



**2014 Periodic Review Report  
Groundwater Monitoring and Sampling Results  
153 Fillmore Avenue Site  
City of Tonawanda**

November 2014

**2014 PERIODIC REVIEW REPORT  
GROUNDWATER MONITORING AND SAMPLING RESULTS**

**153 FILLMORE AVENUE SITE  
CITY OF TONAWANDA**

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## SECTION 1 - SITE BACKGROUND

### 1.1 Site Location

The site is located at the intersection of Fillmore Avenue and Freemont Street in the City of Tonawanda (Figure 1). The 1.7-acre parcel is bounded on the east by an active railroad line, to the north and south by small commercial/industrial operations, and on the west by Fillmore Avenue. The subject property is located in a small industrial area adjacent to a residential neighborhood.

### 1.2 Site History

City directories for the period between 1946 to 1957, list Tonawanda Roofing and Paint Company at 141 Fillmore Avenue (adjacent property immediately north of site) and National Manufacturing Corporation at 153 Fillmore under Roofing Materials and Supplies. This is consistent with reports from local workers in the area that roofing materials were produced at the National Manufacturing site and installed by Tonawanda Roofing and Paint. This is further supported by the presence of four large ASTs and associated piping on the site that contain heavy, viscous, tar like material.

In 1957, National Manufacturing Corporation added paint manufacturing facilities at the subject property. Raw materials for paint production were shipped to the facility in bulk and were stored in above-ground storage tanks (ASTs) located in the tank rooms or underground storage tanks (USTs). The raw materials were transferred from the tank rooms to the manufacturing room where the paint was produced. The finished paint was then transferred to the warehouse where it was stored prior to shipment. National Manufacturing Corporation closed the facility in 1981.

In 1981, Envirotek Ltd, a solvent recycling company, reopened the facility as a Resource Conservation and Recovery Act (RCRA) treatment, storage, and disposal (TSD) facility. Containers of RCRA hazardous wastes were transported to the facility where they were stored pending reshipment to a RCRA disposal facility. Containers of RCRA characteristic ignitable, corrosive, and toxic hazardous wastes were stored at the facility from 1981 to 1986. A number of containers were left at the facility when Envirotek Ltd abandoned the facility in 1988.

NYSDEC contacted the United States Environmental Protection Agency (USEPA) concerning the subject property on June 29, 1987. The USEPA conducted a preliminary assessment (PA) under the Comprehensive Environmental Response, Compensation and Liabilities Act (CERCLA) on November 30, 1988 to determine if the subject property should be included on the National Priority List (NPL). The PA disclosed that an estimated 770 55-gallon drums and 1,000 smaller containers of RCRA flammable, combustible, and corrosive hazardous wastes that were present on the subject property. Several process vessels, four large ASTs, two UST's, and six transformers were also present at the subject property.

On July 18, 1989 the USEPA initiated remedial action activities at the site. These initial remedial action activities were completed on October 15, 1990, and included:

- the identification and categorization of all RCRA hazardous wastes;
- repackaging of 31,165 gallons of liquids and 11,655 pounds of solids and shipping off-site for incineration;
- repackaging 204 cubic yards of solids and shipping off-site for land disposal; and,
- repackaging 61,975 pounds of solids and shipping off-site for recycling.

A summary of remedial action activities are presented in a report entitled, "Federal On-Scene Coordinator's Report - Envirotek 1, Tonawanda, Erie County, New York," prepared by Roy F. Weston, Inc. and dated November 1990.

The NYSDEC conducted a limited site investigation in November 1997. This investigation was intended to determine if the site posed a significant threat to human health or the environment. This investigation consisted of the collection of soil samples from the site and surface water samples from Ellicott Creek.



The results of this investigation indicated no impairment of the Creek sediments or surface waters associated with the site. Analytical results of surface soils detected exceedances of NYSDEC soil cleanup objectives for (polynuclear aromatic hydrocarbons (PAHs), PCBs, and numerous metals. The highest concentrations were observed in the northeast corner of the site.

A Site Investigation/Remedial Alternatives Report was completed by URS Corporation in 2002 indicating that the primary contaminants on-site were volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs). These contaminants were present in surface and subsurface soils, and groundwater. Some metals and minor concentrations of PCBs were detected in surface soils.

The remedial activities completed at 153 Fillmore Avenue were separated into two phases. Phase I, completed in 2001, consisted of the demolition and removal of various structures, the removal of three (3) underground storage tanks, backfilling with clean material, and the stockpiling of contaminated soil. Phase II, completed in October 2002, consisted of the following:

1. Excavation, removal, and disposal of contaminated soils from Phase I.
2. Decontamination and removal of four (4) above ground storage tanks.
3. Removal and disposal of ACM coatings on tanks.
4. Removal of piping, supports and associated structures.
5. Sampling, analysis, and characterization of site materials.
6. Removal and off-site disposal of 11.6 tons of hazardous materials
7. 200 CY of concrete crushed and placed as fill material.
8. Installation of 1-foot of clean cover material over the entire site of clay and topsoil.
9. Asphalt paving for two (2) parking areas.

A Site Management Plan as presented in Section 4 was completed after Site Investigation/Remedial Alternatives Report detailing a Groundwater Monitoring Plan.



## SECTION 2 - GROUNDWATER MONITORING ACTIVITIES

The 2014 monitoring program at the 153 Fillmore Avenue Site in the City of Tonawanda consisted of one annual sampling event completed on July 15, 2014. Groundwater samples were collected from monitoring wells MW-1, MW-2, MW-5, MW-6, MW-7, and MW-8, located on the perimeter of the property as presented in Figure 2.

Groundwater samples were collected using low-flow purging and sampling techniques. Prior to sampling, monitoring wells MW-5, MW-6, MW-7 and MW-8 were purged using a peristaltic pump and dedicated tubing. Monitoring wells, MW-1 and MW-2 were purged using a dedicated bailer. Groundwater from monitoring wells MW-1, MW-2, MW-5, MW-6, MW-7 and MW-8 were tested for field parameters to include: pH, conductance, dissolved oxygen (DO), temperature, and oxidation-reduction potential (ORP). Groundwater field parameters 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 1. The groundwater field sampling logs that were used to record field information at each sampling point are provided in Appendix A. After the field parameters stabilized, groundwater samples were collected with a dedicated disposable bailer or dedicated tubing into sample containers provided by the laboratory.

In 2014, groundwater from monitoring well MW-7 was purged collecting only 0.2 gallons of groundwater due to purging to dry conditions in well. Purge water was used for sample water. Volatile sampling was accomplished filling the 40ml vials direct from the pump tubing. In addition, water level indicator cannot pass total depth of well due to obstruction and unable to record water level. If future monitoring, sampling and testing are required from this monitoring well, then possible reinstallation of this well would be necessary. Drilling and installation of a new well near monitoring well MW-7 location would be required.

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 during the sampling event. Samples were delivered under a chain of custody to ESC Lab Sciences in Mount Juliet, Tennessee for analysis of VOCs, SVOCs and Target Analyte List (TAL) Metals under CLP protocols with ASP Deliverable B test results.



## SECTION 3 - GROUNDWATER MONITORING RESULTS

This section includes the results of the 2014 annual 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.

### 3.1 Site Hydrogeology

Groundwater levels were collected at each monitoring well and are presented in Table 2. Figure 3 illustrates the groundwater elevation contours based on the groundwater levels measured on July 15, 2014. The groundwater elevation data indicates that groundwater flows toward the west. The up gradient monitoring well is identified as monitoring well MW-7.

### 3.2 Groundwater Analytical Results

A summary of the compounds detected in groundwater during the 2014 Groundwater Sampling Event is presented on Tables 3, 4 and 5. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, June 1998, Class GA was used for the reporting limits. The groundwater samples were analyzed for volatiles, semi-volatiles, and metals on the Target Compound List (TCL). Laboratory analytical data reports are provided in Appendix B. Historical groundwater analytical test data is presented on Tables 3, 4 and 5. Historical groundwater total VOC concentration Figures displaying the lateral extent of the total VOC concentration plume from the sampling events of July 2014, July 2013, July, 2012, July 2011, July 2010, July 2009, August 2008, July 2007, and October 2001 are provided in Appendix C.

#### 3.2.1 Volatile Organic Analytical Test Results

The volatile organic analytical test results for the sampling event of 2014 varied depending on the monitoring well and specific compounds detected in groundwater in comparison with previous annual sampling events. Results showed increasing and decreasing volatile organic concentrations when comparing test data from all sampling events with 2012 and 2013 test results. The semi-volatile organic analytical test results are presented in Table 3. Several estimated volatile compounds detected below quantitation limits can be identified as insignificant concentrations for reporting purposes as presented in Table 3.

**Exceeding Groundwater Standards:** The volatile organic analytical test results detected concentrations of vinyl chloride (MW-2 and MW-8), cis-1,2-dichloroethene (MW-1 and MW-8), benzene (MW-2 and MW-8) exceeding groundwater quality standards as presented in Table 3.

**Vinyl chloride:** Detected concentrations of vinyl chloride decreased in groundwater sampled from monitoring well MW-2 which represented concentrations exceeding the groundwater quality standard. Detected concentrations of vinyl chloride remained the same at monitoring well MW-1 which represented concentrations below the groundwater quality standard. Detected concentrations of vinyl chloride decreased in groundwater sampled from monitoring well MW-8 when comparing results from 2014 to 2012 which represented concentrations exceeding the groundwater quality standard. The concentrations of vinyl chloride decreased to non-detectable results at monitoring well MW-7. Concentrations of vinyl chloride were not detected in groundwater sampled from monitoring wells MW-7 and MW-8 in 2013.

**Acetone:** The concentrations of acetone decreased to non-detectable results at monitoring well MW-7. The concentrations of acetone from monitoring well MW-7 decreased when comparing results from 2014 to 2012. Concentrations of acetone were not detected in groundwater sampled from monitoring well MW-7 in 2013.

**Trans-1,2-dichloroethene:** Detected concentrations of trans-1,2-dichloroethene decreased at monitoring well MW-8 which represented concentrations below the groundwater quality standard. The





concentrations of trans-1,2-dichloroethene at monitoring well MW-8 decreased when comparing results from 2014 to 2012. Concentrations of trans-1,2-dichloroethene were not detected in groundwater sampled from monitoring well MW-8 in 2013.

**Cis-1,2-dichloroethene:** Detected concentrations of cis-1,2-dichloroethene remained the same in groundwater samples from monitoring well MW-1, which represented concentrations exceeding the groundwater quality standard. Detected concentrations of cis-1,2-dichloroethene decreased at monitoring well MW-2 which represented concentrations below the groundwater quality standard. Detected concentrations of cis-1,2-dichloroethene decreased in groundwater sampled from monitoring well MW-8 when comparing results from 2014 to 2012 which represented concentrations exceeding the groundwater quality standard. Concentrations of cis-1,2-dichloroethene were not detected in groundwater sampled at monitoring well MW-8 in 2013.

The concentrations of cis-1,2-dichloroethene decreased at monitoring wells MW-2 and MW-7 which represented concentrations below the groundwater quality standard. The concentrations of cis-1,2-dichloroethene from monitoring well MW-7 decreased when comparing results from 2014 to 2012. Concentrations of cis-1,2-dichloroethene were not detected in groundwater sampled from monitoring well MW-7 in 2013.

**Benzene:** Detected concentrations of benzene decreased in groundwater sampled from monitoring wells MW-2 and MW-8 which represented concentrations exceeding the groundwater quality standard. Detected concentrations of benzene decreased in groundwater sampled from monitoring well MW-8 when comparing results from 2014 to 2012. Concentrations of benzene were not detected in groundwater sampled at monitoring well MW-8 in 2013.

**Trichloroethene:** Detected concentrations of trichloroethene decreased at monitoring well MW-7 which represented concentrations below the groundwater quality standard. The concentrations of trichloroethene at monitoring well MW-7 decreased when comparing results from 2014 to 2012. Concentrations of trichloroethene were not detected in groundwater sampled at monitoring well MW-7 in 2013.

**Tetrachloroethene:** Detected concentrations of tetrachloroethene decreased to non-detectable results at monitoring well MW-7. The concentrations of tetrachloroethene from monitoring well MW-7 decreased when comparing results from 2014 to 2012. Concentrations of tetrachloroethene were not detected in groundwater sampled at monitoring well MW-7 in 2013.

As presented in Appendix C, historical total VOC concentration groundwater plume figures show the total VOC plume has migrated in a westward direction over time in a similar direction as groundwater flow. The following observations have been made in regard to VOC plume migration and movement.

**2001** - The October 2001 figure shows a total VOC concentration plume that is centered on the east side of the site with total VOC concentrations of approximately 2,681 ppb detected in groundwater from monitoring well MW-7.

**2007** - The total VOC concentration plume from the 2007 sampling event indicates decreasing total VOC concentration centered on monitoring well MW-7.

**2008** - The center of the total VOC concentration plume migrated in a westward direction due to higher VOC concentrations detected in groundwater from monitoring wells MW-6 and MW-8.

**2009** - The total VOC concentration plume expanded westward with the addition of sampling and test results from monitoring wells MW-1 and MW-2.

**2010** - The total VOC concentration plume remained similar to the 2009 total VOC concentration plume, however, shows decreased VOC concentrations from monitoring well MW-6.



**2011** - The total VOC plume migrated further west with test results from sampling detecting increased total VOC concentrations at monitoring well MW-1. Total VOC concentrations continued to decrease to non-detectable results from monitoring well MW-6.

**2012** - The total VOC plume increased in VOC concentrations groundwater from monitoring well MW-1 for the third year. Plume migration appears to have moved southwest since total VOC concentrations in monitoring well MW-1 have increased every year from 2009 to 2012 as presented below:

- 2009 - 5.5 ug/l
- 2010 - 16.0 ug/l
- 2011 - 26.0 ug/l
- 2012 - 73.0 ug/l

**2013** - The total VOC plume decreased in size and VOC concentrations in monitoring wells MW-1 and MW-2. VOC concentrations were not detected in monitoring well MW-8 in 2013. Plume migration should be migrating to the southwest with the direction of groundwater flow. Total VOC concentrations in monitoring well MW-1 have increased every year from 2009 to 2012 with a decrease in concentration in 2013 as presented below:

- 2009 - 5.5 ug/l
- 2010 - 16.0 ug/l
- 2011 - 26.0 ug/l
- 2012 - 73.0 ug/l
- 2013 - 14.3 ug/l

**2014** - The total VOC plume increased in size and decreased total VOC concentrations. Total VOC concentrations in monitoring well MW-1 have increased every year from 2009 to 2012 with a decrease in VOC concentration in 2013. In 2014, VOC concentrations slightly increased in comparing 2013 results as presented below:

- 2009 - 5.5 ug/l
- 2010 - 16.0 ug/l
- 2011 - 26.0 ug/l
- 2012 - 73.0 ug/l
- 2013 - 14.3 ug/l
- 2014 - 14.8 ug/l

The following observations have been made regarding total VOC concentrations:

- **2007 and 2008** - There was no VOC test data from monitoring wells MW-1 and MW-2 since the wells were nonfunctional until being re-drilled/installed in 2009.
- **2001 to 2009** - Total VOC concentrations increased consistently in groundwater monitoring well MW-8.
- **2010, 2011, 2012** Total VOC concentrations in monitoring well MW-8 decreased.
- **2010, 2011, 2012** - Total VOC concentrations in monitoring well MW-2 decreased.
- **2012** - Total VOC concentrations in monitoring wells MW-1 and MW-7 increased.
- **2013** - Total VOC concentrations in monitoring wells MW-1, MW-2 and MW-8 decreased.
- **2014** - Total VOC concentrations in monitoring wells MW-1, MW-2, MW-7 and MW-8 decreased from total VOC concentrations detected in 2013 of 107.2 ug/l to 73.5 ug/l as reported in 2014.



### 3.2.2 Semi-Volatile Organic Analytical Test Results

The semi-volatile organic analytical test results for the sampling event of 2014 varied depending on the monitoring well location and specific compounds detected in groundwater in comparison with previous annual sampling events. Results showed increasing and decreasing semi-volatile organic concentrations when comparing data with 2013 test results. The semi-volatile organic analytical test results are presented in Table 4.

**Acenaphthene:** Detected concentrations of acenaphthene increased in groundwater sampled from monitoring wells MW-2, MW-6 and MW-8. Concentrations of acenaphthene were below the groundwater quality standard. Detected concentrations of acenaphthene decreased in groundwater sampled from monitoring wells MW-1 and MW-5 to non-detectable results.

**Bis(2-ethylhexyl)phthalate:** Detected concentrations of bis(2-ethylhexyl)phthalate decreased in groundwater sampled from monitoring well MW-1 to an estimated concentration detected below quantitation limits.

The detected concentrations as reported in 2012 of acenaphthene, fluoranthene, pyrene, benz(a)anthracene, chrysene, bis(2-ethylhexyl) phthalate, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene were not detected in groundwater sampled in 2014 from monitoring well MW-7. Concentrations of semi-volatile organics as listed were not detected in groundwater sampled at monitoring well MW-7 in 2013 due to no groundwater available. Test results from 2014 were compared to 2012 test results.

Several estimated semi-volatile compounds detected below quantitation limits can be identified as insignificant concentrations for reporting purposes as presented in Table 4. The following compounds were reported as estimated values: dimethyl phthalate, bis(2-ethylhexyl)phthalate, di-n-butyl phthalate, acenaphthylene, diethyl phthalate, fluorine, and anthracene.

### 3.2.3 Inorganic Metals Analytical Test Results

Detected concentrations of inorganic metals for the 2014 sampling event that exceeded groundwater quality standards and increased in concentrations when compared with 2013 analytical test results include the following. The inorganic metals analytical test results detected concentrations cadmium (MW-1), chromium (MW-2), iron (MW-2 and MW-5), lead (MW-7), magnesium (MW-5), manganese (MW-7), and selenium (MW-5 and MW-6) exceeding groundwater quality standards as presented in Table 5.

**Aluminum:** Detected concentrations of aluminum decreased in groundwater sampled from monitoring well MW-1, MW-8 and remained the same in monitoring well MW-2. Test results exceeded the groundwater quality standard from both monitoring wells MW-1 and MW-2.

**Antimony:** Detected concentrations of antimony decreased in groundwater sampled from monitoring wells MW-1, MW-2, MW-5, MW-7, and MW-8 and reported below the groundwater quality standard.

**Arsenic:** Detected concentrations of arsenic decreased in groundwater sampled from monitoring wells MW-1, MW-2, MW-5, MW-7, and MW-8 and reported below the groundwater quality standard.

**Barium:** Detected concentrations of barium decreased or remained the same in groundwater sampled from monitoring wells MW-1, MW-2, MW-5, MW-6, MW-7, and MW-8 and reported below the groundwater quality standard.

**Beryllium:** Detected concentrations of beryllium decreased in groundwater sampled from monitoring well MW-1 and exceeded the groundwater quality standard. Beryllium concentrations in groundwater sampled from all other wells were non-detectable results.

**Cadmium:** Detected concentrations increased in groundwater sampled from monitoring well MW-1 and exceeded the groundwater quality standard. Cadmium concentrations in groundwater sampled from



monitoring wells MW-5 and MW-7 were estimated concentrations below quantification limits. Cadmium concentrations in groundwater sampled from monitoring wells MW-2, MW-6, and MW-8 were non-detectable results.

**Chromium:** Detected concentrations of chromium increased in groundwater sampled from monitoring well MW-2 and exceeded the groundwater quality standard. Detected concentrations of chromium decreased in groundwater sampled from monitoring well MW-1 and exceeded the groundwater quality standard. Chromium concentrations in groundwater sampled from monitoring well MW-7 were estimated concentrations below quantification limits. Groundwater sampled from monitoring wells MW-5, MW-6, and MW-8 were reported at non-detectable results for chromium concentrations.

**Copper:** Detected concentrations of copper decreased in groundwater sampled from monitoring wells MW-1, MW-2, and MW-7 and reported below the groundwater quality standard. Copper concentrations in groundwater sampled from monitoring well MW-5 were estimated concentrations below quantification limits. Groundwater sampled from monitoring wells MW-6 and MW-8 were reported at non-detectable results for copper concentrations.

**Iron:** Detected concentrations of iron increased in groundwater sampled from monitoring wells MW-2 and MW-5 and exceeded the groundwater quality standard. Detected concentrations of iron decreased in groundwater sampled from monitoring wells MW-1, MW-6, MW-7, and MW-8. Detected concentrations of iron exceeded the groundwater quality standard in all monitoring wells.

**Lead:** Detected concentrations of lead decreased in groundwater sampled from monitoring well MW-7 and exceeded the groundwater quality standard. Detected concentrations of lead increased in groundwater sampled from monitoring wells MW-5 and MW-6 and reported below the groundwater quality standard. Detected concentrations of lead decreased in groundwater sampled from monitoring wells MW-1, MW-2, and MW-8 and reported below the groundwater quality standard.

**Magnesium:** Detected concentration of magnesium increased in groundwater sampled from monitoring well MW-5 and exceeded the groundwater quality standard. Detected concentrations of magnesium decreased in groundwater sampled from monitoring wells MW-1 and MW-2 and exceeded the groundwater quality standard. Detected concentration of magnesium decreased in groundwater sampled from monitoring well MW-7 and reported below the groundwater quality standard. Detected concentration of magnesium increased in groundwater sampled from monitoring wells MW-6 and MW-8 and reported below the groundwater quality standard.

**Manganese:** Detected concentration of manganese increased in groundwater sampled from monitoring well MW-7 and exceeded the groundwater quality standard. Detected concentrations of manganese decreased in groundwater sampled from monitoring wells MW-1, MW-2, MW-6 and MW-8 and exceeded the groundwater quality standard. Detected concentration of manganese increased in groundwater sampled from monitoring well MW-5 and reported below the groundwater quality standard.

**Mercury:** Detected concentrations of mercury decreased in groundwater sampled from monitoring wells MW-1 and MW-2 and reported below the groundwater quality standard.

**Nickel:** Detected concentrations of nickel decreased in groundwater sampled from monitoring wells MW-1, MW-2, and MW-7 and reported below the groundwater quality standard.

**Selenium:** Detected concentrations of selenium increased in groundwater sampled from monitoring wells MW-5 and MW-6 and exceeded the groundwater quality standard. Selenium concentrations in groundwater sampled from monitoring wells MW-2, MW-7, and MW-8 were estimated concentrations below quantification limits. Groundwater sampled from monitoring well MW-1 were reported at non-detectable results for selenium concentrations.



**Thallium:** Detected concentrations of thallium decreased in groundwater sampled from monitoring wells MW-1, MW-2 and MW-8 to non-detectable results. Groundwater sampled from all wells were reported at non-detectable results for thallium concentrations.

**Zinc:** Detected concentrations of zinc decreased in groundwater sampled from monitoring wells MW-1, MW-2, MW-5, MW-7, and MW-8 and reported below the groundwater quality standard. Zinc concentrations in groundwater sampled from monitoring well MW-6 were estimated concentrations below quantification limits.

### **3.3 Quality Assurance/Quality Control Analytical Results**

Groundwater samples were analyzed for VOCs by USEPA SW-846 Method 8260, SVOCs by USEPA SW-846 Method 8270 and TAL Metals at ESC Lab Sciences in Mount Juliet, Tennessee. The laboratory data were independently reviewed in accordance with USEPA National Functional Guidelines of October 1999. The data package includes a summary of the analytical results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a field duplicate, method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis.

Data Usability Summary Reporting completed by Vali-Data of WNY, LLC October 31, 2014 is 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.



## SECTION 4 - SOILS MANAGEMENT PLAN

### 4.1 Objective

The objective of this Soils Management Plan (SMP) is to set guidelines for the maintenance and repair of the cover system at the Site, and for the management of soil and fill disturbed during any future intrusive work that breaches this cover system. This SMP addresses environmental concerns related to soil management and has been reviewed and approved by the New York State Department of Environmental Conservation (NYSDEC).

### 4.2 Nature and Extent of Contamination

The data obtained during the investigation and remediation of the Site reveal that the contaminants of concern at this Site for surface soil consist primarily of semivolatile organic compounds (SVOCs) and metals. The primary SVOCs of concern includes benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene and indeno(1,2,3-cd)pyrene. 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 ubiquitous in the environment. Sources of PAHs include incomplete combustion of coal, oil, gasoline, garbage, wood and incinerators. PAHs are also found in coal tar, crude oil, creosote, roofing tar, medicines, dyes, plastics and pesticides. The primary metals of concern in surface soil include barium, cadmium, chromium, lead and mercury.

The contaminants of concern at the Site for subsurface soil consist primarily of volatile organic compounds and semivolatile organic compounds. The primary VOCs of concern includes acetone, benzene, ethylbenzene and xylene, while the primary SVOCs of concern include benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and chrysene.

The contaminants of concern at the Site for groundwater consist primarily of volatile organic compounds and metals. The primary VOCs of concern includes dichloroethene and vinyl chloride, although historic groundwater samples also contained benzene, ethylbenzene, toluene, trichloroethene and xylene. The primary metals of concern in groundwater include aluminum, cadmium, iron, lead and manganese.

### 4.3 Contemplated Use

Following the remediation of the Site, the property was purchased by Manth Manufacturing for use as parking and warehousing for the company's existing manufacturing operations at 131 Fillmore Avenue. The Deed Restriction specifically prohibits the use of the Site for any type of residential, agricultural or school/day care purposes.

### 4.4 Purpose and Description of the Cover System

The purpose of the cover system is to prevent public exposures with contaminated soil, fill and groundwater, and to prevent the migration of contaminants off-site via groundwater or surface water runoff.

The cover system at the Site consists of the following:

- A 1-foot thick clean soil cover without a demarcation layer;
- A 1-foot thick asphalt and sub base cover at two areas used for parking and access;
- A concrete and sub base cover consisting of sidewalks and the floors of Site buildings. Vapor barriers are not present under any of the concrete buildings slabs.

### 4.5 Cover System Maintenance and Repair

The cover system will be periodically inspected and maintained. Maintenance includes controlling surface erosion and run-off from the Site, and includes proper maintenance of the vegetative cover. In the event that damage to the cover system is observed (e.g., ruts, erosion, cracked or broken asphalt, etc.), repairs will be made to restore the cover system to its pre-damaged condition. These repairs are required to maintain the integrity of the cover system.

Future use of the Site should preclude as described in the Deed Restriction, whenever possible, excavation or disturbance of the cover system. Should any future intrusive work breach the cover system, the



requirements of Sections 4.6 thru 4.9 of this SMP must be followed. Once the intrusive activities are complete, the cover system must be restored in a manner that is consistent with the original construction. If the type of cover system changes from that which existed prior to the intrusive activities (i.e., a soil cover is replaced by asphalt, concrete or a building), a figure showing the modified surface should be included in the appropriate annually submitted Periodic Review Report, and in any updates to the Site Management Plan. The Periodic Review Report should also certify that all intrusive and cover system repair activities were conducted in conformance with this Soil Management Plan.

#### **4.6 Management of Subsurface Soil and Fill**

The purpose of this section is to provide environmental guidelines for the management of soil and fill encountered during any future intrusive work that breaches the cover system. This SMP includes the following conditions:

- Any breach of the cover system, including for the purposes of construction or utilities work, must be replaced or repaired using an acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination. The repaired area must be covered with clean soil and reseeded, or covered with impervious product such as concrete or asphalt to prevent future erosion;
- During any intrusive activities that breach the cover system, the Contingency Plan of Section 4.7 must be implemented, if conditions so warrant. Dust monitoring and control techniques (e.g., wetting road surfaces, covering soil stockpiles, stopping intrusive activities during windy conditions, etc) must also be implemented;
- Soil and fill excavated at the Site that is intended to be removed from the property must be managed, characterized, and properly disposed of in accordance with NYSDEC regulations as referenced in Section 4.8;
- Soil and fill excavated at the Site may be reused as backfill material on-site provided it contains no visual or olfactory evidence of contamination, and is placed beneath a cover system component as referenced in Section 4.4;
- Any off-site 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 will be subject to the collection of one representative composite sample per source. The sample should be analyzed for TCL VOCs, TCL SVOCs, TCL pesticides, TCL PCBs, TAL metals and cyanide by a NYSDOH ELAP-certified laboratory. The soil will be acceptable for use as cover material provided that all parameters meet the 6 NYCRR Part 375 residential soil cleanup objectives (Appendix E);
- Prior to any construction activities, workers are to be notified of 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, including all applicable personal protective equipment.

#### **4.7 Contingency Plan**

If underground storage tanks or other previously unidentified contaminant sources are encountered during future intrusive work, excavation activities will be suspended until sufficient equipment is mobilized to address the situation. Such findings will be promptly communicated to the NYSDEC Region 9 Office in Buffalo, New York. Reportable quantities of petroleum product will also be reported to the NYSDEC spills hotline. Representative samples of product, soil and fill will be collected for chemical analysis to determine the nature of the material and proper disposal method. The samples should be analyzed for TCL VOCs, TCL SVOCs, TCL pesticides, TCL PCBs, TAL metals and cyanide by a NYSDOH ELAP certified laboratory. Disposal of this material should take place as referenced in Section 4.8.



#### **4.8 Disposal of Subsurface Soil and Fill**

Soil and fill that is excavated at the Site but cannot be used as fill below the cover system will be further characterized prior to transportation off-site for disposal at a permitted facility. For excavated soil and fill with visual evidence of contamination (i.e., staining or elevated PID measurements), one composite sample and one duplicate sample will be collected for every 100 cubic yards of material. For excavated soil and fill that does not exhibit visual evidence of contamination but must be sent for off-site disposal, one composite sample and one duplicate sample will be collected for every 2,000 cubic yards of material. A minimum of one composite sample and one duplicate sample will be collected for volumes less than 2,000 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. If elevated PID measurements are documented, one grab sample will be collected from the individual location with the highest PID measurement. If none of the individual samples exhibit PID readings, one grab sample will be selected at random. The composite sample will be analyzed for pH (EPA Method 9045C), TCL SVOCs, TCL pesticides, TCL PCBs, TAL metals and cyanide by a NYSDOH ELAP certified laboratory. The grab sample will be analyzed for TCL VOCs.

Samples will be composited by placing equal portions of soil and fill from each of the five composite sample locations into a pre-cleaned, stainless steel (or Pyrex glass) mixing bowl. The soil and fill will be thoroughly homogenized using a stainless steel trowel or disposable scoop, and transferred to pre-cleaned sample bottles provided by the laboratory. The sample bottles will 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 is not a hazardous waste, the material will be properly disposed off-site at a non-hazardous waste facility. Stockpiled soil cannot be transported on or off-site until the analytical results are received from the laboratory.

#### **4.9 Subgrade Material**

Subgrade material used to backfill excavations or placed to increase surface grades must meet the following criteria.

- Excavated on-site soil and fill that appears to be visually impacted shall be sampled and analyzed as described in Section 4.8. If analytical results indicate that contaminants are present at concentrations below the 6 NYCRR Part 375 commercial soil cleanup objectives (Appendix E), the soil and fill can be used as backfill on-site;
- Any off-site 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, and 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 soil will be subject to the collection of one representative composite sample per source. The sample should be analyzed for TCL VOCs, TCL SVOCs, TCL pesticides, TCL PCBs, arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver and cyanide by a NYSDOH ELAP certified laboratory. The soil





will be acceptable for use as backfill provided that all parameters meet the 6 NYCRR Part 375 commercial soil cleanup objectives as referenced in Appendix E;

- Non-virgin soil will be tested via collection of one composite sample per 500 cubic yards of material from each source. If more than 1,000 cubic yards of soil are borrowed from a given off-site non-virgin source, and both samples of the first 1,000 cubic yards meet the 6 NYCRR Part 375 commercial soil cleanup objectives as referenced in Appendix E, 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 6 NYCRR Part 375 commercial soil cleanup objectives.

#### **4.10 2014 Site Usage**

No excavation took place on-site in 2014.



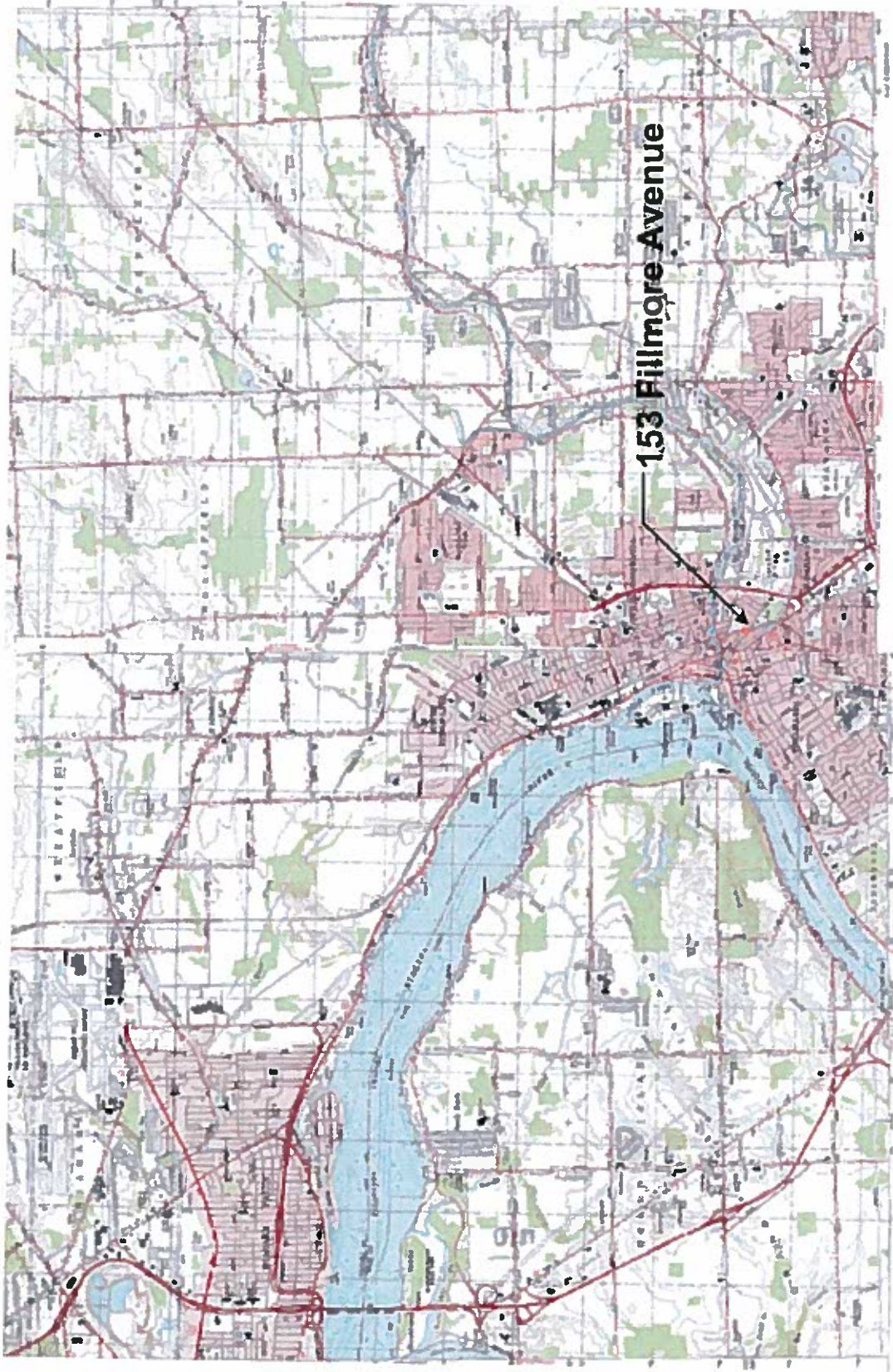
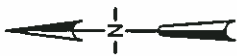
## SECTION 5 - CONCLUSIONS

1. Volatile organic compound concentrations detected in 2014 analytical test results exceeded groundwater standards. Analytical testing detected the following volatiles: vinyl chloride (MW-2 and MW-8), cis-1,2-dichloroethene (MW-1 and MW-8), benzene (MW-2 and MW-8) at concentrations exceeding groundwater quality standards. Volatile organic compound concentrations detected in 2014 groundwater samples decreased from reported 2013 test results.
2. Semi-volatiles organic concentrations detected in 2014 analytical test results did not exceeded groundwater quality standards in groundwater. Only acenaphthene was detected in 2014 groundwater samples.
3. The inorganic metals analytical test results detected the following concentrations of aluminum, beryllium, cadmium, chromium, iron, lead, magnesium, manganese, and selenium exceeding groundwater quality standards.
4. Total VOC concentrations in monitoring wells MW-1, MW-2, MW-7 and MW-8 decreased from total VOC concentrations detected in 2013 of 107.2 ug/l to 73.5 ug/l as reported in 2014.
5. Trend analysis of volatile parameters indicates the total VOC concentrations in monitoring well MW-1 have increased every year from 2009 to 2012 from 5.5 ug/l in 2009 to 73.0 ug/l in 2012. In 2013, however, trending of total VOC concentrations decreased to 14.3 ug/l. In 2014, total VOC concentrations slightly increased at 14.8 ug/l.
6. Trend analysis of volatile parameters indicates the total VOC concentrations in monitoring well MW-2 have decreased every year from 2010 to 2013 from 118.0 ug/l in 2010 to 10.1 ug/l in 2014.
7. Trend analysis of semi-volatile parameters indicated increasing and decreasing semi-volatile organic concentrations when comparing data with 2013 test results, which remained below groundwater quality standards.
8. Based on 2014 analytical test results, the total VOC concentration plume appears to be migrating in a southwestward direction with groundwater flow. Total VOC concentrations decreased in groundwater from monitoring wells MW-2, MW-7 and MW-8. Total VOC concentrations remained the same in groundwater at monitoring well MW-1. Monitoring wells MW-5 and MW-6 remained at non-detectable results.

## FIGURES

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Scale 1:25,000

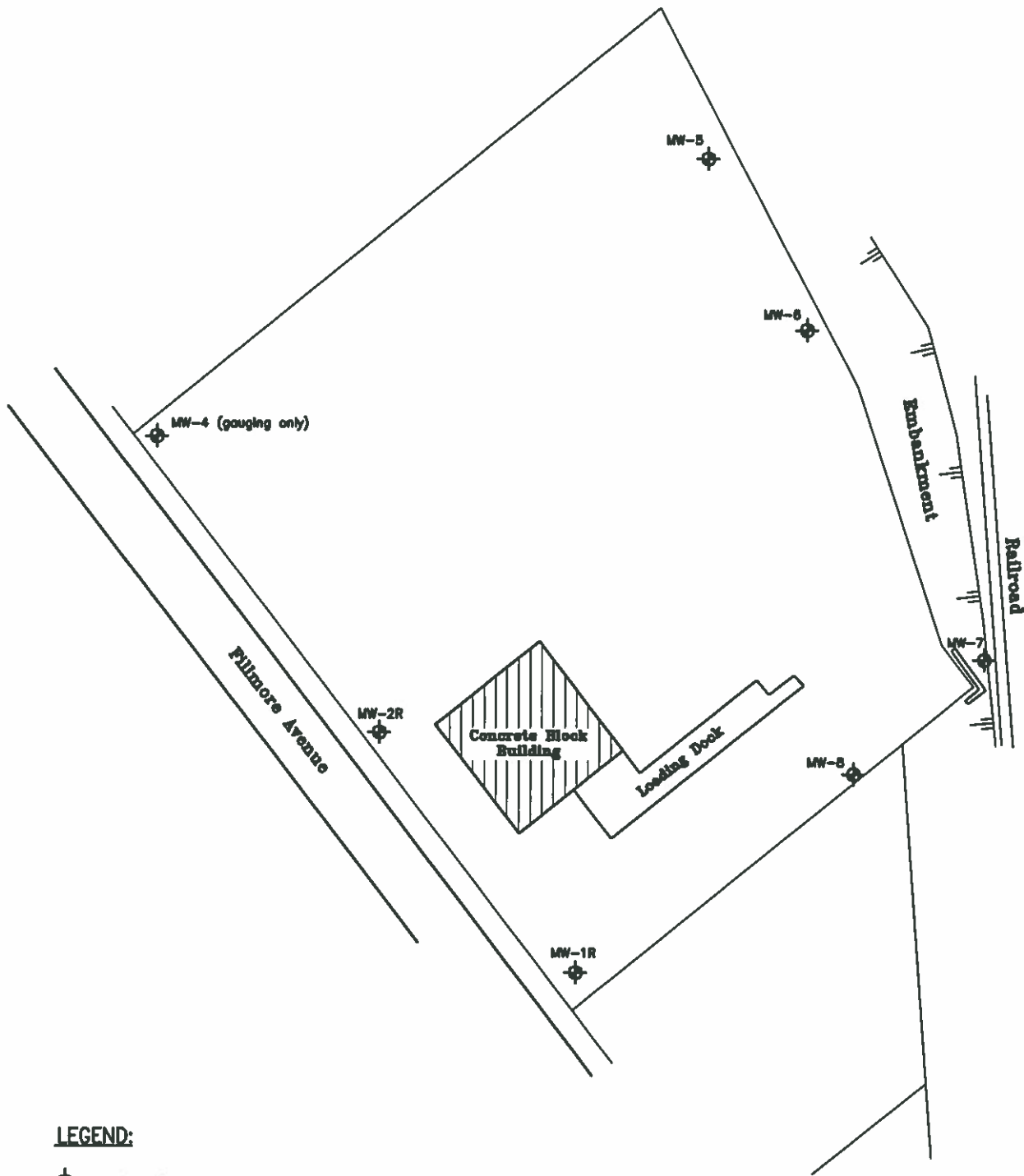


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AMHERST, NEW YORK  
JOB No.: 8612199

153 FILLMORE AVENUE  
TONAWANDA, NEW YORK  
GROUNDWATER MONITORING REPORT

FIGURE 1  
SITE LOCATION MAP



**LEGEND:**

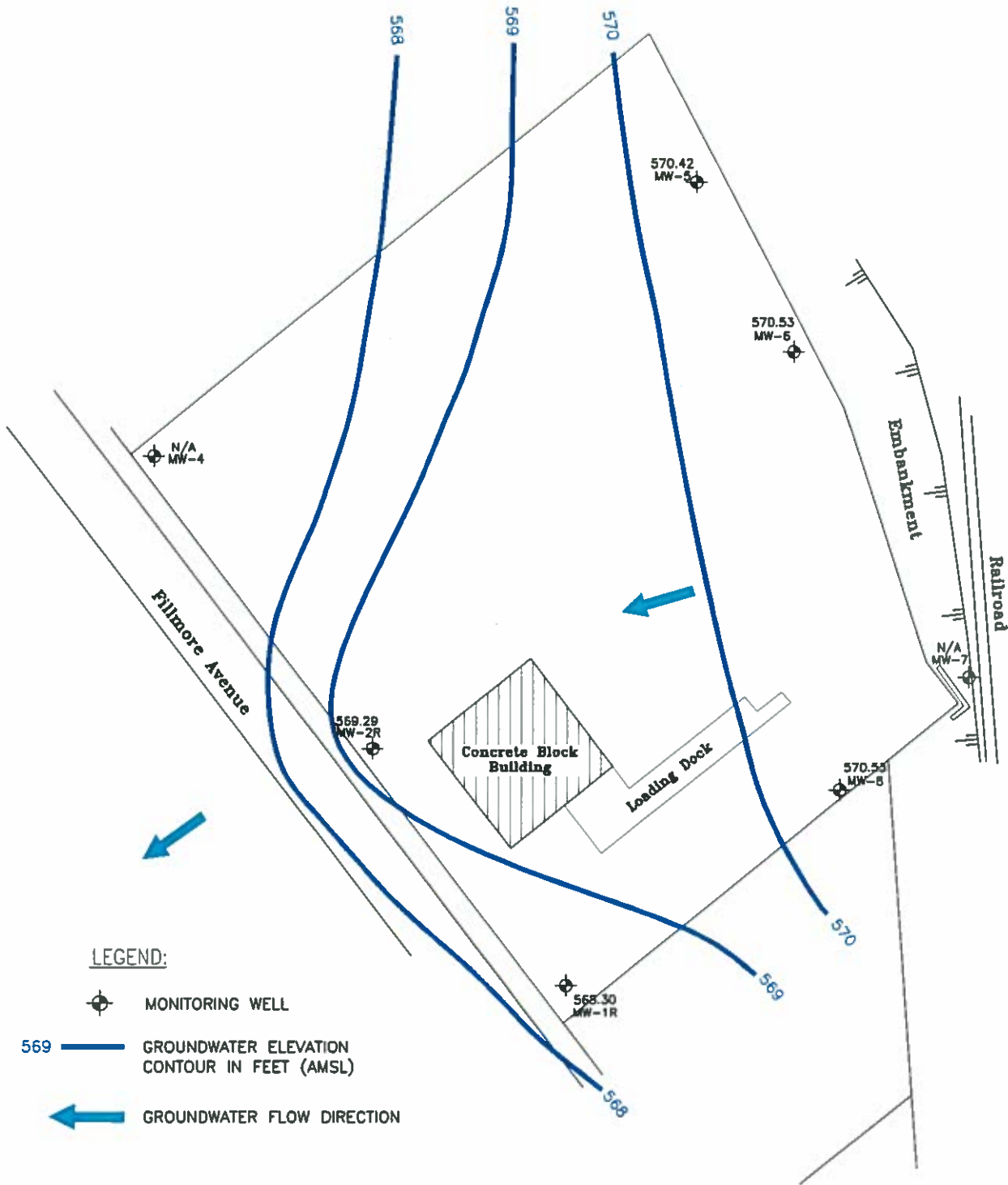
 MONITORING WELL






153 FILLMORE AVENUE SITE  
 TONAWANDA, NEW YORK  
 GROUNDWATER MONITORING REPORT  
 MONITORING WELL LOCATIONS

Job Number 86-12199  
 Revision A  
 Date 09 14

**Figure 02**



**LEGEND:**

-  MONITORING WELL
-  569 — GROUNDWATER ELEVATION CONTOUR IN FEET (AMSL)
-  ← GROUNDWATER FLOW DIRECTION

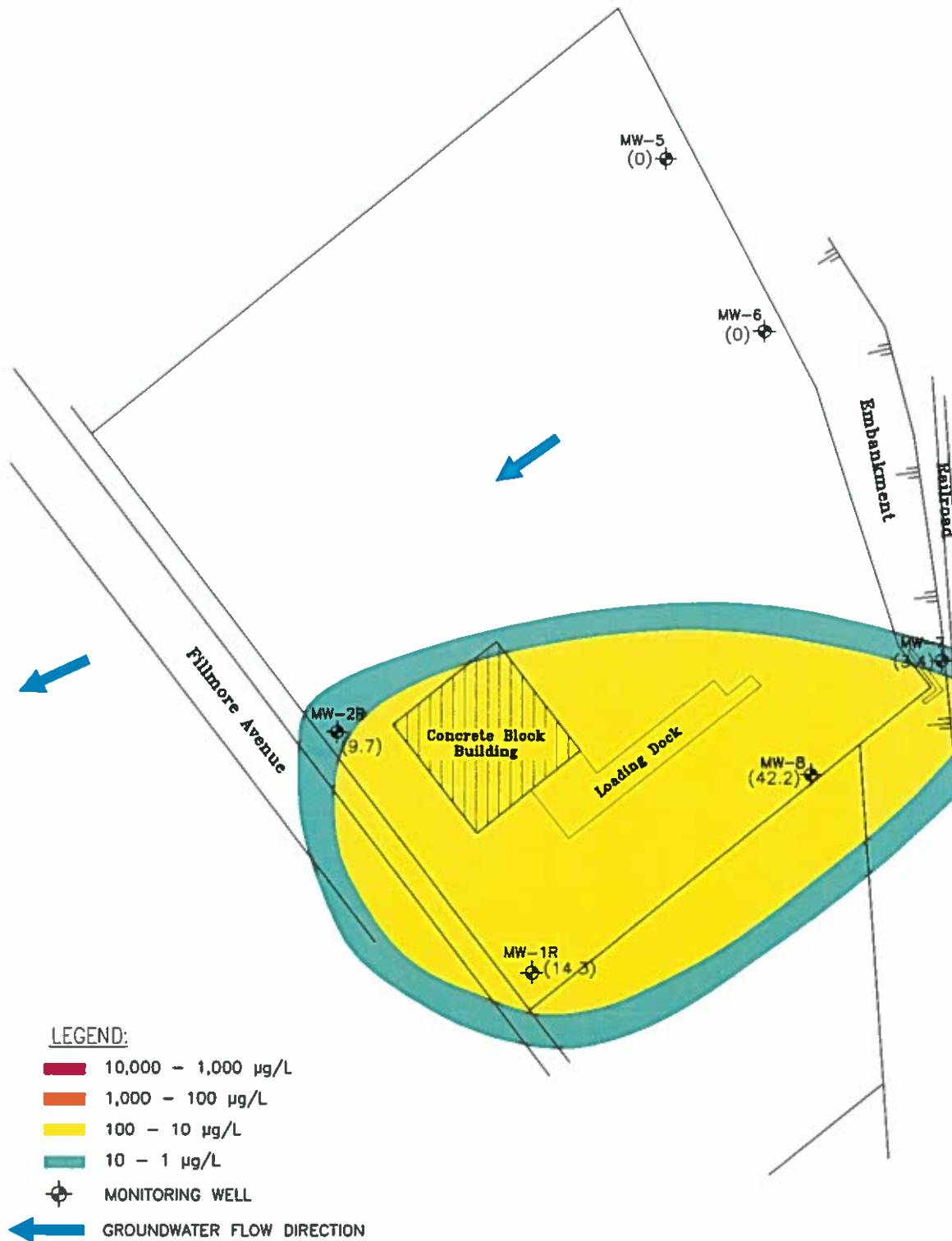
NOTE: GROUNDWATER ELEVATIONS NOT AVAILABLE AT MONITORING WELLS MW-4 & MW-7 DUE TO UNIDENTIFIED OBSTRUCTIONS IN THE WELL.



153 FILLMORE AVENUE SITE  
TONAWANDA, NEW YORK  
GROUNDWATER MONITORING REPORT  
GROUNDWATER CONTOUR  
ELEVATIONS MAP

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**Figure 03**



153 FILLMORE AVENUE SITE  
 TONAWANDA, NEW YORK  
 GROUNDWATER MONITORING REPORT  
 TOTAL GROUNDWATER VOC  
 CONCENTRATION MAP - 07/15/14

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**Figure 04**

# TABLES

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**TABLE 1**  
**153 Fillmore Avenue Site**  
**City of Tonawanda**  
**2014 Field Groundwater Parameters**

Parameter	Monitoring Well Location							
	MW-1	MW-2	MW-5	MW-6	MW-7	MW-8		
Temperature (°C)	64.40	59.30	62.20	59.1	58.9	58.8		
pH	7.00	6.72	7.08	6.93	7.07	6.72		
Conductivity (mS/cm)	0.883	0.923	0.995	0.708	0.856	0.757		
Dissolved Oxygen (mg/L)	13.46	15.37	12.56	11.06	12.96	12.86		
Turbidity (NTUs) <sup>(1)</sup>	NA	NA	18.6	79.8	70	56		
ORP (mV)	-10	-21	-57	-55.0	4.0	-23		

Note: <sup>(1)</sup> The field parameter probe was unable to record a turbidity reading due to very murky water at some well locations.











**TABLE 2E**  
**Monitoring Well MW-7**  
**Groundwater Monitoring Well Data**  
**153 Fillmore Avenue Site**

Property	Units	10/17/01	07/26/07	08/27/08	07/23/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Well Depth Top PVC	feet	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Well Depth Elevation	feet	562.76	562.76	562.76	562.76	562.76	562.76	562.76	562.76	562.76
Depth to Static Water	feet	4.86	16.50	14.70	(1)	(1)	(1)	(1)	(1)	(1)
Height of Water	feet	18.64	7.00	8.80	(1)	(1)	(1)	(1)	(1)	(1)
Top PVC Elevation	feet	586.26	586.26	586.26	586.26	586.26	586.26	586.26	586.26	586.26
Static Water Level Elevation	feet	581.4	569.76	571.56	(1)	(1)	(1)	(1)	(1)	(1)
Well Casing Diameter	inch	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Water Volume	gallon	1.68	0.63	0.79	(1)	(1)	(1)	(1)	(1)	(1)
Water Purged	gallon	5.03	1.89	1.50	1.50	1.25	1.25	1.25	0.00	0.00
Purging Method	-	-	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump

Note: 1. There was an obstruction in the well at a depth of 8.8 feet in which the water level indicator could not proceed further down the well. The initial static water level from 2007 and 2008 were used to determine the amount of water to be purged.





**TABLE 3A**  
**Monitoring Well MW-1**  
**Volatile Organic Analytical Test Results**  
**153 Fillmore Avenue Site**

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards <sup>1</sup>	Units	08/07/01	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	ND	ND	3 J	3 J	16	1.3	1.3
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Acetone	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	2.3 J	ND	0.46J
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	47	5.5	13	23	55	13	13
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Benzene	1.0	µg/L	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND
Toluene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Styrene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Total VOCs		µg/L	47.0	5.5	16.0	26.0	73.3	14.3	14.8
Total VOCs		mg/L	0.047	0.006	0.016	0.026	0.073	0.014	0.015

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06/98 Class GA.

Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.

NE = NYSDEC TOGS 1.1.1 water quality standard not established.

\* Dilution factor of 5 used

ND - Not detected for at or above reporting limit

J - Analyte detected estimated value below quantitation limits

- = The analyte was not sampled for.

**TABLE 3B**  
**Monitoring Well MW-2**  
**Volatile Organic Analytical Test Results**  
**153 Fillmore Avenue Site**

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards <sup>1</sup>	Units	08/07/01	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	ND	<b>82</b>	<b>64</b>	<b>28</b>	<b>21</b>	<b>7.8</b>	<b>6.5</b>
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Acetone	50.0	µg/L	ND	ND	ND	<b>11</b>	ND	ND	ND
1,1-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	<b>4 J</b>	ND	ND	ND	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	ND	ND	<b>54</b>	<b>12</b>	<b>2.7 J</b>	<b>1.4</b>	<b>1.3</b>
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Benzene	1.0	µg/L	ND	<b>6.7</b>	ND	<b>5 J</b>	<b>2.9 J</b>	<b>2.3</b>	<b>1.9</b>
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND
Toluene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND	<b>0.36J</b>
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Styrene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Total VOCs		µg/L	0	92.7	118.0	56.0	26.6	11.5	10.1
Total VOCs		mg/L	0.000	0.093	0.118	0.056	0.027	0.012	0.010

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06/98 Class GA.

Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.

NE = NYSDEC TOGS 1.1.1 water quality standard not established.

\* Dilution factor of 5 used

ND - Not detected for at or above reporting limit

J - Analyte detected estimated value below quantitation limits

- = The analyte was not sampled for.

**TABLE 3C**  
**Monitoring Well MW-5**  
**Volatile Organic Analytical Test Results**  
**153 Fillmore Avenue Site**

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards <sup>1</sup>	Units	08/07/01	07/26/07	08/27/08	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50.0	µg/L	<b>30</b>	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1.0	µg/L	<b>2</b>	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		µg/L	32.0	0	0	0	0	0	0	0	0
Total VOCs		mg/L	0.032	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06/98 Class GA.

Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.

NE = NYSDEC TOGS 1.1.1 water quality standard not established.

\* Dilution factor of 5 used

ND - Not detected for at or above reporting limit

J - Analyte detected estimated value below quantitation limits

- = The analyte was not sampled for.

**TABLE 3D**  
**Monitoring Well MW-6**  
**Volatile Organic Analytical Test Results**  
**153 Fillmore Avenue Site**

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards <sup>1</sup>	Units										
			08/07/01	07/26/07	08/27/08	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14	
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	ND	ND	<b>99</b>	<b>42</b>	<b>5</b>	ND	ND	ND	ND	ND
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	ND	ND	<b>3 J</b>	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	ND	ND	<b>240</b>	<b>51</b>	<b>2 J</b>	ND	ND	ND	ND	ND
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	<b>2 J</b>	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	5.0	µg/L	<b>5</b>	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		µg/L	5.0	0	339.0	98.0	7.1	0	0	0	0	0
Total VOCs		mg/L	0.005	0.000	0.339	0.098	0.007	0.000	0.000	0.000	0.000	0.000

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06/98 Class GA.

Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.

NE = NYSDEC TOGS 1.1.1 water quality standard not established.

\* Dilution factor of 5 used

ND - Not detected for at or above reporting limit

J - Analyte detected estimated value below quantitation limits

- = The analyte was not sampled for.

**TABLE 3E**  
**Monitoring Well MW-7**  
**Volatile Organic Analytical Test Results**  
**153 Fillmore Avenue Site**

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards <sup>1</sup>	Units	08/07/01	07/26/07	08/27/08	07/23/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Vinyl chloride	2.0	µg/L	<b>10</b>	<b>40 J</b>	ND	<b>2 J</b>	ND	ND	<b>17</b>	*NA	ND
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Acetone	50.0	µg/L	ND	ND	ND	ND	ND	<b>27</b>	<b>29</b>	*NA	ND
1,1-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	*NA	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	<b>10 J</b>	ND	ND	ND	ND	ND	*NA	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	*NA	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
cis-1,2-Dichloroethene	5.0	µg/L	<b>150</b>	<b>270</b>	ND	<b>14</b>	<b>45</b>	<b>9.4</b>	<b>29</b>	*NA	<b>2.0</b>
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Benzene	1.0	µg/L	<b>36</b>	ND	ND	<b>1 J</b>	ND	ND	ND	*NA	<b>0.72J</b>
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Trichloroethene	5.0	µg/L	<b>19</b>	<b>10 J</b>	ND	<b>5.2</b>	ND	<b>3 J</b>	<b>3.9 J</b>	*NA	<b>1.4</b>
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Toluene	5.0	µg/L	<b>660</b>	ND	ND	ND	ND	ND	ND	*NA	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Tetrachloroethene	5.0	µg/L	ND	<b>10 J</b>	ND	ND	ND	ND	<b>2.5 J</b>	*NA	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Ethylbenzene	5.0	µg/L	<b>690</b>	ND	ND	<b>2 J</b>	ND	ND	ND	*NA	<b>0.9J</b>
m,p-Xylene	5.0	µg/L	<b>660</b>	ND	ND	ND	ND	ND	ND	*NA	ND
o-Xylene	5.0	µg/L	<b>440</b>	ND	ND	ND	ND	ND	ND	*NA	<b>1.4J</b>
Styrene	5.0	µg/L	<b>16</b>	ND	ND	ND	ND	ND	ND	*NA	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Total VOCs		µg/L	2,681.0	340.0	0	24.2	45.0	39.4	81.4	0.0	6.4
Total VOCs		mg/L	2.681	0.340	0.000	0.024	0.045	0.039	0.081	0.000	0.006

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06/98 Class GA.  
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.  
 NE = NYSDEC TOGS 1.1.1 water quality standard not established.

\* Dilution factor of 5 used

ND - Not detected for at or above reporting limit

J - Analyte detected estimated value below quantitation limits

- = The analyte was not sampled for.

\*NA - Unable to purge or sample due to equipment failure or no water was able to be removed from well. No water was retrievable.

**TABLE 3F**  
**Monitoring Well MW-8**  
**Volatile Organic Analytical Test Results**  
**153 Fillmore Avenue Site**

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards <sup>1</sup>	Units										
			08/07/01	07/26/07	08/27/08	07/23/09*	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14	
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	<b>54</b>	<b>190</b>	<b>160</b>	<b>190</b>	<b>240</b>	<b>120</b>	<b>110</b>	ND	<b>30</b>	
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	<b>7</b>	<b>15</b>	<b>20 J</b>	<b>20 J</b>	<b>10 J</b>	<b>11</b>	<b>4.9</b>	ND	<b>1.5</b>	
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	<b>31</b>	<b>160</b>	<b>230</b>	<b>370</b>	<b>260</b>	<b>52</b>	<b>22</b>	ND	<b>8.6</b>	
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1.0	µg/L	<b>4</b>	ND	ND	ND	ND	<b>3 J</b>	<b>2.4 J</b>	ND	<b>2.1</b>	
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5.0	µg/L	ND	<b>2 J</b>	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	5.0	µg/L	<b>6</b>	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		µg/L	102.0	367.0	410.0	580.0	510.0	186.0	144.2	0.0	42.2	
Total VOCs		mg/L	0.102	0.367	0.410	0.580	0.510	0.186	0.144	0.000	0.042	

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06/98 Class GA.

Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.

NE = NYSDEC TOGS 1.1.1 water quality standard not established.

\* Dilution factor of 5 used

ND - Not detected for at or above reporting limit

J - Analyte detected estimated value below quantitation limits

- = The analyte was not sampled for.

**TABLE 4A**  
**Monitoring Well MW-1**  
**Semi-Volatile Organic Analytical Test Results**  
**153 Fillmore Avenue Site**

Semi-Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards <sup>1</sup>	Units	08/08/01	07/23/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Phenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND
bis(2-chloroethyl) ether	1.0	µg/L	-	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND
2-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	NE	µg/L	-	ND	ND	ND	ND	ND	ND
Hexachlorocyclohexane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Nitrobenzene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND
Isophorone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
bis(2-chloroethoxy) methane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NE	µg/L	-	ND	ND	ND	ND	ND	ND
Naphthalene	10.0	µg/L	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.5	µg/L	-	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NE	µg/L	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	10.0	µg/L	-	ND	ND	ND	ND	ND	ND
2-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	0.93J
Acenaphthylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
3-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Acenaphthene	20.0	µg/L	ND	ND	ND	ND	ND	1.2	ND
2,4-Dinitrophenol	10.0	µg/L	-	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND
Dibenzofuran	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Diethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND
Fluorene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.04	µg/L	-	ND	ND	ND	ND	ND	ND
Pentachlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND
Phenanthrene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Anthracene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Carbazole	NE	µg/L	-	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	50.0	µg/L	-	2 J	ND	ND	ND	ND	ND
Fluoranthene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Pyrene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND
Chrysene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND
bis(2-ethylhexyl) phthalate	5.0	µg/L	ND	<b>8 J</b>	1 J	<b>6.2 B</b>	2.3 J	4.8	1.7J
Di-n-octyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	NE	µg/L	-	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	NE	µg/L	-	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND
(3+4)-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl) ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. 06/98, Class GA.  
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.  
 NE = NYSDEC TOGS 1.1.1 water quality standard not established.  
 ND - Not detected for at or above reporting limit  
 J - Analyte detected estimated value below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 - = The analyte was not sampled for.

**TABLE 4B**  
**Monitoring Well MW-2**  
**Semi-Volatile Organic Analytical Test Results**  
**153 Fillmore Avenue Site**

Semi-Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards <sup>1</sup>	Units	08/08/01	07/23/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Phenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND
bis(2-chloroethyl) ether	1.0	µg/L	-	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND
2-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	NE	µg/L	-	ND	ND	ND	ND	ND	ND
Hexachlorocyclohexane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Nitrobenzene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND
Isophlorone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
bis(2-chloroethoxy) methane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NE	µg/L	-	ND	ND	ND	ND	ND	ND
Naphthalene	10.0	µg/L	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.5	µg/L	-	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NE	µg/L	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND
2-Chloro-phthalene	10.0	µg/L	-	ND	ND	ND	ND	ND	ND
2-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	1.2J
Acenaphthylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
3-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Acenaphthene	20.0	µg/L	ND	1 J	ND	ND	2.3 J	ND	1.0
2,4-Dinitrophenol	10.0	µg/L	-	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND
Dibenzofuran	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Diethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND
Fluorene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.04	µg/L	-	ND	ND	ND	ND	ND	ND
Pentachlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND
Phenanthrene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Anthracene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Carbazole	NE	µg/L	-	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	50.0	µg/L	-	2 J	ND	ND	1.2 J	ND	0.4J
Fluoranthene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND
Pyrene	50.0	µg/L	ND	ND	ND	ND	1.1 J	ND	ND
Butyl benzyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5.0	µg/L	-	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND
Chrysene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND
bis(2-ethylhexyl) phthalate	5.0	µg/L	ND	9 J	30 J	6.5 B	25	ND	1.9J
Di-n-octyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	NE	µg/L	-	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	NE	µg/L	-	ND	ND	ND	ND	ND	ND
Benzo(g,h,i) perylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND
(3+4)-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl) ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. 06/98, Class GA.  
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.  
 NE = NYSDEC TOGS 1.1.1 water quality standard not established.  
 ND - Not detected for at or above reporting limit  
 J - Analyte detected estimated value below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 - = The analyte was not sampled for



**TABLE 4C**  
**Monitoring Well MW-5**  
**Semi-Volatile Organic Analytical Test Results**  
**153 Fillmore Avenue Site**

Semi-Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards <sup>1</sup>	Units	08/08/01	07/26/07	08/27/08	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Phenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroethyl) ether	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroethoxy) methane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10.0	µg/L	59	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NE	µg/L	800	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloro-phthalene	10.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	1.0 J
Acenaphthylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	0.64 J
2,6-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20.0	µg/L	65	ND	ND	ND	ND	1 J	1.5 J	2.3	ND
2,4-Dinitrophenol	10.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	50.0	µg/L	93	ND	ND	ND	ND	ND	1.2 J	ND	0.51 J
4-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.04	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50.0	µg/L	220	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	NE	µg/L	-	ND	ND	ND	ND	2 J	3.2 J	ND	ND
Di-n-butyl phthalate	50.0	µg/L	-	ND	ND	3 J	2 J	ND	ND	ND	0.45 J
Fluoranthene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-ethylhexyl) phthalate	5.0	µg/L	ND	4 J	7 J	7 J	3 J	4 J	ND	ND	1.8 J
Di-n-octyl phthalate	50.0	µg/L	-	75	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
(3+4)-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl) ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. 06/98, Class GA.  
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.  
 NE = NYSDEC TOGS 1.1.1 water quality standard not established.  
 ND = Not detected for at or above reporting limit  
 J = Analyte detected estimated value below quantitation limits  
 B = Analyte detected in the associated Method Blank  
 - = The analyte was not sampled for.

**TABLE 4D**  
**Monitoring Well MW-6**  
**Semi-Volatile Organic Analytical Test Results**  
**153 Fillmore Avenue Site**

Semi-Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards <sup>1</sup>	Units	08/08/01	07/26/07	08/27/08	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Phenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroethyl) ether	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroethoxy) methane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NE	µg/L	800	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloro-phthalene	10.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	1.2 J
Acenaphthylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	0.59 J
2,6-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20.0	µg/L	120	ND	3 J	ND	ND	2 J	3.4 J	1.0	3.0
2,4-Dinitrophenol	10.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	50.0	µg/L	72	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	50.0	µg/L	200	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.04	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50.0	µg/L	530	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	50.0	µg/L	-	ND	ND	3 J	ND	ND	ND	ND	0.48 J
Fluoranthene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	50.0	µg/L	64	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-ethylhexyl) phthalate	5.0	µg/L	ND	8 J	2 J	8 J	3 J	4 J	ND	ND	1.9 J
Di-n-octyl phthalate	50.0	µg/L	-	5 J	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i)perylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
(3+4)-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl) ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. 06/98, Class GA.  
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.  
 NE = NYSDEC TOGS 1.1.1 water quality standard not established.  
 ND = Not detected for at or above reporting limit  
 J - Analyte detected estimated value below quantitation limits  
 B - Analyte detected in the associated Method Blank  
 - = The analyte was not sampled for.

**TABLE 4E**  
**Monitoring Well MW-7**  
**Semi-Volatile Organic Analytical Test Results**  
**153 Fillmore Avenue Site**

Semi-Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards <sup>1</sup>	Units	08/08/01	07/26/07	08/27/08	07/23/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Phenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
bis(2-chloroethyl) ether	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
2-Chlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
1,3-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
1,4-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
2-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
N-Nitrosodi-n-propylamine	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Hexachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Nitrobenzene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Isophorone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
2-Nitrophenol	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	*NA	ND
2,4-Dimethylphenol	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	*NA	ND
bis(2-chloroethoxy) methane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
2,4-Dichlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
1,2,4-Trichlorobenzene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Naphthalene	10.0	µg/L	<b>3,000</b>	ND	ND	ND	ND	ND	ND	*NA	ND
4-Chloroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Hexachlorobutadiene	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
4-Chloro-3-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
2-Methylnaphthalene	NE	µg/L	<b>1,100</b>	ND	ND	ND	ND	ND	ND	*NA	ND
Hexachlorocyclopentadiene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
2,4,6-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
2,4,5-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
2-Chloro-phthalene	10.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
2-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Dimethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	<b>1.1 J</b>
Acenaphthylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
2,6-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
3-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Acenaphthene	20.0	µg/L	<b>590</b>	ND	ND	ND	ND	ND	<b>9.6 J</b>	*NA	ND
2,4-Dinitrophenol	10.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
4-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Dibenzofuran	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	*NA	ND
2,4-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Diethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	<b>0.47 J</b>
4-Chlorophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Fluorene	50.0	µg/L	<b>430</b>	ND	ND	ND	ND	ND	ND	*NA	ND
4-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
4,6-Dinitro-2-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
N-Nitrosodiphenylamine	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
4-Bromophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Hexachlorobenzene	0.04	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Pentachlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Phenanthrene	50.0	µg/L	<b>1,100</b>	ND	ND	ND	ND	ND	ND	*NA	ND
Anthracene	50.0	µg/L	<b>350</b>	ND	ND	ND	ND	ND	ND	*NA	0.45 J
Carbazole	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Di-n-butyl phthalate	50.0	µg/L	-	ND	ND	<b>3 J</b>	<b>1 J</b>	ND	ND	*NA	<b>0.74 J</b>
Fluoranthene	50.0	µg/L	<b>270</b>	ND	ND	ND	ND	<b>9.4 J</b>	ND	*NA	ND
Pyrene	50.0	µg/L	<b>480</b>	<b>3 J</b>	ND	ND	ND	ND	<b>28</b>	*NA	ND
Butyl benzyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
3,3'-Dichlorobenzidine	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Benzo(a)anthracene	0.002	µg/L	<b>150</b>	<b>1 J</b>	ND	ND	ND	ND	<b>16</b>	*NA	ND
Chrysene	0.002	µg/L	<b>140</b>	<b>1 J</b>	ND	ND	ND	ND	<b>17</b>	*NA	ND
bis(2-ethylhexyl) phthalate	5.0	µg/L	ND	ND	ND	<b>82</b>	<b>2 J</b>	<b>7 J</b>	<b>8.6 J</b>	*NA	<b>1.6 J</b>
Di-n-octyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Benzo(b)fluoranthene	0.002	µg/L	-	<b>1 J</b>	ND	ND	ND	ND	<b>16</b>	*NA	ND
Benzo(k)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	<b>16</b>	*NA	ND
Benzo(a)pyrene	NE	µg/L	-	<b>2 J</b>	ND	ND	ND	ND	<b>29</b>	*NA	ND
Indeno(1,2,3-cd)pyrene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Dibenz(a,h)anthracene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Benzo(g,h,i) perylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
(3+4)-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
bis(2-chloroisopropyl) ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. June 1998. Class GA.  
 Bolded concentrations indicated the analyte was detected.  
 Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.  
 NE = NYSDEC TOGS 1.1.1 water quality standard not established.  
 ND = Not detected for at or above reporting limit  
 J - Analyte detected estimated value below quantitation limits  
 - = The analyte was not sampled for.  
 \*NA - Unable to purge or sample due to equipment failure or no water was able to be removed from well. No water was retrievable.

**TABLE 4F**  
**Monitoring Well MW-8**  
**Semi-Volatile Organic Analytical Test Results**  
**153 Fillmore Avenue Site**

Semi-Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards <sup>1</sup>	Units	08/08/01	07/26/07	08/27/08	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Phenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroethyl) ether	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroethoxy) methane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloro-phthalene	10.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	1.3 J
Acenaphthylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20.0	µg/L	13	4 J	3 J	2 J	2 J	1 J	1.4 J	ND	2.2
2,4-Dinitrophenol	10.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.04	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50.0	µg/L	6	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	50.0	µg/L	-	ND	ND	4 J	2 J	ND	ND	ND	0.57 J
Fluoranthene	50.0	µg/L	8	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	50.0	µg/L	9	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Benz(a)anthracene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-ethylhexyl) phthalate	5.0	µg/L	85	ND	ND	8 J	3 J	4 J	ND	ND	2.3 J
Di-n-octyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i) perylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
(3+4)-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl) ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. 06/98, Class GA.  
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.  
 NE = NYSDEC TOGS 1.1.1 water quality standard not established.  
 ND = Not detected for at or above reporting limit  
 J = Analyte detected estimated value below quantitation limits  
 B = Analyte detected in the associated Method Blank  
 - = The analyte was not sampled for.

**TABLE 5A**  
**Monitoring Well MW-1**  
**Inorganic Metals Analytical Test Results**  
**153 Fillmore Avenue Site**

Metals Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards <sup>1</sup>	Units	08/08/01	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Aluminum	2,000	µg/L	-	4,760	48,000	37,300	215,000	170,000	62,000
Antimony	6	µg/L	-	ND	ND	ND	ND	3.1	1.4
Arsenic	50	µg/L	11	ND	23	36	184	150	22
Barium	2,000	µg/L	301	265	590	545	1,920	1,400	840
Beryllium	3	µg/L	-	ND	ND	ND	7.62	7.50	5.40
Cadmium	10	µg/L	ND	ND	10.4	ND	151	ND	28
Calcium	NE	µg/L	-	188,000	635,000	400,000	1,130,000	830,000	540,000
Chromium	50	µg/L	ND	ND	67.7	58.2	287	310	100
Cobalt	NE	µg/L	-	ND	49	35.5	160	200	77
Copper	1,000	µg/L	-	16.6	77.7	89.5	437	570	220
Iron	600	µg/L	-	22,200	112,000	81,800	311,000	420,000	210,000
Lead	50	µg/L	7	3.78	80	62	518	200	38
Magnesium	35,000	µg/L	-	35,800	127,000	61,400	226,000	210,000	130,000
Manganese	600	µg/L	-	2,250	7,410	5,100	9,570	16,000	9,300
Mercury	0.7	µg/L	ND	ND	0.22	ND	0.52	0.54	0.23
Nickel	200	µg/L	-	ND	121	78.2	436	410	150
Potassium	NE	µg/L	-	4,650	12,600	12,400	51,100	26,000	16,000
Selenium	10	µg/L	-	ND	3.9	ND	ND	ND	ND
Silver	50	µg/L	-	ND	ND	ND	ND	ND	7.2 J
Sodium	NE	µg/L	-	79,500	71,300	81,000	54,000	45,000	77,000
Thallium	0.5	µg/L	-	ND	ND	ND	ND	2.6	ND
Vanadium	NE	µg/L	-	ND	102	87	343	360	130
Zinc	5,000	µg/L	-	28.1	402	307	1,310	1,500	920

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06/98. Class GA.

Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.

NE = NYSDEC TOGS 1.1.1 water quality standard not established.

ND - Not detected for at or above reporting limit

J - Analyte detected estimated value below quantitation limits

- = The analyte was not sampled for.

**TABLE 5B**  
**Monitoring Well MW-2**  
**Inorganic Metals Analytical Test Results**  
**153 Fillmore Avenue Site**

Metals Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards <sup>1</sup>	Units	08/08/01	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Aluminum	2,000	µg/L	-	<b>3,250</b>	<b>98,500</b>	<b>35,400</b>	<b>265,000</b>	<b>34,000</b>	<b>34,000</b>
Antimony	6	µg/L	-	ND	ND	ND	ND	1.5	0.84 J
Arsenic	50	µg/L	5	ND	17	32	297	44	16
Barium	2,000	µg/L	73	<b>261</b>	<b>2,330</b>	<b>724</b>	<b>3,890</b>	<b>1,000</b>	<b>880</b>
Beryllium	3	µg/L	-	ND	5	ND	<b>8.35</b>	ND	1.4 J
Cadmium	10	µg/L	ND	ND	20	5.32	238	10	ND
Calcium	NE	µg/L	-	<b>213,000</b>	<b>1,240,000</b>	<b>417,000</b>	<b>2,550,000</b>	<b>460,000</b>	<b>370,000</b>
Chromium	50	µg/L	ND	ND	146	<b>56.2</b>	<b>336</b>	<b>52</b>	<b>62</b>
Cobalt	NE	µg/L	-	ND	90	30.6	190	32	32
Copper	1,000	µg/L	-	<b>29.1</b>	<b>611</b>	<b>199</b>	<b>1,510</b>	<b>360</b>	<b>220</b>
Iron	600	µg/L	-	<b>11,300</b>	<b>165,000</b>	<b>71,700</b>	<b>393,000</b>	<b>83,000</b>	<b>110,000</b>
Lead	50	µg/L	2	13.1	410	140	1,150	180	40
Magnesium	35,000	µg/L	-	<b>53,400</b>	<b>315,000</b>	<b>119,000</b>	<b>706,000</b>	<b>200,000</b>	<b>160,000</b>
Manganese	600	µg/L	-	490	5,250	2,110	8,930	2,100	1,600
Mercury	0.7	µg/L	ND	ND	2.8	0.542	2.04	0.67	0.21
Nickel	200	µg/L	-	ND	222	71.6	534	89	87
Potassium	NE	µg/L	-	<b>3,580</b>	<b>20,900</b>	<b>11,000</b>	<b>554,000</b>	<b>8,500</b>	<b>8,100</b>
Selenium	10	µg/L	-	ND	5.6	ND	ND	32	11 J
Silver	50	µg/L	-	ND	ND	ND	ND	ND	6.1 J
Sodium	NE	µg/L	-	<b>56,900</b>	<b>60,500</b>	<b>58,700</b>	<b>514,000</b>	<b>30,000</b>	<b>44,000</b>
Thallium	0.5	µg/L	-	ND	ND	ND	ND	1.1	ND
Vanadium	NE	µg/L	-	ND	153	76	356	73	64
Zinc	5,000	µg/L	-	<b>79.8</b>	<b>2,060</b>	<b>606</b>	<b>4,100</b>	<b>1,200</b>	<b>760</b>

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06/98. Class GA.

Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.

NE = NYSDEC TOGS 1.1.1 water quality standard not established.

ND - Not detected for at or above reporting limit

J - Analyte detected estimated value below quantitation limits

- = The analyte was not sampled for.

**TABLE 5C**  
**Monitoring Well MW-5**  
**Inorganic Metals Analytical Test Results**  
**153 Fillmore Avenue Site**

Metals Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards <sup>1</sup>	Units	08/08/01	07/26/07	08/27/08	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Aluminum	2,000	µg/L	-	1,440	5,740	6,990	2,640	1,480	161	140	120
Antimony	6	µg/L	-	ND	ND	ND	ND	ND	ND	2.3	0.98 J
Arsenic	50	µg/L	11	ND	ND	ND	ND	ND	ND	1.6	0.86 J
Barium	2,000	µg/L	2,390	160	666	522	176	239	172	110	110
Beryllium	3	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	10	µg/L	22	ND	7	ND	ND	ND	ND	ND	0.72 J
Calcium	NE	µg/L	-	164,000	163,000	193,000	173,000	159,000	140,000	130,000	190,000
Chromium	50	µg/L	ND	ND	13.9	22.1	ND	ND	ND	ND	ND
Cobalt	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Copper	1,000	µg/L	-	20.8	45.9	79.1	12.9	22	ND	ND	6.8 J
Iron	600	µg/L	-	2,880	12,400	17,200	7,090	4,970	3,450	860	2,100
Lead	50	µg/L	580	64.5	231	527	170	91	ND	4.8	13.0
Magnesium	35,000	µg/L	-	31,700	38,500	59,600	39,800	34,600	31,400	24,000	35,000
Manganese	600	µg/L	-	530	509	591	569	437	225	190	480
Mercury	0.7	µg/L	ND	ND	ND	ND	ND	ND	0.689	ND	ND
Nickel	200	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	NE	µg/L	-	ND	4,270	2,030	ND	ND	ND	1,200	680 J
Selenium	10	µg/L	-	8.1	ND	ND	ND	ND	47.7	ND	22.0
Silver	50	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	NE	µg/L	-	24,200	18,400	17,200	20,100	19,000	11,000	19,000	25,000
Thallium	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	5,000	µg/L	-	1,690	2,310	1,670	2,740	984	165	550	340

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06/98. Class GA.

Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.

NE = NYSDEC TOGS 1.1.1 water quality standard not established.

ND - Not detected for at or above reporting limit

J - Analyte detected estimated value below quantitation limits

- = The analyte was not sampled for.

**TABLE 5D**  
**Monitoring Well MW-6**  
**Inorganic Metals Analytical Test Results**  
**153 Fillmore Avenue Site**

Metals Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards <sup>1</sup>	Units	08/08/01	07/26/07	08/27/08	07/23/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Aluminum	2,000	µg/L	-	148	1,630	843	941	202	ND	120	180
Antimony	6	µg/L	-	ND	ND	ND	ND	ND	ND	ND	0.84 J
Arsenic	50	µg/L	ND	ND	ND	ND	ND	ND	ND	1.0	1.1
Barium	2,000	µg/L	1,660	234	242	230	213	191	207	180	180
Beryllium	3	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	10	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	NE	µg/L	-	156,000	132,000	146,000	137,000	130,000	149,000	140,000	140,000
Chromium	50	µg/L	22	ND	ND	ND	ND	ND	ND	11	ND
Cobalt	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Copper	1,000	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Iron	600	µg/L	-	7,270	10,700	8,050	9,530	7,090	6,220	9,800	8,000
Lead	50	µg/L	84	ND	5.91	3.82	9.5	ND	ND	1.7	3.8
Magnesium	35,000	µg/L	-	27,900	24,300	27,900	24,600	24,800	29,100	27,000	29,000
Manganese	600	µg/L	-	1,200	2,720	1,690	1,860	1,480	1,080	2,500	1,700
Mercury	0.7	µg/L	0.2	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	200	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	NE	µg/L	-	2,190	3,190	3,260	ND	ND	ND	3,100	2,900
Selenium	10	µg/L	-	13.5	ND	ND	ND	ND	ND	ND	23.0
Silver	50	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	NE	µg/L	-	21,600	21,600	20,600	16,900	16,000	14,700	14,000	12,000
Thallium	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	5,000	µg/L	-	63.2	47.6	29.4	39.7	51.6	18.7	ND	40 J

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06/98. Class GA.

Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.

NE = NYSDEC TOGS 1.1.1 water quality standard not established.

ND - Not detected for at or above reporting limit

J - Analyte detected estimated value below quantitation limits

- = The analyte was not sampled for.



**TABLE SE**  
**Monitoring Well MW-7**  
**Inorganic Metals Analytical Test Results**  
**153 Fillmore Avenue Site**

Metals Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards <sup>1</sup>	Units	08/08/01	07/26/07	08/27/08	07/23/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Aluminum	2,000	µg/L	-	<b>3,390</b>	<b>22,700</b>	<b>4,050</b>	<b>21,120</b>	<b>5,360</b>	<b>4,970</b>	*NA	1,300
Antimony	6	µg/L	-	ND	ND	ND	ND	ND	<b>35.5</b>	*NA	3.2
Arsenic	50	µg/L	<b>6.0</b>	ND	ND	ND	<b>5.7</b>	ND	<b>115</b>	*NA	<b>3.3</b>
Barium	2,000	µg/L	<b>163</b>	<b>76.2</b>	<b>173</b>	<b>96</b>	<b>64</b>	<b>84.4</b>	<b>102</b>	*NA	<b>72.0</b>
Beryllium	3	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Cadmium	10	µg/L	ND	<b>11.7</b>	<b>40.2</b>	ND	ND	<b>15.7</b>	<b>50.3</b>	*NA	<b>2.2 J</b>
Calcium	NE	µg/L	-	<b>145,000</b>	<b>299,000</b>	<b>166,000</b>	<b>135,000</b>	<b>185,000</b>	<b>149,000</b>	*NA	<b>160,000</b>
Chromium	50	µg/L	ND	<b>7.3</b>	<b>36.6</b>	ND	ND	<b>10.8</b>	<b>10.9</b>	*NA	<b>1.9 J</b>
Cobalt	NE	µg/L	-	ND	<b>30.0</b>	ND	ND	ND	ND	*NA	<b>8.6 J</b>
Copper	1,000	µg/L	-	<b>106</b>	<b>293</b>	<b>162</b>	<b>63</b>	<b>134</b>	<b>250</b>	*NA	<b>40</b>
Iron	600	µg/L	-	<b>11,200</b>	<b>38,000</b>	<b>15,200</b>	<b>9,950</b>	<b>17,000</b>	<b>13,500</b>	*NA	<b>10,000</b>
Lead	50	µg/L	<b>36</b>	<b>96.6</b>	<b>451</b>	<b>231</b>	<b>120</b>	<b>180</b>	<b>329</b>	*NA	<b>82</b>
Magnesium	35,000	µg/L	-	<b>38,100</b>	<b>60,500</b>	<b>30,600</b>	<b>29,500</b>	<b>43,500</b>	<b>30,700</b>	*NA	<b>27,000</b>
Manganese	600	µg/L	-	<b>942</b>	<b>2,210</b>	<b>1,380</b>	<b>508</b>	<b>1,440</b>	<b>849</b>	*NA	<b>1,200</b>
Mercury	0.7	µg/L	ND	ND	<b>0.211</b>	ND	ND	ND	<b>0.541</b>	*NA	ND
Nickel	200	µg/L	-	ND	<b>112.0</b>	<b>36.8</b>	ND	<b>36.2</b>	<b>32.7</b>	*NA	<b>21.0</b>
Potassium	NE	µg/L	-	<b>12,500</b>	<b>15,000</b>	<b>13,900</b>	<b>9,940</b>	<b>11,100</b>	<b>11,100</b>	*NA	<b>7,100</b>
Selenium	10	µg/L	-	<b>17.1</b>	ND	ND	ND	ND	<b>119</b>	*NA	<b>14 J</b>
Silver	50	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Sodium	NE	µg/L	-	<b>72,900</b>	<b>34,500</b>	<b>88,600</b>	<b>72,100</b>	<b>65,100</b>	<b>58,600</b>	*NA	<b>39,000</b>
Thallium	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND
Vanadium	NE	µg/L	-	ND	<b>46.0</b>	ND	ND	ND	ND	*NA	<b>3 J</b>
Zinc	5,000	µg/L	-	<b>2,540</b>	<b>21,000</b>	<b>7,010</b>	<b>2,470</b>	<b>6,270</b>	<b>7,080</b>	*NA	<b>3,500</b>

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06/98. Class GA.

Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.

NE = NYSDEC TOGS 1.1.1 water quality standard not established.

ND - Not detected for at or above reporting limit

J - Analyte detected estimated value below quantitation limits

- - The analyte was not sampled for.

\*NA - Unable to purge or sample due to equipment failure or no water was able to be removed from well. No water was retrievable.

**TABLE 5F**  
**Monitoring Well MW-8**  
**Inorganic Metals Analytical Test Results**  
**153 Fillmore Avenue Site**

Metals Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards <sup>1</sup>	Units	08/08/01	07/26/07	08/27/08	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14
Aluminum	2,000	µg/L	-	ND	1,420	722	199	ND	ND	130	46 J
Antimony	6	µg/L	-	ND	ND	ND	ND	ND	ND	6.0	0.61 J
Arsenic	50	µg/L	14.0	ND	ND	ND	ND	ND	ND	22.0	1.7
Barium	2,000	µg/L	880	172	175	125	133	107	110	180	120
Beryllium	3	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	10	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	NE	µg/L	-	157,000	149,000	141,000	144,000	141,000	147,000	140,000	160,000
Chromium	50	µg/L	15	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Copper	1,000	µg/L	-	10.4	15.0	ND	ND	ND	ND	23.0	ND
Iron	600	µg/L	-	3,230	4,640	3,120	2,870	3,090	3,650	8,600	4,100
Lead	50	µg/L	270	ND	15.4	5.4	11.0	ND	16.6	98.0	5.4
Magnesium	35,000	µg/L	-	28,700	27,100	28,100	25,300	26,200	28,300	19,000	34,000
Manganese	600	µg/L	-	802	891	618	665	817	819	1,500	820
Mercury	0.7	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	200	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	NE	µg/L	-	1,780	4,060	3,080	ND	ND	ND	6,800	2,700
Selenium	10	µg/L	-	9.5	ND	ND	ND	ND	24.1	ND	19 J
Silver	50	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	NE	µg/L	-	30,100	24,000	22,600	22,600	22,700	19,800	15,000	19,000
Thallium	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	1.1	ND
Vanadium	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	5,000	µg/L	-	189.0	630.0	250.0	375.0	33.0	43.3	240.0	80.0

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06/98. Class GA.  
 Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.

NE = NYSDEC TOGS 1.1.1 water quality standard not established.

ND - Not detected for at or above reporting limit

J - Analyte detected estimated value below quantitation limits

- - The analyte was not sampled for.

# APPENDICES

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# **APPENDIX A**

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## **Groundwater Field Sampling Records**



**GHD INC.  
GROUNDWATER FIELD SAMPLING RECORD**

SITE 153 Fillmore Avenue

DATE 07/15/14

Sampler: Brian Doyle

SAMPLE ID MW-01, FD

Depth of well (from top of casing).....	<u>13.83 ft</u>	EL <u>560.97</u>
Initial static water level (from top of casing)....	<u>6.5 ft</u>	EL <u>568.30</u>
Top of PVC Casing Elevation	<u>574.80</u>	

**Evacuation Method:**

**Well Volume Calculation**

Peristaltic	<u>          </u>	Centrifugal	<u>          </u>	1 in. casing:	<u>          </u> ft. of water x .09 =	<u>          </u> gallons
Airlift	<u>          </u>	Pos. Displ.	<u>          </u>	2 in. casing:	<u>7.3</u> ft. of water x .16 =	<u>1.17</u> gallons
Bailer	<u>X</u>	>>> No. of bails	<u>          </u>	3 in. casing:	<u>          </u> ft. of water x .36 =	<u>          </u> gallons

Volume of water removed 3.52 gals.

> 3 volumes: 

YES	no
-----	----

dry: 

yes	NO
-----	----

Field Tests:

Temp:	<u>64.40</u> C
pH	<u>7</u>
Conductivity	<u>0.883</u> mS/cm
DO	<u>13.46</u> mg/L
Turbidity	<u>NA</u> NTUs
Oxidation Reduction Potential (ORP)	<u>-10</u> mV

Sampling: Time: 12:00 noon

Sampling Method:

Peristaltic Pump	<u>          </u>
Disposable Bailer	<u>X</u>
Disposable Tubing	<u>          </u>

**Observations:**

Weather/Temperature: Partly Cloudy, 70 ° F

Physical Appearance and Odor of Sample: Brown. No odor.  
Surface water from parking lot/flush mount well casing found  
holding inside well annular space and above 2" well cap seal.  
Well cap seal holding. Water removed from annular space prior  
to opening well cap.

Comments: Field equipment unable to record a turbidity reading due to very murky water.

**GHD INC.  
GROUNDWATER FIELD SAMPLING RECORD**

SITE 153 Fillmore Avenue

DATE 07/15/14

Sampler: Brian Doyle

SAMPLE ID MW-02, FD

Depth of well (from top of casing).....	<u>13.5 ft</u>	<u>EL 561.69</u>
Initial static water level (from top of casing)....	<u>5.9 ft</u>	<u>EL 569.29</u>
Top of PVC Casing Elevation	<u>575.19</u>	

**Evacuation Method:**

**Well Volume Calculation**

Peristaltic	<u>          </u>	Centrifugal	<u>          </u>	1 in. casing:	<u>          </u>	ft. of water x .09 =	<u>          </u>	gallons
Airlift	<u>          </u>	Pos. Displ.	<u>          </u>	2 in. casing:	<u>7.6</u>	ft. of water x .16 =	<u>1.22</u>	gallons
Bailer	<u>X</u>	>>> No. of bails	<u>          </u>	3 in. casing:	<u>          </u>	ft. of water x .36 =	<u>          </u>	gallons

Volume of water removed 3.65 gals.

> 3 volumes:  YES  no

dry:  ycs  NO

**Field Tests:**

Temp:	<u>59.30 C</u>
pH	<u>19-Jul</u>
Conductivity	<u>0.923 mS/cm</u>
DO	<u>15.37 mg/L</u>
Turbidity	<u>NA NTUs</u>
Oxidation Reduction Potential (ORP)	<u>-21 mV</u>

Sampling: Time: 12:30pm

Sampling Method: Peristaltic Pump           

Disposable Bailer

Disposable Tubing           

**Observations:**

Weather/Temperature: Partly Cloudy, 70 ° F

Physical Appearance and Odor of Sample: Clear initially, then brown, very murky and turbid

Comments: Field equipment unable to record a turbidity reading due to very murky water.

**GHD INC.  
GROUNDWATER FIELD SAMPLING RECORD**

SITE 153 Fillmore Avenue

DATE 07/15/14

Sampler: Brian Doyle

SAMPLE ID MW-05

Depth of well (from top of casing).....	<u>15.5 ft</u>	EL <u>562.82</u>
Initial static water level (from top of casing)....	<u>7.9 ft</u>	EL <u>570.42</u>
Top of PVC Casing Elevation	<u>578.32</u>	

**Evacuation Method:**

**Well Volume Calculation**

Peristaltic   X   Centrifugal \_\_\_\_\_  
 Airlift \_\_\_\_\_ Pos Displ. \_\_\_\_\_  
 Bailer \_\_\_\_\_ >>> No. of bails \_\_\_\_\_

1 in. casing:   7.6   ft. of water x .09 =   0.68   gallons  
 2 in. casing: \_\_\_\_\_ ft of water x .16 = \_\_\_\_\_ gallons  
 3 in. casing: \_\_\_\_\_ ft. of water x .36 = \_\_\_\_\_ gallons

Volume of water removed   2.00   gals.  
 > 3 volumes:  YES  no  
 dry:  yes  NO

**Field Tests:**  
 Temp:   62.20   C  
 pH   7.08    
 Conductivity   0.995   mS/cm  
 DO   12.56   mg/L  
 Turbidity   18.6   NTUs  
 Oxidation Reduction Potential (ORP)   -57   mV

Sampling: \_\_\_\_\_ Time:   11:00 AM  

Sampling Method: Peristaltic Pump   X    
 Disposable Bailer \_\_\_\_\_  
 Disposable Tubing   X  

**Observations:**

Weather/Temperature:   Partly Cloudy, 70 ° F  

Physical Appearance and Odor of Sample:   Clear, slight sulfur odor.  

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

**GHD INC.  
GROUNDWATER FIELD SAMPLING RECORD**

SITE 153 Fillmore Avenue

DATE 07/15/14

Sampler: Brian Doyle

SAMPLE ID MW-06, MS & MSD

Depth of well (from top of casing).....	<u>17.3 ft</u>	<u>EL 560.83</u>
Initial static water level (from top of casing)....	<u>7.6 ft</u>	<u>EL 570.53</u>
Top of PVC Casing Elevation	<u>578.13</u>	

**Evacuation Method:**

**Well Volume Calculation**

Peristaltic   X   Centrifugal \_\_\_\_\_  
 Airlift \_\_\_\_\_ Pos. Displ. \_\_\_\_\_  
 Bailer \_\_\_\_\_ >>> No. of bails \_\_\_\_\_

1 in. casing:   9.7   ft. of water x .09 =   0.87   gallons  
 2 in. casing: \_\_\_\_\_ ft. of water x .16 = \_\_\_\_\_ gallons  
 3 in. casing: \_\_\_\_\_ ft. of water x .36 = \_\_\_\_\_ gallons

Volume of water removed   2.60   gals.  
 > 3 volumes:  YES  no  
 dry:  yes  NO

**Field Tests:**

Temp:	<u>  59.1  </u> C
pH	<u>  6.93  </u>
Conductivity	<u>  0.708  </u> mS/cm
DO	<u>  11.06  </u> mg/L
Turbidity	<u>  79.8  </u> NTUs
Oxidation Reduction Potential (ORP)	<u>  -55.0  </u> mV

Sampling: \_\_\_\_\_ Time:   10:30 AM  

Sampling Method: Peristaltic Pump   X    
 Disposable Bailer \_\_\_\_\_  
 Disposable Tubing   X  

**Observations:**

Weather/Temperature:   Partly Cloudy, 70 ° F  

Physical Appearance and Odor of Sample:   Oil residue. Slight odor.  

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



**GHD INC.  
GROUNDWATER FIELD SAMPLING RECORD**

SITE 153 Fillmore Avenue

DATE 07/15/14

Sampler: Brian Doyle

SAMPLE ID MW-07

Depth of well (from top of casing).....	<u>23.5 ft</u>	<u>EL 562.76</u>
Initial static water level (from top of casing)....	<u>(See Comments) ft</u>	<u>EL</u>
Top of PVC Casing Elevation	<u>586.26</u>	

**Evacuation Method:**

**Well Volume Calculation**

Peristaltic	<u>X</u>	Centrifugal		1 in. casing:		ft. of water x .09 =		gallons
Airlift		Pos. Displ.		2 in. casing:		ft. of water x .16 =		gallons
Bailer		>>> No. of bails		3 in. casing:		ft. of water x .36 =		gallons

Volume of water removed 0.00 gals.

> 3 volumes:      yes      no

dry:                    yes      no

**Field Tests:**

Temp:	<u>58.9 C</u>
pH	<u>7.07</u>
Conductivity	<u>0.856 mS/cm</u>
DO	<u>12.96 mg/L</u>
Turbidity	<u>70 NTUs</u>
Oxidation Reduction Potential (ORP)	<u>4.0 mV</u>

Sampling: Time: 10:00 AM

Sampling Method: Peristaltic Pump X

Disposable Bailer \_\_\_\_\_

Disposable Tubing X

**Observations:**

Weather/Temperature: Partly Cloudy, 70 ° F

Physical Appearance and Odor of Sample: no odor

**Comments:**

Well went dry after 0.2 gallons was removed, Due to obstruction, water level indicator can not pass and unable to tell if water is in well.

There is an obstruction in the well at a depth of 8.8 feet in which the water level indicator could not proceed further down the well.



# **APPENDIX B**

---

## **Laboratory Analytical Results**





12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 101  
Amherst, NY 14228

### Report Summary

Tuesday November 04, 2014

Report Number: L710351

Samples Received: 07/16/14

Client Project: 8612199

Description: Fillmore Ave.

The analytical results in this report are based upon information supplied by you, the client, and are for your exclusive use. If you have any questions regarding this data package, please do not hesitate to call.

Entire Report Reviewed By:

Leslie Newton , ESC Representative

#### Laboratory Certification Numbers

A2LA - 1461-01, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,  
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,  
NC - ENV375/DW21704/BIO041, ND - R-140. NJ - TN002, NJ NELAP - TN002,  
SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,  
MN - 047-999-395, NY - 11742, WI - 998093910, NV - TN000032011-1,  
TX - T104704245-11-3, OK - 9915, PA - 68-02979, IA Lab #364, EPA - TN002

Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

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12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Dave Rowlinson  
 GHD  
 200 John James Audubon Pkwy; Ste 10  
 Amherst, NY 14228

November 04, 2014

Date Received : July 16, 2014  
 Description : Fillmore Ave.

ESC Sample # : L710351-01

Sample ID : MW-1

Site ID :

Collected By : Dave Rowlinson  
 Collection Date : 07/15/14 12:00

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	0.0014	0.00021	0.0010	mg/l		6020	07/17/14	1
Arsenic	0.022	0.00025	0.0010	mg/l		6020	07/17/14	1
Lead	0.038	0.00024	0.0010	mg/l		6020	07/17/14	1
Thallium	U	0.00019	0.0010	mg/l		6020	07/17/14	1
Mercury	0.00023	0.000049	0.00020	mg/l		7470A	07/18/14	1
Aluminum	62.	0.035	0.10	mg/l		6010B	07/22/14	1
Barium	0.84	0.0017	0.0050	mg/l		6010B	07/22/14	1
Beryllium	0.0054	0.00070	0.0020	mg/l		6010B	07/22/14	1
Cadmium	0.028	0.00070	0.0050	mg/l		6010B	07/22/14	1
Calcium	540	0.046	1.0	mg/l		6010B	07/22/14	1
Chromium	0.10	0.0014	0.010	mg/l		6010B	07/22/14	1
Cobalt	0.077	0.0023	0.010	mg/l		6010B	07/22/14	1
Copper	0.22	0.0053	0.020	mg/l		6010B	07/22/14	1
Iron	210	0.014	0.10	mg/l		6010B	07/22/14	1
Magnesium	130	0.011	1.0	mg/l		6010B	07/22/14	1
Manganese	9.3	0.0012	0.010	mg/l		6010B	07/22/14	1
Nickel	0.15	0.0049	0.020	mg/l		6010B	07/22/14	1
Potassium	16.	0.10	1.0	mg/l		6010B	07/22/14	1
Selenium	U	0.0074	0.020	mg/l		6010B	07/22/14	1
Silver	0.0072	0.0028	0.010	mg/l	J	6010B	07/22/14	1
Sodium	77.	0.098	1.0	mg/l		6010B	07/22/14	1
Vanadium	0.13	0.0024	0.020	mg/l		6010B	07/22/14	1
Zinc	0.92	0.0059	0.050	mg/l		6010B	07/22/14	1
Volatile Organics								
Acetone	U	0.010	0.050	mg/l		8260B	07/19/14	1
Benzene	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
Bromochloromethane	U	0.00052	0.0010	mg/l		8260B	07/19/14	1
Bromodichloromethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Bromoform	U	0.00047	0.0010	mg/l		8260B	07/19/14	1
Bromomethane	U	0.00087	0.0050	mg/l	J3	8260B	07/19/14	1
Carbon disulfide	U	0.00028	0.0010	mg/l		8260B	07/19/14	1
Carbon tetrachloride	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Chlorobenzene	U	0.00035	0.0010	mg/l		8260B	07/19/14	1
Chlorodibromomethane	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
Chloroethane	U	0.00045	0.0050	mg/l		8260B	07/19/14	1
Chloroform	U	0.00032	0.0050	mg/l		8260B	07/19/14	1
Chloromethane	U	0.00028	0.0025	mg/l		8260B	07/23/14	1
Cyclohexane	U	0.00039	0.0010	mg/l		8260B	07/19/14	1
1,2-Dibromo-3-Chloropropane	U	0.0013	0.0050	mg/l		8260B	07/19/14	1
1,2-Dibromoethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD = TRRP SDL

RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 11/04/14 13:49 Printed: 11/04/14 13:56



YOUR LAB OF CHOICE

12065 Lebanon Rd.  
Mt. Juliet, TN 37122  
(615) 758-5858  
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

November 04, 2014

Date Received : July 16, 2014  
Description : Fillmore Ave.  
Sample ID : MW-1  
Collected By : Dave Rowlinson  
Collection Date : 07/15/14 12:00

ESC Sample # : L710351-01

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,2-Dichlorobenzene	U	0.00035	0.0010	mg/l		8260B	07/19/14	1
1,3-Dichlorobenzene	U	0.00022	0.0010	mg/l		8260B	07/19/14	1
1,4-Dichlorobenzene	U	0.00027	0.0010	mg/l		8260B	07/19/14	1
Dichlorodifluoromethane	U	0.00055	0.0050	mg/l		8260B	07/19/14	1
1,1-Dichloroethane	U	0.00026	0.0010	mg/l		8260B	07/19/14	1
1,2-Dichloroethane	U	0.00036	0.0010	mg/l		8260B	07/19/14	1
1,1-Dichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
cis-1,2-Dichloroethene	0.013	0.00026	0.0010	mg/l		8260B	07/19/14	1
trans-1,2-Dichloroethene	0.00046	0.00040	0.0010	mg/l	J	8260B	07/19/14	1
1,2-Dichloropropane	U	0.00031	0.0010	mg/l		8260B	07/19/14	1
cis-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260B	07/19/14	1
trans-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260B	07/19/14	1
Ethylbenzene	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
2-Hexanone	U	0.0038	0.010	mg/l		8260B	07/19/14	1
Isopropylbenzene	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
2-Butanone (MEK)	U	0.0039	0.010	mg/l		8260B	07/19/14	1
Methyl Acetate	U	0.0043	0.020	mg/l		8260B	07/19/14	1
Methyl Cyclohexane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Methylene Chloride	U	0.0010	0.0050	mg/l		8260B	07/19/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0021	0.010	mg/l		8260B	07/19/14	1
Methyl tert-butyl ether	U	0.00037	0.0010	mg/l		8260B	07/19/14	1
Styrene	U	0.00031	0.0010	mg/l		8260B	07/19/14	1
1,1,2,2-Tetrachloroethane	U	0.00058	0.0010	mg/l		8260B	07/19/14	1
Tetrachloroethene	U	0.00037	0.0010	mg/l		8260B	07/19/14	1
Toluene	U	0.00078	0.0050	mg/l		8260B	07/19/14	1
1,2,3-Trichlorobenzene	U	0.00023	0.0010	mg/l		8260B	07/19/14	1
1,2,4-Trichlorobenzene	U	0.00021	0.0010	mg/l		8260B	07/19/14	1
1,1,1-Trichloroethane	U	0.00032	0.0010	mg/l		8260B	07/19/14	1
1,1,2-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Trichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
Trichlorofluoromethane	U	0.0012	0.0050	mg/l		8260B	07/19/14	1
1,1,2-Trichlorotrifluoroethane	U	0.00030	0.0010	mg/l		8260B	07/19/14	1
Vinyl chloride	U	0.00026	0.0010	mg/l		8260B	07/19/14	1
Xylenes, Total	U	0.0011	0.0030	mg/l		8260B	07/19/14	1
Surrogate Recovery								
Toluene-d8	102.				Rec.	8260B	07/19/14	1
Dibromofluoromethane	100.				Rec.	8260B	07/19/14	1
a,a,a-Trifluorotoluene	99.1				Rec.	8260B	07/19/14	1
4-Bromofluorobenzene	103.				Rec.	8260B	07/19/14	1
TCL Base/Neutral Extractables								
Acenaphthene	U	0.00032	0.0010	mg/l		8270 D	07/21/14	1
Acenaphthylene	U	0.00031	0.0010	mg/l		8270 D	07/21/14	1

U = ND (Not Detected)

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REPORT OF ANALYSIS

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

November 04, 2014

Date Received : July 16, 2014  
Description : Fillmore Ave.  
Sample ID : MW-1  
Collected By : Dave Rowlinson  
Collection Date : 07/15/14 12:00

ESC Sample # : L710351-01

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Acetophenone	U	0.0027	0.010	mg/l		8270 D	07/21/14	1
Anthracene	U	0.00029	0.0010	mg/l		8270 D	07/21/14	1
Atrazine	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
Benzaldehyde	U	0.0026	0.010	mg/l		8270 D	07/21/14	1
Benzo (a) anthracene	U	0.00032	0.0010	mg/l		8270 D	07/21/14	1
Benzo (b) fluoranthene	U	0.00027	0.0010	mg/l		8270 D	07/21/14	1
Benzo (k) fluoranthene	U	0.00036	0.0010	mg/l		8270 D	07/21/14	1
Benzo (g, h, i) perylene	U	0.00033	0.0010	mg/l		8270 D	07/21/14	1
Benzo (a) pyrene	U	0.00034	0.0010	mg/l		8270 D	07/21/14	1
Biphenyl	U	0.00032	0.010	mg/l		8270 D	07/21/14	1
Bis (2-chlorethoxy)methane	U	0.00033	0.010	mg/l		8270 D	07/21/14	1
Bis (2-chloroethyl) ether	U	0.0016	0.010	mg/l		8270 D	07/21/14	1
Bis (2-chloroisopropyl) ether	U	0.00044	0.010	mg/l		8270 D	07/21/14	1
4-Bromophenyl-phenylether	U	0.00034	0.010	mg/l		8270 D	07/21/14	1
Caprolactam	U	0.0026	0.010	mg/l		8270 D	07/21/14	1
Carbazole	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
4-Chloroaniline	U	0.00038	0.010	mg/l		8270 D	07/21/14	1
2-Chloronaphthalene	U	0.00033	0.0010	mg/l		8270 D	07/21/14	1
4-Chlorophenyl-phenylether	U	0.00030	0.010	mg/l		8270 D	07/21/14	1
Chrysene	U	0.00033	0.0010	mg/l		8270 D	07/21/14	1
Dibenz (a, h) anthracene	U	0.00028	0.0010	mg/l		8270 D	07/21/14	1
Dibenzofuran	U	0.00034	0.010	mg/l		8270 D	07/21/14	1
3,3-Dichlorobenzidine	U	0.0020	0.010	mg/l		8270 D	07/21/14	1
2,4-Dinitrotoluene	U	0.0016	0.010	mg/l		8270 D	07/21/14	1
2,6-Dinitrotoluene	U	0.00028	0.010	mg/l		8270 D	07/21/14	1
Fluoranthene	U	0.00031	0.0010	mg/l		8270 D	07/21/14	1
Fluorene	U	0.00032	0.0010	mg/l		8270 D	07/21/14	1
Hexachlorobenzene	U	0.00034	0.0010	mg/l		8270 D	07/21/14	1
Hexachloro-1,3-butadiene	U	0.00033	0.010	mg/l		8270 D	07/21/14	1
Hexachlorocyclopentadiene	U	0.0023	0.010	mg/l		8270 D	07/21/14	1
Hexachloroethane	U	0.00036	0.010	mg/l		8270 D	07/21/14	1
Indeno (1,2,3-cd) pyrene	U	0.00028	0.0010	mg/l		8270 D	07/21/14	1
Isophorone	U	0.00027	0.010	mg/l		8270 D	07/21/14	1
2-Methylnaphthalene	U	0.00031	0.0010	mg/l		8270 D	07/21/14	1
Naphthalene	U	0.00037	0.0010	mg/l		8270 D	07/21/14	1
2-Nitroaniline	U	0.0019	0.010	mg/l		8270 D	07/21/14	1
3-Nitroaniline	U	0.00031	0.010	mg/l		8270 D	07/21/14	1
4-Nitroaniline	U	0.00035	0.010	mg/l		8270 D	07/21/14	1
Nitrobenzene	U	0.00037	0.010	mg/l		8270 D	07/21/14	1
n-Nitrosodiphenylamine	U	0.00030	0.010	mg/l		8270 D	07/21/14	1
n-Nitrosodi-n-propylamine	U	0.00040	0.010	mg/l		8270 D	07/21/14	1
Phenanthrene	U	0.00037	0.0010	mg/l		8270 D	07/21/14	1
Benzylbutyl phthalate	U	0.00028	0.0030	mg/l		8270 D	07/21/14	1

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REPORT OF ANALYSIS

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

November 04, 2014

Date Received : July 16, 2014  
Description : Fillmore Ave.  
Sample ID : MW-1  
Collected By : Dave Rowlinson  
Collection Date : 07/15/14 12:00

ESC Sample # : L710351-01

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Bis(2-ethylhexyl)phthalate	0.0017	0.00071	0.0030	mg/l	J	8270 D	07/21/14	1
Di-n-butyl phthalate	U	0.00027	0.0030	mg/l		8270 D	07/21/14	1
Diethyl phthalate	U	0.00028	0.0030	mg/l		8270 D	07/21/14	1
Dimethyl phthalate	0.00093	0.00028	0.0030	mg/l	J	8270 D	07/21/14	1
Di-n-octyl phthalate	U	0.00028	0.0010	mg/l		8270 D	07/21/14	1
Pyrene	U	0.00033	0.0010	mg/l		8270 D	07/21/14	1
1,2,4,5-Tetrachlorobenzene	U	0.0024	0.010	mg/l		8270 D	07/21/14	1
TCL Acid Extractables								
4-Chloro-3-methylphenol	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
2-Chlorophenol	U	0.00028	0.010	mg/l		8270 D	07/21/14	1
2-Methylphenol	U	0.00031	0.010	mg/l		8270 D	07/21/14	1
3,4-Methyl Phenol	U	0.00027	0.010	mg/l		8270 D	07/21/14	1
2,4-Dichlorophenol	U	0.00028	0.010	mg/l		8270 D	07/21/14	1
2,4-Dimethylphenol	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
4,6-Dinitro-2-methylphenol	U	0.0026	0.010	mg/l		8270 D	07/21/14	1
2,4-Dinitrophenol	U	0.0032	0.010	mg/l	J3	8270 D	07/21/14	1
2-Nitrophenol	U	0.00032	0.010	mg/l		8270 D	07/21/14	1
4-Nitrophenol	U	0.0020	0.010	mg/l	J3J4	8270 D	07/21/14	1
Pentachlorophenol	U	0.00031	0.010	mg/l		8270 D	07/21/14	1
Phenol	U	0.00033	0.010	mg/l		8270 D	07/21/14	1
2,4,5-Trichlorophenol	U	0.00024	0.010	mg/l		8270 D	07/21/14	1
2,4,6-Trichlorophenol	U	0.00030	0.010	mg/l		8270 D	07/21/14	1
Surrogate Recovery								
2-Fluorophenol	24.1			Rec.		8270 D	07/21/14	1
Phenol-d5	17.3			Rec.		8270 D	07/21/14	1
Nitrobenzene-d5	48.4			Rec.		8270 D	07/21/14	1
2-Fluorobiphenyl	76.6			Rec.		8270 D	07/21/14	1
2,4,6-Tribromophenol	88.0			Rec.		8270 D	07/21/14	1
p-Terphenyl-d14	69.7			Rec.		8270 D	07/21/14	1

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REPORT OF ANALYSIS

November 04, 2014

Mr. Dave Rowlinson  
 GHD  
 200 John James Audubon Pkwy; Ste 10  
 Amherst, NY 14228

ESC Sample # : L710351-02

Date Received : July 16, 2014  
 Description : Fillmore Ave.

Site ID :

Sample ID : MW-2

Project # : 8612199

Collected By : Dave Rowlinson  
 Collection Date : 07/15/14 12:30

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	0.00084	0.00021	0.0010	mg/l	J	6020	07/17/14	1
Arsenic	0.016	0.00025	0.0010	mg/l		6020	07/17/14	1
Lead	0.040	0.00024	0.0010	mg/l		6020	07/17/14	1
Thallium	U	0.00019	0.0010	mg/l		6020	07/17/14	1
Mercury	0.00021	0.000049	0.00020	mg/l		7470A	07/18/14	1
Aluminum	34.	0.035	0.10	mg/l		6010B	07/22/14	1
Barium	0.88	0.0017	0.0050	mg/l		6010B	07/22/14	1
Beryllium	0.0014	0.00070	0.0020	mg/l	J	6010B	07/22/14	1
Cadmium	U	0.00070	0.0050	mg/l		6010B	07/22/14	1
Calcium	370	0.046	1.0	mg/l		6010B	07/22/14	1
Chromium	0.062	0.0014	0.010	mg/l		6010B	07/22/14	1
Cobalt	0.032	0.0023	0.010	mg/l		6010B	07/22/14	1
Copper	0.22	0.0053	0.020	mg/l		6010B	07/22/14	1
Iron	110	0.014	0.10	mg/l		6010B	07/22/14	1
Magnesium	160	0.011	1.0	mg/l		6010B	07/22/14	1
Manganese	1.6	0.0012	0.010	mg/l		6010B	07/22/14	1
Nickel	0.087	0.0049	0.020	mg/l		6010B	07/22/14	1
Potassium	8.1	0.10	1.0	mg/l		6010B	07/22/14	1
Selenium	0.011	0.0074	0.020	mg/l	J	6010B	07/22/14	1
Silver	0.0061	0.0028	0.010	mg/l	J	6010B	07/22/14	1
Sodium	44.	0.098	1.0	mg/l		6010B	07/22/14	1
Vanadium	0.064	0.0024	0.020	mg/l		6010B	07/22/14	1
Zinc	0.76	0.0059	0.050	mg/l		6010B	07/22/14	1
Volatile Organics								
Acetone	U	0.010	0.050	mg/l		8260B	07/19/14	1
Benzene	0.0019	0.00033	0.0010	mg/l		8260B	07/19/14	1
Bromochloromethane	U	0.00052	0.0010	mg/l		8260B	07/19/14	1
Bromodichloromethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Bromoform	U	0.00047	0.0010	mg/l		8260B	07/19/14	1
Bromomethane	U	0.00087	0.0050	mg/l	J3	8260B	07/19/14	1
Carbon disulfide	U	0.00028	0.0010	mg/l		8260B	07/19/14	1
Carbon tetrachloride	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Chlorobenzene	0.00036	0.00035	0.0010	mg/l	J	8260B	07/19/14	1
Chlorodibromomethane	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
Chloroethane	U	0.00045	0.0050	mg/l		8260B	07/19/14	1
Chloroform	U	0.00032	0.0050	mg/l		8260B	07/19/14	1
Chloromethane	U	0.00028	0.0025	mg/l		8260B	07/23/14	1
Cyclohexane	0.0014	0.00039	0.0010	mg/l		8260B	07/19/14	1
1,2-Dibromo-3-Chloropropane	U	0.0013	0.0050	mg/l		8260B	07/19/14	1
1,2-Dibromoethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1

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Amherst, NY 14228

November 04, 2014

Date Received : July 16, 2014  
Description : Fillmore Ave.  
Sample ID : MW-2  
Collected By : Dave Rowlinson  
Collection Date : 07/15/14 12:30

ESC Sample # : L710351-02  
Site ID :  
Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,2-Dichlorobenzene	U	0.00035	0.0010	mg/l		8260B	07/19/14	1
1,3-Dichlorobenzene	U	0.00022	0.0010	mg/l		8260B	07/19/14	1
1,4-Dichlorobenzene	U	0.00027	0.0010	mg/l		8260B	07/19/14	1
Dichlorodifluoromethane	U	0.00055	0.0050	mg/l		8260B	07/19/14	1
1,1-Dichloroethane	U	0.00026	0.0010	mg/l		8260B	07/19/14	1
1,2-Dichloroethane	U	0.00036	0.0010	mg/l		8260B	07/19/14	1
1,1-Dichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
cis-1,2-Dichloroethene	0.0013	0.00026	0.0010	mg/l		8260B	07/19/14	1
trans-1,2-Dichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
1,2-Dichloropropane	U	0.00031	0.0010	mg/l		8260B	07/19/14	1
cis-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260B	07/19/14	1
trans-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260B	07/19/14	1
Ethylbenzene	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
2-Hexanone	U	0.0038	0.010	mg/l		8260B	07/19/14	1
Isopropylbenzene	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
2-Butanone (MEK)	U	0.0039	0.010	mg/l		8260B	07/19/14	1
Methyl Acetate	U	0.0043	0.020	mg/l		8260B	07/19/14	1
Methyl Cyclohexane	0.00063	0.00038	0.0010	mg/l	J	8260B	07/19/14	1
Methylene Chloride	U	0.0010	0.0050	mg/l		8260B	07/19/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0021	0.010	mg/l		8260B	07/19/14	1
Methyl tert-butyl ether	U	0.00037	0.0010	mg/l		8260B	07/19/14	1
Styrene	U	0.00031	0.0010	mg/l		8260B	07/19/14	1
1,1,2,2-Tetrachloroethane	U	0.00058	0.0010	mg/l		8260B	07/19/14	1
Tetrachloroethene	U	0.00037	0.0010	mg/l		8260B	07/19/14	1
Toluene	U	0.00078	0.0050	mg/l		8260B	07/19/14	1
1,2,3-Trichlorobenzene	U	0.00023	0.0010	mg/l		8260B	07/19/14	1
1,2,4-Trichlorobenzene	U	0.00021	0.0010	mg/l		8260B	07/19/14	1
1,1,1-Trichloroethane	U	0.00032	0.0010	mg/l		8260B	07/19/14	1
1,1,2-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Trichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
Trichlorofluoromethane	U	0.0012	0.0050	mg/l		8260B	07/19/14	1
1,1,2-Trichlorotrifluoroethane	U	0.00030	0.0010	mg/l		8260B	07/19/14	1
Vinyl chloride	0.0065	0.00026	0.0010	mg/l		8260B	07/19/14	1
Xylenes, Total	U	0.0011	0.0030	mg/l		8260B	07/19/14	1
Surrogate Recovery								
Toluene-d8	102.				Rec.	8260B	07/19/14	1
Dibromofluoromethane	97.0				Rec.	8260B	07/19/14	1
a,a,a-Trifluorotoluene	98.7				Rec.	8260B	07/19/14	1
4-Bromofluorobenzene	101.				Rec.	8260B	07/19/14	1
TCL Base/Neutral Extractables								
Acenaphthene	0.0010	0.00032	0.0010	mg/l		8270 D	07/21/14	1
Acenaphthylene	U	0.00031	0.0010	mg/l		8270 D	07/21/14	1

U = ND (Not Detected)  
MDL = Minimum Detection Limit = LOD = TRRP SDL  
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL  
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REPORT OF ANALYSIS

November 04, 2014

Mr. Dave Rowlinson
GHD
200 John James Audubon Pkwy; Ste 10
Amherst, NY 14228

ESC Sample # : L710351-02

Date Received : July 16, 2014
Description : Fillmore Ave.

Site ID :

Sample ID : MW-2

Project # : 8612199

Collected By : Dave Rowlinson
Collection Date : 07/15/14 12:30

Table with columns: Parameter, Result, MDL, RDL, Units, Qualifier, Method, Date, Dil. Lists various chemical parameters and their detection results.

U = ND (Not Detected)
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REPORT OF ANALYSIS

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

November 04, 2014

Date Received : July 16, 2014  
Description : Fillmore Ave.  
Sample ID : MW-2  
Collected By : Dave Rowlinson  
Collection Date : 07/15/14 12:30

ESC Sample # : L710351-02

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Bis(2-ethylhexyl)phthalate	0.0019	0.00071	0.0030	mg/l	J	8270 D	07/21/14	1
Di-n-butyl phthalate	0.00040	0.00027	0.0030	mg/l	J	8270 D	07/21/14	1
Diethyl phthalate	U	0.00028	0.0030	mg/l		8270 D	07/21/14	1
Dimethyl phthalate	0.0012	0.00028	0.0030	mg/l	J	8270 D	07/21/14	1
Di-n-octyl phthalate	U	0.00028	0.0010	mg/l		8270 D	07/21/14	1
Pyrene	U	0.00033	0.0010	mg/l		8270 D	07/21/14	1
1,2,4,5-Tetrachlorobenzene	U	0.0024	0.010	mg/l		8270 D	07/21/14	1
TCL Acid Extractables								
4-Chloro-3-methylphenol	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
2-Chlorophenol	U	0.00028	0.010	mg/l		8270 D	07/21/14	1
2-Methylphenol	U	0.00031	0.010	mg/l		8270 D	07/21/14	1
3&4-Methyl Phenol	U	0.00027	0.010	mg/l		8270 D	07/21/14	1
2,4-Dichlorophenol	U	0.00028	0.010	mg/l		8270 D	07/21/14	1
2,4-Dimethylphenol	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
4,6-Dinitro-2-methylphenol	U	0.0026	0.010	mg/l		8270 D	07/21/14	1
2,4-Dinitrophenol	U	0.0032	0.010	mg/l	J3	8270 D	07/21/14	1
2-Nitrophenol	U	0.00032	0.010	mg/l		8270 D	07/21/14	1
4-Nitrophenol	U	0.0020	0.010	mg/l	J3J4	8270 D	07/21/14	1
Pentachlorophenol	U	0.00031	0.010	mg/l		8270 D	07/21/14	1
Phenol	U	0.00033	0.010	mg/l		8270 D	07/21/14	1
2,4,5-Trichlorophenol	U	0.00024	0.010	mg/l		8270 D	07/21/14	1
2,4,6-Trichlorophenol	U	0.00030	0.010	mg/l		8270 D	07/21/14	1
Surrogate Recovery								
2-Fluorophenol	42.5			% Rec.		8270 D	07/21/14	1
Phenol-d5	31.0			% Rec.		8270 D	07/21/14	1
Nitrobenzene-d5	51.5			% Rec.		8270 D	07/21/14	1
2-Fluorobiphenyl	75.0			% Rec.		8270 D	07/21/14	1
2,4,6-Tribromophenol	86.7			% Rec.		8270 D	07/21/14	1
p-Terphenyl-d14	68.6			% Rec.		8270 D	07/21/14	1

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REPORT OF ANALYSIS

Mr. Dave Rowlinson  
 GHD  
 200 John James Audubon Pkwy; Ste 10  
 Amherst, NY 14228

November 04, 2014

Date Received : July 16, 2014  
 Description : Fillmore Ave.  
 Sample ID : MW-5  
 Collected By : Dave Rowlinson  
 Collection Date : 07/15/14 11:00

ESC Sample # : L710351-03

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	0.00098	0.00021	0.0010	mg/l	J	6020	07/17/14	1
Arsenic	0.00086	0.00025	0.0010	mg/l	J	6020	07/17/14	1
Lead	0.013	0.00024	0.0010	mg/l		6020	07/17/14	1
Thallium	U	0.00019	0.0010	mg/l		6020	07/17/14	1
Mercury	U	0.000049	0.00020	mg/l		7470A	07/18/14	1
Aluminum	0.12	0.035	0.10	mg/l		6010B	07/22/14	1
Barium	0.11	0.0017	0.0050	mg/l		6010B	07/22/14	1
Beryllium	U	0.00070	0.0020	mg/l		6010B	07/22/14	1
Cadmium	0.00072	0.00070	0.0050	mg/l	J	6010B	07/22/14	1
Calcium	190	0.046	1.0	mg/l		6010B	07/22/14	1
Chromium	U	0.0014	0.010	mg/l		6010B	07/22/14	1
Cobalt	U	0.0023	0.010	mg/l		6010B	07/22/14	1
Copper	0.0068	0.0053	0.020	mg/l	J	6010B	07/22/14	1
Iron	2.1	0.014	0.10	mg/l		6010B	07/22/14	1
Magnesium	35.	0.011	1.0	mg/l		6010B	07/22/14	1
Manganese	0.48	0.0012	0.010	mg/l		6010B	07/22/14	1
Nickel	U	0.0049	0.020	mg/l		6010B	07/22/14	1
Potassium	0.68	0.10	1.0	mg/l	J	6010B	07/22/14	1
Selenium	0.022	0.0074	0.020	mg/l		6010B	07/22/14	1
Silver	U	0.0028	0.010	mg/l		6010B	07/22/14	1
Sodium	25.	0.098	1.0	mg/l		6010B	07/22/14	1
Vanadium	U	0.0024	0.020	mg/l		6010B	07/22/14	1
Zinc	0.34	0.0059	0.050	mg/l		6010B	07/22/14	1
Volatile Organics								
Acetone	U	0.010	0.050	mg/l		8260B	07/19/14	1
Benzene	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
Bromochloromethane	U	0.00052	0.0010	mg/l		8260B	07/19/14	1
Bromodichloromethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Bromoform	U	0.00047	0.0010	mg/l		8260B	07/19/14	1
Bromomethane	U	0.00087	0.0050	mg/l	J3	8260B	07/19/14	1
Carbon disulfide	U	0.00028	0.0010	mg/l		8260B	07/19/14	1
Carbon tetrachloride	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Chlorobenzene	U	0.00035	0.0010	mg/l		8260B	07/19/14	1
Chlorodibromomethane	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
Chloroethane	U	0.00045	0.0050	mg/l		8260B	07/19/14	1
Chloroform	U	0.00032	0.0050	mg/l		8260B	07/19/14	1
Chloromethane	U	0.00028	0.0025	mg/l		8260B	07/23/14	1
Cyclohexane	U	0.00039	0.0010	mg/l		8260B	07/19/14	1
1,2-Dibromo-3-Chloropropane	U	0.0013	0.0050	mg/l		8260B	07/19/14	1
1,2-Dibromoethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1

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REPORT OF ANALYSIS

November 04, 2014

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

ESC Sample # : L710351-03

Date Received : July 16, 2014  
Description : Fillmore Ave.

Site ID :

Sample ID : MW-5

Project # : 8612199

Collected By : Dave Rowlinson  
Collection Date : 07/15/14 11:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,2-Dichlorobenzene	U	0.00035	0.0010	mg/l		8260B	07/19/14	1
1,3-Dichlorobenzene	U	0.00022	0.0010	mg/l		8260B	07/19/14	1
1,4-Dichlorobenzene	U	0.00027	0.0010	mg/l		8260B	07/19/14	1
Dichlorodifluoromethane	U	0.00055	0.0050	mg/l		8260B	07/19/14	1
1,1-Dichloroethane	U	0.00026	0.0010	mg/l		8260B	07/19/14	1
1,2-Dichloroethane	U	0.00036	0.0010	mg/l		8260B	07/19/14	1
1,1-Dichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
cis-1,2-Dichloroethene	U	0.00026	0.0010	mg/l		8260B	07/19/14	1
trans-1,2-Dichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
1,2-Dichloropropane	U	0.00031	0.0010	mg/l		8260B	07/19/14	1
cis-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260B	07/19/14	1
trans-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260B	07/19/14	1
Ethylbenzene	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
2-Hexanone	U	0.0038	0.010	mg/l		8260B	07/19/14	1
Isopropylbenzene	0.00038	0.00033	0.0010	mg/l	J	8260B	07/19/14	1
2-Butanone (MEK)	U	0.0039	0.010	mg/l		8260B	07/19/14	1
Methyl Acetate	U	0.0043	0.020	mg/l		8260B	07/19/14	1
Methyl Cyclohexane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Methylene Chloride	U	0.0010	0.0050	mg/l		8260B	07/19/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0021	0.010	mg/l		8260B	07/19/14	1
Methyl tert-butyl ether	U	0.00037	0.0010	mg/l		8260B	07/19/14	1
Styrene	U	0.00031	0.0010	mg/l		8260B	07/19/14	1
1,1,2,2-Tetrachloroethane	U	0.00058	0.0010	mg/l		8260B	07/19/14	1
Tetrachloroethene	U	0.00037	0.0010	mg/l		8260B	07/19/14	1
Toluene	U	0.00078	0.0050	mg/l		8260B	07/19/14	1
1,2,3-Trichlorobenzene	U	0.00023	0.0010	mg/l		8260B	07/19/14	1
1,2,4-Trichlorobenzene	U	0.00021	0.0010	mg/l		8260B	07/19/14	1
1,1,1-Trichloroethane	U	0.00032	0.0010	mg/l		8260B	07/19/14	1
1,1,2-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Trichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
Trichlorofluoromethane	U	0.0012	0.0050	mg/l		8260B	07/19/14	1
1,1,2-Trichlorotrifluoroethane	U	0.00030	0.0010	mg/l		8260B	07/19/14	1
Vinyl chloride	U	0.00026	0.0010	mg/l		8260B	07/19/14	1
Xylenes, Total	U	0.0011	0.0030	mg/l		8260B	07/19/14	1
Surrogate Recovery								
Toluene-d8	102.				Rec.	8260B	07/19/14	1
Dibromofluoromethane	99.0				Rec.	8260B	07/19/14	1
a,a,a-Trifluorotoluene	98.8				Rec.	8260B	07/19/14	1
4-Bromofluorobenzene	101.				Rec.	8260B	07/19/14	1
TCL Base/Neutral Extractables								
Acenaphthene	0.00064	0.00032	0.0010	mg/l	J	8270 D	07/21/14	1
Acenaphthylene	U	0.00031	0.0010	mg/l		8270 D	07/21/14	1

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REPORT OF ANALYSIS

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

November 04, 2014

Date Received : July 16, 2014  
Description : Fillmore Ave.  
Sample ID : MW-5  
Collected By : Dave Rowlinson  
Collection Date : 07/15/14 11:00

ESC Sample # : L710351-03  
Site ID :  
Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Acetophenone	U	0.0027	0.010	mg/l		8270 D	07/21/14	1
Anthracene	U	0.00029	0.0010	mg/l		8270 D	07/21/14	1
Atrazine	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
Benzaldehyde	U	0.0026	0.010	mg/l		8270 D	07/21/14	1
Benzo(a)anthracene	U	0.00032	0.0010	mg/l		8270 D	07/21/14	1
Benzo(b)fluoranthene	U	0.00027	0.0010	mg/l		8270 D	07/21/14	1
Benzo(k)fluoranthene	U	0.00036	0.0010	mg/l		8270 D	07/21/14	1
Benzo(g,h,i)perylene	U	0.00033	0.0010	mg/l		8270 D	07/21/14	1
Benzo(a)pyrene	U	0.00034	0.0010	mg/l		8270 D	07/21/14	1
Biphenyl	U	0.00032	0.010	mg/l		8270 D	07/21/14	1
Bis(2-chloroethoxy)methane	U	0.00033	0.010	mg/l		8270 D	07/21/14	1
Bis(2-chloroethyl)ether	U	0.0016	0.010	mg/l		8270 D	07/21/14	1
Bis(2-chloroisopropyl)ether	U	0.00044	0.010	mg/l		8270 D	07/21/14	1
4-Bromophenyl-phenylether	U	0.00034	0.010	mg/l		8270 D	07/21/14	1
Caprolactam	U	0.0026	0.010	mg/l		8270 D	07/21/14	1
Carbazole	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
4-Chloroaniline	U	0.00038	0.010	mg/l		8270 D	07/21/14	1
2-Chloronaphthalene	U	0.00033	0.0010	mg/l		8270 D	07/21/14	1
4-Chlorophenyl-phenylether	U	0.00030	0.010	mg/l		8270 D	07/21/14	1
Chrysene	U	0.00033	0.0010	mg/l		8270 D	07/21/14	1
Dibenz(a,h)anthracene	U	0.00028	0.0010	mg/l		8270 D	07/21/14	1
Dibenzofuran	U	0.00034	0.010	mg/l		8270 D	07/21/14	1
3,3-Dichlorobenzidine	U	0.0020	0.010	mg/l		8270 D	07/21/14	1
2,4-Dinitrotoluene	U	0.0016	0.010	mg/l		8270 D	07/21/14	1
2,6-Dinitrotoluene	U	0.00028	0.010	mg/l		8270 D	07/21/14	1
Fluoranthene	U	0.00031	0.0010	mg/l		8270 D	07/21/14	1
Fluorene	0.00051	0.00032	0.0010	mg/l	J	8270 D	07/21/14	1
Hexachlorobenzene	U	0.00034	0.0010	mg/l		8270 D	07/21/14	1
Hexachloro-1,3-butadiene	U	0.00033	0.010	mg/l		8270 D	07/21/14	1
Hexachlorocyclopentadiene	U	0.0023	0.010	mg/l		8270 D	07/21/14	1
Hexachloroethane	U	0.00036	0.010	mg/l		8270 D	07/21/14	1
Indeno(1,2,3-cd)pyrene	U	0.00028	0.0010	mg/l		8270 D	07/21/14	1
Isophorone	U	0.00027	0.010	mg/l		8270 D	07/21/14	1
2-Methylnaphthalene	U	0.00031	0.0010	mg/l		8270 D	07/21/14	1
Naphthalene	U	0.00037	0.0010	mg/l		8270 D	07/21/14	1
2-Nitroaniline	U	0.0019	0.010	mg/l		8270 D	07/21/14	1
3-Nitroaniline	U	0.00031	0.010	mg/l		8270 D	07/21/14	1
4-Nitroaniline	U	0.00035	0.010	mg/l		8270 D	07/21/14	1
Nitrobenzene	U	0.00037	0.010	mg/l		8270 D	07/21/14	1
n-Nitrosodiphenylamine	U	0.00030	0.010	mg/l		8270 D	07/21/14	1
n-Nitrosodi-n-propylamine	U	0.00040	0.010	mg/l		8270 D	07/21/14	1
Phenanthrene	U	0.00037	0.0010	mg/l		8270 D	07/21/14	1
Benzylbutyl phthalate	U	0.00028	0.0030	mg/l		8270 D	07/21/14	1

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REPORT OF ANALYSIS

Mr. Dave Rowlinson  
 GHD  
 200 John James Audubon Pkwy; Ste 10  
 Amherst, NY 14228

November 04, 2014

Date Received : July 16, 2014  
 Description : Fillmore Ave.  
 Sample ID : MW-5  
 Collected By : Dave Rowlinson  
 Collection Date : 07/15/14 11:00

ESC Sample # : L710351-03

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Bis(2-ethylhexyl)phthalate	0.0018	0.00071	0.0030	mg/l	J	8270 D	07/21/14	1
Di-n-butyl phthalate	0.00045	0.00027	0.0030	mg/l	J	8270 D	07/21/14	1
Diethyl phthalate	U	0.00028	0.0030	mg/l		8270 D	07/21/14	1
Dimethyl phthalate	0.0010	0.00028	0.0030	mg/l	J	8270 D	07/21/14	1
Di-n-octyl phthalate	U	0.00028	0.0010	mg/l		8270 D	07/21/14	1
Pyrene	U	0.00033	0.0010	mg/l		8270 D	07/21/14	1
1,2,4,5-Tetrachlorobenzene	U	0.0024	0.010	mg/l		8270 D	07/21/14	1
TCL Acid Extractables								
4-Chloro-3-methylphenol	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
2-Chlorophenol	U	0.00028	0.010	mg/l		8270 D	07/21/14	1
2-Methylphenol	U	0.00031	0.010	mg/l		8270 D	07/21/14	1
3,4-Methyl Phenol	U	0.00027	0.010	mg/l		8270 D	07/21/14	1
2,4-Dichlorophenol	U	0.00028	0.010	mg/l		8270 D	07/21/14	1
2,4-Dimethylphenol	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
4,6-Dinitro-2-methylphenol	U	0.0026	0.010	mg/l		8270 D	07/21/14	1
2,4-Dinitrophenol	U	0.0032	0.010	mg/l	J3	8270 D	07/21/14	1
2-Nitrophenol	U	0.00032	0.010	mg/l		8270 D	07/21/14	1
4-Nitrophenol	U	0.0020	0.010	mg/l	J3J4	8270 D	07/21/14	1
Pentachlorophenol	U	0.00031	0.010	mg/l		8270 D	07/21/14	1
Phenol	U	0.00033	0.010	mg/l		8270 D	07/21/14	1
2,4,5-Trichlorophenol	U	0.00024	0.010	mg/l		8270 D	07/21/14	1
2,4,6-Trichlorophenol	U	0.00030	0.010	mg/l		8270 D	07/21/14	1
Surrogate Recovery								
2-Fluorophenol	33.1			% Rec.		8270 D	07/21/14	1
Phenol-d5	24.5			% Rec.		8270 D	07/21/14	1
Nitrobenzene-d5	45.7			% Rec.		8270 D	07/21/14	1
2-Fluorobiphenyl	68.5			% Rec.		8270 D	07/21/14	1
2,4,6-Tribromophenol	101.			% Rec.		8270 D	07/21/14	1
p-Terphenyl-d14	67.8			% Rec.		8270 D	07/21/14	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD = TRRP SDL

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Est. 1970

REPORT OF ANALYSIS

Mr. Dave Rowlinson  
 GHD  
 200 John James Audubon Pkwy; Ste 10  
 Amherst, NY 14228

November 04, 2014

Date Received : July 16, 2014  
 Description : Fillmore Ave.  
 Sample ID : MW-6  
 Collected By : Dave Rowlinson  
 Collection Date : 07/15/14 10:30

ESC Sample # : L710351-04

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	0.00084	0.00021	0.0010	mg/l	J	6020	07/17/14	1
Arsenic	0.0011	0.00025	0.0010	mg/l		6020	07/17/14	1
Lead	0.0038	0.00024	0.0010	mg/l		6020	07/17/14	1
Thallium	U	0.00019	0.0010	mg/l		6020	07/17/14	1
Mercury	U	0.000049	0.00020	mg/l		7470A	07/22/14	1
Aluminum	0.18	0.035	0.10	mg/l		6010B	07/22/14	1
Barium	0.18	0.0017	0.0050	mg/l		6010B	07/22/14	1
Beryllium	U	0.00070	0.0020	mg/l		6010B	07/22/14	1
Cadmium	U	0.00070	0.0050	mg/l		6010B	07/22/14	1
Calcium	140	0.046	1.0	mg/l	V	6010B	07/22/14	1
Chromium	U	0.0014	0.010	mg/l		6010B	07/22/14	1
Cobalt	U	0.0023	0.010	mg/l		6010B	07/22/14	1
Copper	U	0.0053	0.020	mg/l		6010B	07/22/14	1
Iron	8.0	0.014	0.10	mg/l		6010B	07/22/14	1
Magnesium	29.	0.011	1.0	mg/l		6010B	07/22/14	1
Manganese	1.7	0.0012	0.010	mg/l		6010B	07/22/14	1
Nickel	U	0.0049	0.020	mg/l		6010B	07/22/14	1
Potassium	2.9	0.10	1.0	mg/l		6010B	07/22/14	1
Selenium	0.023	0.0074	0.020	mg/l		6010B	07/22/14	1
Silver	U	0.0028	0.010	mg/l	J6	6010B	07/22/14	1
Sodium	12.	0.098	1.0	mg/l	O1	6010B	07/22/14	1
Vanadium	U	0.0024	0.020	mg/l		6010B	07/22/14	1
Zinc	0.040	0.0059	0.050	mg/l	J	6010B	07/22/14	1
Volatile Organics								
Acetone	U	0.010	0.050	mg/l		8260B	07/19/14	1
Benzene	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
Bromochloromethane	U	0.00052	0.0010	mg/l		8260B	07/19/14	1
Bromodichloromethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Bromoform	U	0.00047	0.0010	mg/l		8260B	07/19/14	1
Bromomethane	U	0.00087	0.0050	mg/l		8260B	07/19/14	1
Carbon disulfide	U	0.00028	0.0010	mg/l		8260B	07/19/14	1
Carbon tetrachloride	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Chlorobenzene	U	0.00035	0.0010	mg/l		8260B	07/19/14	1
Chlorodibromomethane	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
Chloroethane	U	0.00045	0.0050	mg/l		8260B	07/19/14	1
Chloroform	U	0.00032	0.0050	mg/l		8260B	07/19/14	1
Chloromethane	U	0.00028	0.0025	mg/l		8260B	07/23/14	1
Cyclohexane	U	0.00039	0.0010	mg/l		8260B	07/19/14	1
1,2-Dibromo-3-Chloropropane	U	0.0013	0.0050	mg/l		8260B	07/19/14	1
1,2-Dibromoethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1

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REPORT OF ANALYSIS

November 04, 2014

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

ESC Sample # : L710351-04

Date Received : July 16, 2014  
Description : Fillmore Ave.

Site ID :

Sample ID : MW-6

Project # : 8612199

Collected By : Dave Rowlinson  
Collection Date : 07/15/14 10:30

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,2-Dichlorobenzene	U	0.00035	0.0010	mg/l		8260B	07/19/14	1
1,3-Dichlorobenzene	U	0.00022	0.0010	mg/l		8260B	07/19/14	1
1,4-Dichlorobenzene	U	0.00027	0.0010	mg/l		8260B	07/19/14	1
Dichlorodifluoromethane	U	0.00055	0.0050	mg/l		8260B	07/19/14	1
1,1-Dichloroethane	U	0.00026	0.0010	mg/l		8260B	07/19/14	1
1,2-Dichloroethane	U	0.00036	0.0010	mg/l		8260B	07/19/14	1
1,1-Dichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
cis-1,2-Dichloroethene	U	0.00026	0.0010	mg/l		8260B	07/19/14	1
trans-1,2-Dichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
1,2-Dichloropropane	U	0.00031	0.0010	mg/l		8260B	07/19/14	1
cis-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260B	07/19/14	1
trans-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260B	07/19/14	1
Ethylbenzene	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
2-Hexanone	U	0.0038	0.010	mg/l		8260B	07/19/14	1
Isopropylbenzene	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
2-Butanone (MEK)	U	0.0039	0.010	mg/l		8260B	07/19/14	1
Methyl Acetate	U	0.0043	0.020	mg/l		8260B	07/19/14	1
Methyl Cyclohexane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Methylene Chloride	U	0.0010	0.0050	mg/l		8260B	07/19/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0021	0.010	mg/l		8260B	07/19/14	1
Methyl tert-butyl ether	U	0.00037	0.0010	mg/l		8260B	07/19/14	1
Styrene	U	0.00031	0.0010	mg/l		8260B	07/19/14	1
1,1,2,2-Tetrachloroethane	U	0.00058	0.0010	mg/l		8260B	07/19/14	1
Tetrachloroethene	U	0.00037	0.0010	mg/l		8260B	07/19/14	1
Toluene	U	0.00078	0.0050	mg/l		8260B	07/19/14	1
1,2,3-Trichlorobenzene	U	0.00023	0.0010	mg/l		8260B	07/19/14	1
1,2,4-Trichlorobenzene	U	0.00021	0.0010	mg/l		8260B	07/19/14	1
1,1,1-Trichloroethane	U	0.00032	0.0010	mg/l		8260B	07/19/14	1
1,1,2-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Trichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
Trichlorofluoromethane	U	0.0012	0.0050	mg/l		8260B	07/19/14	1
1,1,2-Trichlorotrifluoroethane	U	0.00030	0.0010	mg/l		8260B	07/19/14	1
Vinyl chloride	U	0.00026	0.0010	mg/l		8260B	07/19/14	1
Xylenes, Total	U	0.0011	0.0030	mg/l		8260B	07/19/14	1
Surrogate Recovery								
Toluene-d8	100.			§ Rec.		8260B	07/19/14	1
Dibromofluoromethane	96.9			§ Rec.		8260B	07/19/14	1
a,a,a-Trifluorotoluene	99.4			§ Rec.		8260B	07/19/14	1
4-Bromofluorobenzene	104.			§ Rec.		8260B	07/19/14	1
TCL Base/Neutral Extractables								
Acenaphthene	0.0030	0.00032	0.0010	mg/l		8270 D	07/21/14	1
Acenaphthylene	0.00059	0.00031	0.0010	mg/l	J	8270 D	07/21/14	1

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REPORT OF ANALYSIS

November 04, 2014

Mr. Dave Rowlinson  
 GHD  
 200 John James Audubon Pkwy; Ste 10  
 Amherst, NY 14228

ESC Sample # : L710351-04

Date Received : July 16, 2014  
 Description : Fillmore Ave.

Site ID :

Sample ID : MW-6

Project # : 8612199

Collected By : Dave Rowlinson  
 Collection Date : 07/15/14 10:30

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Acetophenone	U	0.0027	0.010	mg/l		8270 D	07/21/14	1
Anthracene	U	0.00029	0.0010	mg/l		8270 D	07/21/14	1
Atrazine	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
Benzaldehyde	U	0.0026	0.010	mg/l		8270 D	07/21/14	1
Benzo (a) anthracene	U	0.00032	0.0010	mg/l		8270 D	07/21/14	1
Benzo (b) fluoranthene	U	0.00027	0.0010	mg/l		8270 D	07/21/14	1
Benzo (k) fluoranthene	U	0.00036	0.0010	mg/l		8270 D	07/21/14	1
Benzo (g,h,i) perylene	U	0.00033	0.0010	mg/l		8270 D	07/21/14	1
Benzo (a) pyrene	U	0.00034	0.0010	mg/l		8270 D	07/21/14	1
Biphenyl	U	0.00032	0.010	mg/l		8270 D	07/21/14	1
Bis (2-chlorethoxy) methane	U	0.00033	0.010	mg/l		8270 D	07/21/14	1
Bis (2-chloroethyl) ether	U	0.0016	0.010	mg/l		8270 D	07/21/14	1
Bis (2-chloroisopropyl) ether	U	0.00044	0.010	mg/l		8270 D	07/21/14	1
4-Bromophenyl-phenylether	U	0.00034	0.010	mg/l		8270 D	07/21/14	1
Caprolactam	U	0.0026	0.010	mg/l		8270 D	07/21/14	1
Carbazole	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
4-Chloroaniline	U	0.00038	0.010	mg/l		8270 D	07/21/14	1
2-Chloronaphthalene	U	0.00033	0.0010	mg/l		8270 D	07/21/14	1
4-Chlorophenyl-phenylether	U	0.00030	0.010	mg/l		8270 D	07/21/14	1
Chrysene	U	0.00033	0.0010	mg/l		8270 D	07/21/14	1
Dibenz (a,h) anthracene	U	0.00028	0.0010	mg/l		8270 D	07/21/14	1
Dibenzofuran	U	0.00034	0.010	mg/l		8270 D	07/21/14	1
3,3-Dichlorobenzidine	U	0.0020	0.010	mg/l	J3	8270 D	07/21/14	1
2,4-Dinitrotoluene	U	0.0016	0.010	mg/l		8270 D	07/21/14	1
2,6-Dinitrotoluene	U	0.00028	0.010	mg/l		8270 D	07/21/14	1
Fluoranthene	U	0.00031	0.0010	mg/l		8270 D	07/21/14	1
Fluorene	U	0.00032	0.0010	mg/l		8270 D	07/21/14	1
Hexachlorobenzene	U	0.00034	0.0010	mg/l		8270 D	07/21/14	1
Hexachloro-1,3-butadiene	U	0.00033	0.010	mg/l		8270 D	07/21/14	1
Hexachlorocyclopentadiene	U	0.0023	0.010	mg/l		8270 D	07/21/14	1
Hexachloroethane	U	0.00036	0.010	mg/l		8270 D	07/21/14	1
Indeno (1,2,3-cd) pyrene	U	0.00028	0.0010	mg/l		8270 D	07/21/14	1
Isophorone	U	0.00027	0.010	mg/l		8270 D	07/21/14	1
2-Methylnaphthalene	U	0.00031	0.0010	mg/l		8270 D	07/21/14	1
Naphthalene	U	0.00037	0.0010	mg/l		8270 D	07/21/14	1
2-Nitroaniline	U	0.0019	0.010	mg/l		8270 D	07/21/14	1
3-Nitroaniline	U	0.00031	0.010	mg/l		8270 D	07/21/14	1
4-Nitroaniline	U	0.00035	0.010	mg/l		8270 D	07/21/14	1
Nitrobenzene	U	0.00037	0.010	mg/l		8270 D	07/21/14	1
n-Nitrosodiphenylamine	U	0.00030	0.010	mg/l		8270 D	07/21/14	1
n-Nitrosodi-n-propylamine	U	0.00040	0.010	mg/l		8270 D	07/21/14	1
Phenanthrene	U	0.00037	0.0010	mg/l		8270 D	07/21/14	1
Benzylbutyl phthalate	U	0.00028	0.0030	mg/l		8270 D	07/21/14	1

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REPORT OF ANALYSIS

Mr. Dave Rowlinson  
 GHD  
 200 John James Audubon Pkwy; Ste 10  
 Amherst, NY 14228

November 04, 2014

Date Received : July 16, 2014  
 Description : Fillmore Ave.  
 Sample ID : MW-6  
 Collected By : Dave Rowlinson  
 Collection Date : 07/15/14 10:30

ESC Sample # : L710351-04

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Bis(2-ethylhexyl)phthalate	0.0019	0.00071	0.0030	mg/l	J	8270 D	07/21/14	1
Di-n-butyl phthalate	0.00048	0.00027	0.0030	mg/l	J	8270 D	07/21/14	1
Diethyl phthalate	U	0.00028	0.0030	mg/l		8270 D	07/21/14	1
Dimethyl phthalate	0.0012	0.00028	0.0030	mg/l	J	8270 D	07/21/14	1
Di-n-octyl phthalate	U	0.00028	0.0010	mg/l		8270 D	07/21/14	1
Pyrene	U	0.00033	0.0010	mg/l		8270 D	07/21/14	1
1,2,4,5-Tetrachlorobenzene	U	0.0024	0.010	mg/l		8270 D	07/21/14	1
TCL Acid Extractables								
4-Chloro-3-methylphenol	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
2-Chlorophenol	U	0.00028	0.010	mg/l		8270 D	07/21/14	1
2-Methylphenol	U	0.00031	0.010	mg/l		8270 D	07/21/14	1
3&4-Methyl Phenol	U	0.00027	0.010	mg/l		8270 D	07/21/14	1
2,4-Dichlorophenol	U	0.00028	0.010	mg/l		8270 D	07/21/14	1
2,4-Dimethylphenol	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
4,6-Dinitro-2-methylphenol	U	0.0026	0.010	mg/l		8270 D	07/21/14	1
2,4-Dinitrophenol	U	0.0032	0.010	mg/l		8270 D	07/21/14	1
2-Nitrophenol	U	0.00032	0.010	mg/l		8270 D	07/21/14	1
4-Nitrophenol	U	0.0020	0.010	mg/l	J4	8270 D	07/21/14	1
Pentachlorophenol	U	0.00031	0.010	mg/l		8270 D	07/21/14	1
Phenol	U	0.00033	0.010	mg/l		8270 D	07/21/14	1
2,4,5-Trichlorophenol	U	0.00024	0.010	mg/l		8270 D	07/21/14	1
2,4,6-Trichlorophenol	U	0.00030	0.010	mg/l		8270 D	07/21/14	1
Surrogate Recovery								
2-Fluorophenol	22.6			% Rec.		8270 D	07/21/14	1
Phenol-d5	12.4			% Rec.		8270 D	07/21/14	1
Nitrobenzene-d5	47.6			% Rec.		8270 D	07/21/14	1
2-Fluorobiphenyl	72.4			% Rec.		8270 D	07/21/14	1
2,4,6-Tribromophenol	85.5			% Rec.		8270 D	07/21/14	1
p-Terphenyl-d14	66.9			% Rec.		8270 D	07/21/14	1

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REPORT OF ANALYSIS

Mr. Dave Rowlinson  
 GHD  
 200 John James Audubon Pkwy; Ste 10  
 Amherst, NY 14228

November 04, 2014

Date Received : July 16, 2014  
 Description : Fillmore Ave.  
 Sample ID : MW-7  
 Collected By : Dave Rowlinson  
 Collection Date : 07/15/14 10:00

ESC Sample # : L710351-05  
 Site ID :  
 Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	0.0032	0.00021	0.0010	mg/l		6020	07/17/14	1
Arsenic	0.0033	0.00025	0.0010	mg/l		6020	07/17/14	1
Lead	0.082	0.00024	0.0010	mg/l		6020	07/17/14	1
Thallium	U	0.00019	0.0010	mg/l		6020	07/17/14	1
Mercury	U	0.000049	0.00020	mg/l		7470A	07/18/14	1
Aluminum	1.3	0.035	0.10	mg/l		6010B	07/22/14	1
Barium	0.072	0.0017	0.0050	mg/l		6010B	07/22/14	1
Beryllium	U	0.00070	0.0020	mg/l		6010B	07/22/14	1
Cadmium	0.0022	0.00070	0.0050	mg/l	J	6010B	07/22/14	1
Calcium	160	0.046	1.0	mg/l		6010B	07/22/14	1
Chromium	0.0019	0.0014	0.010	mg/l	J	6010B	07/22/14	1
Cobalt	0.0086	0.0023	0.010	mg/l	J	6010B	07/22/14	1
Copper	0.040	0.0053	0.020	mg/l		6010B	07/22/14	1
Iron	10.	0.014	0.10	mg/l		6010B	07/22/14	1
Magnesium	27.	0.011	1.0	mg/l		6010B	07/22/14	1
Manganese	1.2	0.0012	0.010	mg/l		6010B	07/22/14	1
Nickel	0.021	0.0049	0.020	mg/l		6010B	07/22/14	1
Potassium	7.1	0.10	1.0	mg/l		6010B	07/22/14	1
Selenium	0.014	0.0074	0.020	mg/l	J	6010B	07/22/14	1
Silver	U	0.0028	0.010	mg/l		6010B	07/22/14	1
Sodium	39.	0.098	1.0	mg/l		6010B	07/22/14	1
Vanadium	0.0030	0.0024	0.020	mg/l	J	6010B	07/22/14	1
Zinc	3.5	0.0059	0.050	mg/l		6010B	07/22/14	1
Volatile Organics								
Acetone	U	0.010	0.050	mg/l		8260B	07/19/14	1
Benzene	0.00072	0.00033	0.0010	mg/l	J	8260B	07/19/14	1
Bromochloromethane	U	0.00052	0.0010	mg/l		8260B	07/19/14	1
Bromodichloromethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Bromoform	U	0.00047	0.0010	mg/l		8260B	07/19/14	1
Bromomethane	U	0.00087	0.0050	mg/l	J3	8260B	07/19/14	1
Carbon disulfide	U	0.00028	0.0010	mg/l		8260B	07/19/14	1
Carbon tetrachloride	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Chlorobenzene	U	0.00035	0.0010	mg/l		8260B	07/19/14	1
Chlorodibromomethane	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
Chloroethane	U	0.00045	0.0050	mg/l		8260B	07/19/14	1
Chloroform	U	0.00032	0.0050	mg/l		8260B	07/19/14	1
Chloromethane	U	0.00028	0.0025	mg/l		8260B	07/23/14	1
Cyclohexane	U	0.00039	0.0010	mg/l		8260B	07/19/14	1
1,2-Dibromo-3-Chloropropane	U	0.0013	0.0050	mg/l		8260B	07/19/14	1
1,2-Dibromoethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1

U = ND (Not Detected)

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Est. 1970

REPORT OF ANALYSIS

November 04, 2014

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

ESC Sample # : L710351-05

Date Received : July 16, 2014  
Description : Fillmore Ave.

Site ID :

Sample ID : MW-7

Project # : 8612199

Collected By : Dave Rowlinson  
Collection Date : 07/15/14 10:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,2-Dichlorobenzene	U	0.00035	0.0010	mg/l		8260B	07/19/14	1
1,3-Dichlorobenzene	U	0.00022	0.0010	mg/l		8260B	07/19/14	1
1,4-Dichlorobenzene	U	0.00027	0.0010	mg/l		8260B	07/19/14	1
Dichlorodifluoromethane	U	0.00055	0.0050	mg/l		8260B	07/19/14	1
1,1-Dichloroethane	U	0.00026	0.0010	mg/l		8260B	07/19/14	1
1,2-Dichloroethane	U	0.00036	0.0010	mg/l		8260B	07/19/14	1
1,1-Dichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
cis-1,2-Dichloroethene	0.0020	0.00026	0.0010	mg/l		8260B	07/19/14	1
trans-1,2-Dichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
1,2-Dichloropropane	U	0.00031	0.0010	mg/l		8260B	07/19/14	1
cis-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260B	07/19/14	1
trans-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260B	07/19/14	1
Ethylbenzene	0.00090	0.00038	0.0010	mg/l	J	8260B	07/19/14	1
2-Hexanone	U	0.0038	0.010	mg/l		8260B	07/19/14	1
Isopropylbenzene	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
2-Butanone (MEK)	U	0.0039	0.010	mg/l		8260B	07/19/14	1
Methyl Acetate	U	0.0043	0.020	mg/l		8260B	07/19/14	1
Methyl Cyclohexane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Methylene Chloride	U	0.0010	0.0050	mg/l		8260B	07/19/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0021	0.010	mg/l		8260B	07/19/14	1
Methyl tert-butyl ether	U	0.00037	0.0010	mg/l		8260B	07/19/14	1
Styrene	U	0.00031	0.0010	mg/l		8260B	07/19/14	1
1,1,2,2-Tetrachloroethane	U	0.00058	0.0010	mg/l		8260B	07/19/14	1
Tetrachloroethene	U	0.00037	0.0010	mg/l		8260B	07/19/14	1
Toluene	U	0.00078	0.0050	mg/l		8260B	07/19/14	1
1,2,3-Trichlorobenzene	U	0.00023	0.0010	mg/l		8260B	07/19/14	1
1,2,4-Trichlorobenzene	U	0.00021	0.0010	mg/l		8260B	07/19/14	1
1,1,1-Trichloroethane	U	0.00032	0.0010	mg/l		8260B	07/19/14	1
1,1,2-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Trichloroethene	0.0014	0.00040	0.0010	mg/l		8260B	07/19/14	1
Trichlorofluoromethane	U	0.0012	0.0050	mg/l		8260B	07/19/14	1
1,1,2-Trichlorotrifluoroethane	U	0.00030	0.0010	mg/l		8260B	07/19/14	1
Vinyl chloride	U	0.00026	0.0010	mg/l		8260B	07/19/14	1
Xylenes, Total	0.0014	0.0011	0.0030	mg/l	J	8260B	07/19/14	1
Surrogate Recovery								
Toluene-d8	103.			Rec.		8260B	07/19/14	1
Dibromofluoromethane	101.			Rec.		8260B	07/19/14	1
a,a,a-Trifluorotoluene	99.9			Rec.		8260B	07/19/14	1
4-Bromofluorobenzene	106.			Rec.		8260B	07/19/14	1
TCL Base/Neutral Extractables								
Acenaphthene	U	0.00032	0.0010	mg/l		8270 D	07/21/14	1
Acenaphthylene	U	0.00031	0.0010	mg/l		8270 D	07/21/14	1

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REPORT OF ANALYSIS

November 04, 2014

Mr. Dave Rowlinson  
 GHD  
 200 John James Audubon Pkwy; Ste 10  
 Amherst, NY 14228

ESC Sample # : L710351-05

Date Received : July 16, 2014  
 Description : Fillmore Ave.

Site ID :

Sample ID : MW-7

Project # : 8612199

Collected By : Dave Rowlinson  
 Collection Date : 07/15/14 10:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Acetophenone	U	0.0027	0.010	mg/l		8270 D	07/21/14	1
Anthracene	0.00045	0.00029	0.0010	mg/l	J	8270 D	07/21/14	1
Atrazine	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
Benzaldehyde	U	0.0026	0.010	mg/l		8270 D	07/21/14	1
Benzo (a) anthracene	U	0.00032	0.0010	mg/l		8270 D	07/21/14	1
Benzo (b) fluoranthene	U	0.00027	0.0010	mg/l		8270 D	07/21/14	1
Benzo (k) fluoranthene	U	0.00036	0.0010	mg/l		8270 D	07/21/14	1
Benzo (g, h, i) perylene	U	0.00033	0.0010	mg/l		8270 D	07/21/14	1
Benzo (a) pyrene	U	0.00034	0.0010	mg/l		8270 D	07/21/14	1
Biphenyl	U	0.00032	0.010	mg/l		8270 D	07/21/14	1
Bis (2-chlorethoxy)methane	U	0.00033	0.010	mg/l		8270 D	07/21/14	1
Bis (2-chloroethyl) ether	U	0.0016	0.010	mg/l		8270 D	07/21/14	1
Bis (2-chloroisopropyl) ether	U	0.00044	0.010	mg/l		8270 D	07/21/14	1
4-Bromophenyl-phenylether	U	0.00034	0.010	mg/l		8270 D	07/21/14	1
Caprolactam	U	0.0026	0.010	mg/l		8270 D	07/21/14	1
Carbazole	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
4-Chloroaniline	U	0.00038	0.010	mg/l		8270 D	07/21/14	1
2-Chloronaphthalene	U	0.00033	0.0010	mg/l		8270 D	07/21/14	1
4-Chlorophenyl-phenylether	U	0.00030	0.010	mg/l		8270 D	07/21/14	1
Chrysene	U	0.00033	0.0010	mg/l		8270 D	07/21/14	1
Dibenz (a, h) anthracene	U	0.00028	0.0010	mg/l		8270 D	07/21/14	1
Dibenzofuran	U	0.00034	0.010	mg/l		8270 D	07/21/14	1
3,3-Dichlorobenzidine	U	0.0020	0.010	mg/l		8270 D	07/21/14	1
2,4-Dinitrotoluene	U	0.0016	0.010	mg/l		8270 D	07/21/14	1
2,6-Dinitrotoluene	U	0.00028	0.010	mg/l		8270 D	07/21/14	1
Fluoranthene	U	0.00031	0.0010	mg/l		8270 D	07/21/14	1
Fluorene	U	0.00032	0.0010	mg/l		8270 D	07/21/14	1
Hexachlorobenzene	U	0.00034	0.0010	mg/l		8270 D	07/21/14	1
Hexachloro-1,3-butadiene	U	0.00033	0.010	mg/l		8270 D	07/21/14	1
Hexachlorocyclopentadiene	U	0.0023	0.010	mg/l		8270 D	07/21/14	1
Hexachloroethane	U	0.00036	0.010	mg/l		8270 D	07/21/14	1
Indeno (1,2,3-cd) pyrene	U	0.00028	0.0010	mg/l		8270 D	07/21/14	1
Isophorone	U	0.00027	0.010	mg/l		8270 D	07/21/14	1
2-Methylnaphthalene	U	0.00031	0.0010	mg/l		8270 D	07/21/14	1
Naphthalene	U	0.00037	0.0010	mg/l		8270 D	07/21/14	1
2-Nitroaniline	U	0.0019	0.010	mg/l		8270 D	07/21/14	1
3-Nitroaniline	U	0.00031	0.010	mg/l		8270 D	07/21/14	1
4-Nitroaniline	U	0.00035	0.010	mg/l		8270 D	07/21/14	1
Nitrobenzene	U	0.00037	0.010	mg/l		8270 D	07/21/14	1
n-Nitrosodiphenylamine	U	0.00030	0.010	mg/l		8270 D	07/21/14	1
n-Nitrosodi-n-propylamine	U	0.00040	0.010	mg/l		8270 D	07/21/14	1
Phenanthrene	U	0.00037	0.0010	mg/l		8270 D	07/21/14	1
Benzylbutyl phthalate	U	0.00028	0.0030	mg/l		8270 D	07/21/14	1

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Est. 1970

REPORT OF ANALYSIS

Mr. Dave Rowlinson  
 GHD  
 200 John James Audubon Pkwy; Ste 10  
 Amherst, NY 14228

November 04, 2014

Date Received : July 16, 2014  
 Description : Fillmore Ave.  
 Sample ID : MW-7  
 Collected By : Dave Rowlinson  
 Collection Date : 07/15/14 10:00

ESC Sample # : L710351-05

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Bis(2-ethylhexyl)phthalate	0.0016	0.00071	0.0030	mg/l	J	8270 D	07/21/14	1
Di-n-butyl phthalate	0.00074	0.00027	0.0030	mg/l	J	8270 D	07/21/14	1
Diethyl phthalate	0.00047	0.00028	0.0030	mg/l	J	8270 D	07/21/14	1
Dimethyl phthalate	0.0011	0.00028	0.0030	mg/l	J	8270 D	07/21/14	1
Di-n-octyl phthalate	U	0.00028	0.0010	mg/l		8270 D	07/21/14	1
Pyrene	U	0.00033	0.0010	mg/l		8270 D	07/21/14	1
1,2,4,5-Tetrachlorobenzene	U	0.0024	0.010	mg/l		8270 D	07/21/14	1
TCL Acid Extractables								
4-Chloro-3-methylphenol	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
2-Chlorophenol	U	0.00028	0.010	mg/l		8270 D	07/21/14	1
2-Methylphenol	U	0.00031	0.010	mg/l		8270 D	07/21/14	1
3,4-Methyl Phenol	U	0.00027	0.010	mg/l		8270 D	07/21/14	1
2,4-Dichlorophenol	U	0.00028	0.010	mg/l		8270 D	07/21/14	1
2,4-Dimethylphenol	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
4,6-Dinitro-2-methylphenol	U	0.0026	0.010	mg/l		8270 D	07/21/14	1
2,4-Dinitrophenol	U	0.0032	0.010	mg/l	J3	8270 D	07/21/14	1
2-Nitrophenol	U	0.00032	0.010	mg/l		8270 D	07/21/14	1
4-Nitrophenol	U	0.0020	0.010	mg/l	J3J4	8270 D	07/21/14	1
Pentachlorophenol	U	0.00031	0.010	mg/l		8270 D	07/21/14	1
Phenol	U	0.00033	0.010	mg/l		8270 D	07/21/14	1
2,4,5-Trichlorophenol	U	0.00024	0.010	mg/l		8270 D	07/21/14	1
2,4,6-Trichlorophenol	U	0.00030	0.010	mg/l		8270 D	07/21/14	1
Surrogate Recovery								
2-Fluorophenol	34.5			% Rec.		8270 D	07/21/14	1
Phenol-d5	28.9			% Rec.		8270 D	07/21/14	1
Nitrobenzene-d5	43.4			% Rec.		8270 D	07/21/14	1
2-Fluorobiphenyl	63.8			% Rec.		8270 D	07/21/14	1
2,4,6-Tribromophenol	86.6			% Rec.		8270 D	07/21/14	1
p-Terphenyl-d14	64.4			% Rec.		8270 D	07/21/14	1

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REPORT OF ANALYSIS

Mr. Dave Rowlinson  
 GHD  
 200 John James Audubon Pkwy; Ste 10  
 Amherst, NY 14228

November 04, 2014

Date Received : July 16, 2014  
 Description : Fillmore Ave.  
 Sample ID : MW-8  
 Collected By : Dave Rowlinson  
 Collection Date : 07/15/14 09:30

ESC Sample # : L710351-06

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	0.00061	0.00021	0.0010	mg/l	J	6020	07/17/14	1
Arsenic	0.0017	0.00025	0.0010	mg/l		6020	07/17/14	1
Lead	0.0054	0.00024	0.0010	mg/l		6020	07/17/14	1
Thallium	U	0.00019	0.0010	mg/l		6020	07/17/14	1
Mercury	U	0.000049	0.00020	mg/l		7470A	07/18/14	1
Aluminum	0.046	0.035	0.10	mg/l	J	6010B	07/22/14	1
Barium	0.12	0.0017	0.0050	mg/l		6010B	07/22/14	1
Beryllium	U	0.00070	0.0020	mg/l		6010B	07/22/14	1
Cadmium	U	0.00070	0.0050	mg/l		6010B	07/22/14	1
Calcium	160	0.046	1.0	mg/l		6010B	07/22/14	1
Chromium	U	0.0014	0.010	mg/l		6010B	07/22/14	1
Cobalt	U	0.0023	0.010	mg/l		6010B	07/22/14	1
Copper	U	0.0053	0.020	mg/l		6010B	07/22/14	1
Iron	4.1	0.014	0.10	mg/l		6010B	07/22/14	1
Magnesium	34.	0.011	1.0	mg/l		6010B	07/22/14	1
Manganese	0.82	0.0012	0.010	mg/l		6010B	07/22/14	1
Nickel	U	0.0049	0.020	mg/l		6010B	07/22/14	1
Potassium	2.7	0.10	1.0	mg/l		6010B	07/22/14	1
Selenium	0.019	0.0074	0.020	mg/l	J	6010B	07/22/14	1
Silver	U	0.0028	0.010	mg/l		6010B	07/22/14	1
Sodium	19.	0.098	1.0	mg/l		6010B	07/22/14	1
Vanadium	U	0.0024	0.020	mg/l		6010B	07/22/14	1
Zinc	0.080	0.0059	0.050	mg/l		6010B	07/22/14	1
Volatile Organics								
Acetone	U	0.010	0.050	mg/l		8260B	07/19/14	1
Benzene	0.0021	0.00033	0.0010	mg/l		8260B	07/19/14	1
Bromochloromethane	U	0.00052	0.0010	mg/l		8260B	07/19/14	1
Bromodichloromethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Bromoform	U	0.00047	0.0010	mg/l		8260B	07/19/14	1
Bromomethane	U	0.00087	0.0050	mg/l	J3	8260B	07/19/14	1
Carbon disulfide	U	0.00028	0.0010	mg/l		8260B	07/19/14	1
Carbon tetrachloride	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Chlorobenzene	U	0.00035	0.0010	mg/l		8260B	07/19/14	1
Chlorodibromomethane	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
Chloroethane	U	0.00045	0.0050	mg/l		8260B	07/19/14	1
Chloroform	U	0.00032	0.0050	mg/l		8260B	07/19/14	1
Chloromethane	U	0.00028	0.0025	mg/l		8260B	07/23/14	1
Cyclohexane	0.00086	0.00039	0.0010	mg/l	J	8260B	07/19/14	1
1,2-Dibromo-3-Chloropropane	U	0.0013	0.0050	mg/l		8260B	07/19/14	1
1,2-Dibromoethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1

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Est. 1970

REPORT OF ANALYSIS

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

November 04, 2014

Date Received : July 16, 2014  
Description : Fillmore Ave.  
Sample ID : MW-8  
Collected By : Dave Rowlinson  
Collection Date : 07/15/14 09:30

ESC Sample # : L710351-06

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,2-Dichlorobenzene	U	0.00035	0.0010	mg/l		8260B	07/19/14	1
1,3-Dichlorobenzene	U	0.00022	0.0010	mg/l		8260B	07/19/14	1
1,4-Dichlorobenzene	U	0.00027	0.0010	mg/l		8260B	07/19/14	1
Dichlorodifluoromethane	U	0.00055	0.0050	mg/l		8260B	07/19/14	1
1,1-Dichloroethane	U	0.00026	0.0010	mg/l		8260B	07/19/14	1
1,2-Dichloroethane	U	0.00036	0.0010	mg/l		8260B	07/19/14	1
1,1-Dichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
cis-1,2-Dichloroethene	0.0086	0.00026	0.0010	mg/l		8260B	07/19/14	1
trans-1,2-Dichloroethene	0.0015	0.00040	0.0010	mg/l		8260B	07/19/14	1
1,2-Dichloropropane	U	0.00031	0.0010	mg/l		8260B	07/19/14	1
cis-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260B	07/19/14	1
trans-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260B	07/19/14	1
Ethylbenzene	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
2-Hexanone	U	0.0038	0.010	mg/l		8260B	07/19/14	1
Isopropylbenzene	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
2-Butanone (MEK)	U	0.0039	0.010	mg/l		8260B	07/19/14	1
Methyl Acetate	U	0.0043	0.020	mg/l		8260B	07/19/14	1
Methyl Cyclohexane	0.00079	0.00038	0.0010	mg/l	J	8260B	07/19/14	1
Methylene Chloride	U	0.0010	0.0050	mg/l		8260B	07/19/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0021	0.010	mg/l		8260B	07/19/14	1
Methyl tert-butyl ether	U	0.00037	0.0010	mg/l		8260B	07/19/14	1
Styrene	U	0.00031	0.0010	mg/l		8260B	07/19/14	1
1,1,2,2-Tetrachloroethane	U	0.00058	0.0010	mg/l		8260B	07/19/14	1
Tetrachloroethene	U	0.00037	0.0010	mg/l		8260B	07/19/14	1
Toluene	U	0.00078	0.0050	mg/l		8260B	07/19/14	1
1,2,3-Trichlorobenzene	U	0.00023	0.0010	mg/l		8260B	07/19/14	1
1,2,4-Trichlorobenzene	U	0.00021	0.0010	mg/l		8260B	07/19/14	1
1,1,1-Trichloroethane	U	0.00032	0.0010	mg/l		8260B	07/19/14	1
1,1,2-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Trichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
Trichlorofluoromethane	U	0.0012	0.0050	mg/l		8260B	07/19/14	1
1,1,2-Trichlorotrifluoroethane	U	0.00030	0.0010	mg/l		8260B	07/19/14	1
Vinyl chloride	0.030	0.00026	0.0010	mg/l		8260B	07/19/14	1
Xylenes, Total	U	0.0011	0.0030	mg/l		8260B	07/19/14	1
Surrogate Recovery								
Toluene-d8	103.				% Rec.	8260B	07/19/14	1
Dibromofluoromethane	102.				% Rec.	8260B	07/19/14	1
a,a,a-Trifluorotoluene	102.				% Rec.	8260B	07/19/14	1
4-Bromofluorobenzene	107.				% Rec.	8260B	07/19/14	1
TCL Base/Neutral Extractables								
Acenaphthene	0.0022	0.00032	0.0010	mg/l		8270 D	07/21/14	1
Acenaphthylene	U	0.00031	0.0010	mg/l		8270 D	07/21/14	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD = TRRP SDL

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Est. 1970

REPORT OF ANALYSIS

November 04, 2014

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

ESC Sample # : L710351-06

Date Received : July 16, 2014  
Description : Fillmore Ave.

Site ID :

Sample ID : MW-8

Project # : 8612199

Collected By : Dave Rowlinson  
Collection Date : 07/15/14 09:30

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Acetophenone	U	0.0027	0.010	mg/l		8270 D	07/21/14	1
Anthracene	U	0.00029	0.0010	mg/l		8270 D	07/21/14	1
Atrazine	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
Benzaldehyde	U	0.0026	0.010	mg/l		8270 D	07/21/14	1
Benzo(a)anthracene	U	0.00032	0.0010	mg/l		8270 D	07/21/14	1
Benzo(b)fluoranthene	U	0.00027	0.0010	mg/l		8270 D	07/21/14	1
Benzo(k)fluoranthene	U	0.00036	0.0010	mg/l		8270 D	07/21/14	1
Benzo(g,h,i)perylene	U	0.00033	0.0010	mg/l		8270 D	07/21/14	1
Benzo(a)pyrene	U	0.00034	0.0010	mg/l		8270 D	07/21/14	1
Biphenyl	U	0.00032	0.010	mg/l		8270 D	07/21/14	1
Bis(2-chlorethoxy)methane	U	0.00033	0.010	mg/l		8270 D	07/21/14	1
Bis(2-chloroethyl)ether	U	0.0016	0.010	mg/l		8270 D	07/21/14	1
Bis(2-chloroisopropyl)ether	U	0.00044	0.010	mg/l		8270 D	07/21/14	1
4-Bromophenyl-phenylether	U	0.00034	0.010	mg/l		8270 D	07/21/14	1
Caprolactam	U	0.0026	0.010	mg/l		8270 D	07/21/14	1
Carbazole	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
4-Chloroaniline	U	0.00038	0.010	mg/l		8270 D	07/21/14	1
2-Chloronaphthalene	U	0.00033	0.0010	mg/l		8270 D	07/21/14	1
4-Chlorophenyl-phenylether	U	0.00030	0.010	mg/l		8270 D	07/21/14	1
Chrysene	U	0.00033	0.0010	mg/l		8270 D	07/21/14	1
Dibenz(a,h)anthracene	U	0.00028	0.0010	mg/l		8270 D	07/21/14	1
Dibenzofuran	U	0.00034	0.010	mg/l		8270 D	07/21/14	1
3,3-Dichlorobenzidine	U	0.0020	0.010	mg/l		8270 D	07/21/14	1
2,4-Dinitrotoluene	U	0.0016	0.010	mg/l		8270 D	07/21/14	1
2,6-Dinitrotoluene	U	0.00028	0.010	mg/l		8270 D	07/21/14	1
Fluoranthene	U	0.00031	0.0010	mg/l		8270 D	07/21/14	1
Fluorene	U	0.00032	0.0010	mg/l		8270 D	07/21/14	1
Hexachlorobenzene	U	0.00034	0.0010	mg/l		8270 D	07/21/14	1
Hexachloro-1,3-butadiene	U	0.00033	0.010	mg/l		8270 D	07/21/14	1
Hexachlorocyclopentadiene	U	0.0023	0.010	mg/l		8270 D	07/21/14	1
Hexachloroethane	U	0.00036	0.010	mg/l		8270 D	07/21/14	1
Indeno(1,2,3-cd)pyrene	U	0.00028	0.0010	mg/l		8270 D	07/21/14	1
Isophorone	U	0.00027	0.010	mg/l		8270 D	07/21/14	1
2-Methylnaphthalene	U	0.00031	0.0010	mg/l		8270 D	07/21/14	1
Naphthalene	U	0.00037	0.0010	mg/l		8270 D	07/21/14	1
2-Nitroaniline	U	0.0019	0.010	mg/l		8270 D	07/21/14	1
3-Nitroaniline	U	0.00031	0.010	mg/l		8270 D	07/21/14	1
4-Nitroaniline	U	0.00035	0.010	mg/l		8270 D	07/21/14	1
Nitrobenzene	U	0.00037	0.010	mg/l		8270 D	07/21/14	1
n-Nitrosodiphenylamine	U	0.00030	0.010	mg/l		8270 D	07/21/14	1
n-Nitrosodi-n-propylamine	U	0.00040	0.010	mg/l		8270 D	07/21/14	1
Phenanthrene	U	0.00037	0.0010	mg/l		8270 D	07/21/14	1
Benzylbutyl phthalate	U	0.00028	0.0030	mg/l		8270 D	07/21/14	1

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REPORT OF ANALYSIS

Mr. Dave Rowlinson  
 GHD  
 200 John James Audubon Pkwy; Ste 10  
 Amherst, NY 14228

November 04, 2014

Date Received : July 16, 2014  
 Description : Fillmore Ave.  
 Sample ID : MW-8  
 Collected By : Dave Rowlinson  
 Collection Date : 07/15/14 09:30

ESC Sample # : L710351-06

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Bis(2-ethylhexyl)phthalate	0.0023	0.00071	0.0030	mg/l	J	8270 D	07/21/14	1
Di-n-butyl phthalate	0.00057	0.00027	0.0030	mg/l	J	8270 D	07/21/14	1
Diethyl phthalate	U	0.00028	0.0030	mg/l		8270 D	07/21/14	1
Dimethyl phthalate	0.0013	0.00028	0.0030	mg/l	J	8270 D	07/21/14	1
Di-n-octyl phthalate	U	0.00028	0.0010	mg/l		8270 D	07/21/14	1
Pyrene	U	0.00033	0.0010	mg/l		8270 D	07/21/14	1
1,2,4,5-Tetrachlorobenzene	U	0.0024	0.010	mg/l		8270 D	07/21/14	1
TCL Acid Extractables								
4-Chloro-3-methylphenol	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
2-Chlorophenol	U	0.00028	0.010	mg/l		8270 D	07/21/14	1
2-Methylphenol	U	0.00031	0.010	mg/l		8270 D	07/21/14	1
3&4-Methyl Phenol	U	0.00027	0.010	mg/l		8270 D	07/21/14	1
2,4-Dichlorophenol	U	0.00028	0.010	mg/l		8270 D	07/21/14	1
2,4-Dimethylphenol	U	0.00026	0.010	mg/l		8270 D	07/21/14	1
4,6-Dinitro-2-methylphenol	U	0.0026	0.010	mg/l		8270 D	07/21/14	1
2,4-Dinitrophenol	U	0.0032	0.010	mg/l	J3	8270 D	07/21/14	1
2-Nitrophenol	U	0.00032	0.010	mg/l		8270 D	07/21/14	1
4-Nitrophenol	U	0.0020	0.010	mg/l	J3J4	8270 D	07/21/14	1
Pentachlorophenol	U	0.00031	0.010	mg/l		8270 D	07/21/14	1
Phenol	U	0.00033	0.010	mg/l		8270 D	07/21/14	1
2,4,5-Trichlorophenol	U	0.00024	0.010	mg/l		8270 D	07/21/14	1
2,4,6-Trichlorophenol	U	0.00030	0.010	mg/l		8270 D	07/21/14	1
Surrogate Recovery								
2-Fluorophenol	36.1			% Rec.		8270 D	07/21/14	1
Phenol-d5	25.2			% Rec.		8270 D	07/21/14	1
Nitrobenzene-d5	50.6			% Rec.		8270 D	07/21/14	1
2-Fluorobiphenyl	70.1			% Rec.		8270 D	07/21/14	1
2,4,6-Tribromophenol	99.8			% Rec.		8270 D	07/21/14	1
p-Terphenyl-d14	72.7			% Rec.		8270 D	07/21/14	1

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REPORT OF ANALYSIS

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

November 04, 2014

Date Received : July 16, 2014  
Description : Fillmore Ave.  
Sample ID : FIELD DUP  
Collected By : Dave Rowlinson  
Collection Date : 07/15/14 00:00

ESC Sample # : L710351-07

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Antimony	0.00091	0.00021	0.0010	mg/l	J	6020	07/20/14	1
Arsenic	0.022	0.00025	0.0010	mg/l		6020	07/20/14	1
Lead	0.025	0.00024	0.0010	mg/l		6020	07/20/14	1
Thallium	0.00032	0.00019	0.0010	mg/l	J	6020	07/20/14	1
Mercury	U	0.000049	0.00020	mg/l		7470A	07/19/14	1
Aluminum	12.	0.035	0.10	mg/l		6010B	07/22/14	1
Barium	0.20	0.0017	0.0050	mg/l		6010B	07/22/14	1
Beryllium	0.00072	0.00070	0.0020	mg/l	J	6010B	07/22/14	1
Cadmium	0.0024	0.00070	0.0050	mg/l	J	6010B	07/22/14	1
Calcium	160	0.046	1.0	mg/l		6010B	07/22/14	1
Chromium	0.017	0.0014	0.010	mg/l		6010B	07/22/14	1
Cobalt	0.012	0.0023	0.010	mg/l		6010B	07/22/14	1
Copper	0.034	0.0053	0.020	mg/l		6010B	07/22/14	1
Iron	34.	0.014	0.10	mg/l		6010B	07/22/14	1
Magnesium	28.	0.011	1.0	mg/l		6010B	07/22/14	1
Manganese	3.4	0.0012	0.010	mg/l		6010B	07/22/14	1
Nickel	0.026	0.0049	0.020	mg/l		6010B	07/22/14	1
Potassium	6.6	0.10	1.0	mg/l		6010B	07/22/14	1
Selenium	0.015	0.0074	0.020	mg/l	J	6010B	07/22/14	1
Silver	0.051	0.0028	0.010	mg/l		6010B	07/22/14	1
Sodium	70.	0.098	1.0	mg/l		6010B	07/22/14	1
Vanadium	0.025	0.0024	0.020	mg/l		6010B	07/22/14	1
Zinc	0.12	0.0059	0.050	mg/l		6010B	07/22/14	1
<b>Volatile Organics</b>								
Acetone	U	0.010	0.050	mg/l		8260B	07/19/14	1
Benzene	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
Bromochloromethane	U	0.00052	0.0010	mg/l		8260B	07/19/14	1
Bromodichloromethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Bromoform	U	0.00047	0.0010	mg/l		8260B	07/19/14	1
Bromomethane	U	0.00087	0.0050	mg/l	J3	8260B	07/19/14	1
Carbon disulfide	U	0.00028	0.0010	mg/l		8260B	07/19/14	1
Carbon tetrachloride	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Chlorobenzene	U	0.00035	0.0010	mg/l		8260B	07/19/14	1
Chlorodibromomethane	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
Chloroethane	U	0.00045	0.0050	mg/l		8260B	07/19/14	1
Chloroform	U	0.00032	0.0050	mg/l		8260B	07/19/14	1
Chloromethane	U	0.00028	0.0025	mg/l		8260B	07/23/14	1
Cyclohexane	U	0.00039	0.0010	mg/l		8260B	07/19/14	1
1,2-Dibromo-3-Chloropropane	U	0.0013	0.0050	mg/l		8260B	07/19/14	1
1,2-Dibromoethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1

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November 04, 2014

Date Received : July 16, 2014  
 Description : Fillmore Ave.  
 Sample ID : FIELD DUP  
 Collected By : Dave Rowlinson  
 Collection Date : 07/15/14 00:00

ESC Sample # : L710351-07

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,2-Dichlorobenzene	U	0.00035	0.0010	mg/l		8260B	07/19/14	1
1,3-Dichlorobenzene	U	0.00022	0.0010	mg/l		8260B	07/19/14	1
1,4-Dichlorobenzene	U	0.00027	0.0010	mg/l		8260B	07/19/14	1
Dichlorodifluoromethane	U	0.00055	0.0050	mg/l		8260B	07/19/14	1
1,1-Dichloroethane	U	0.00026	0.0010	mg/l		8260B	07/19/14	1
1,2-Dichloroethane	U	0.00036	0.0010	mg/l		8260B	07/19/14	1
1,1-Dichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
cis-1,2-Dichloroethene	0.0087	0.00026	0.0010	mg/l		8260B	07/19/14	1
trans-1,2-Dichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
1,2-Dichloropropane	U	0.00031	0.0010	mg/l		8260B	07/19/14	1
cis-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260B	07/19/14	1
trans-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260B	07/19/14	1
Ethylbenzene	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
2-Hexanone	U	0.0038	0.010	mg/l		8260B	07/19/14	1
Isopropylbenzene	U	0.00033	0.0010	mg/l		8260B	07/19/14	1
2-Butanone (MEK)	U	0.0039	0.010	mg/l		8260B	07/19/14	1
Methyl Acetate	U	0.0043	0.020	mg/l		8260B	07/19/14	1
Methyl Cyclohexane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Methylene Chloride	U	0.0010	0.0050	mg/l		8260B	07/19/14	1
4-Methyl-2-pentanone (MIBK)	U	0.0021	0.010	mg/l		8260B	07/19/14	1
Methyl tert-butyl ether	U	0.00037	0.0010	mg/l		8260B	07/19/14	1
Styrene	U	0.00031	0.0010	mg/l		8260B	07/19/14	1
1,1,2,2-Tetrachloroethane	U	0.00058	0.0010	mg/l		8260B	07/19/14	1
Tetrachloroethene	U	0.00037	0.0010	mg/l		8260B	07/19/14	1
Toluene	U	0.00078	0.0050	mg/l		8260B	07/19/14	1
1,2,3-Trichlorobenzene	U	0.00023	0.0010	mg/l		8260B	07/19/14	1
1,2,4-Trichlorobenzene	U	0.00021	0.0010	mg/l		8260B	07/19/14	1
1,1,1-Trichloroethane	U	0.00032	0.0010	mg/l		8260B	07/19/14	1
1,1,2-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	07/19/14	1
Trichloroethene	U	0.00040	0.0010	mg/l		8260B	07/19/14	1
Trichlorofluoromethane	U	0.0012	0.0050	mg/l		8260B	07/19/14	1
1,1,2-Trichlorotrifluoroethane	U	0.00030	0.0010	mg/l		8260B	07/19/14	1
Vinyl chloride	U	0.00026	0.0010	mg/l		8260B	07/19/14	1
Xylenes, Total	U	0.0011	0.0030	mg/l		8260B	07/19/14	1
Surrogate Recovery								
Toluene-d8	101.				% Rec.	8260B	07/19/14	1
Dibromofluoromethane	101.				% Rec.	8260B	07/19/14	1
a,a,a-Trifluorotoluene	97.6				% Rec.	8260B	07/19/14	1
4-Bromofluorobenzene	104.				% Rec.	8260B	07/19/14	1
TCL Base/Neutral Extractables								
Acenaphthene	U	0.00032	0.0010	mg/l		8270 D	07/22/14	1
Acenaphthylene	U	0.00031	0.0010	mg/l		8270 D	07/22/14	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD = TRRP SDL

RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL

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Mt. Juliet, TN 37122  
(615) 758-5858  
1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

November 04, 2014

Date Received : July 16, 2014  
Description : Fillmore Ave.  
Sample ID : FIELD DUP  
Collected By : Dave Rowlinson  
Collection Date : 07/15/14 00:00

ESC Sample # : L710351-07  
Site ID :  
Project # : 8612199

Table with 10 columns: Parameter, Result, MDL, RDL, Units, Qualifier, Method, Date, Dil. Lists various chemical compounds and their detection results.

U = ND (Not Detected)  
MDL = Minimum Detection Limit = LOD = TRRP SDL  
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL

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REPORT OF ANALYSIS

November 04, 2014

Mr. Dave Rowlinson  
GHD  
200 John James Audubon Pkwy; Ste 10  
Amherst, NY 14228

ESC Sample # : L710351-07

Date Received : July 16, 2014  
Description : Fillmore Ave.

Site ID :

Sample ID : FIELD DUP

Project # : 8612199

Collected By : Dave Rowlinson  
Collection Date : 07/15/14 00:00

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
Bis(2-ethylhexyl)phthalate	0.0014	0.00071	0.0030	mg/l	J	8270 D	07/22/14	1
Di-n-butyl phthalate	0.00033	0.00027	0.0030	mg/l	J	8270 D	07/22/14	1
Diethyl phthalate	U	0.00028	0.0030	mg/l		8270 D	07/22/14	1
Dimethyl phthalate	0.00034	0.00028	0.0030	mg/l	J	8270 D	07/22/14	1
Di-n-octyl phthalate	U	0.00028	0.0010	mg/l		8270 D	07/22/14	1
Pyrene	U	0.00033	0.0010	mg/l		8270 D	07/22/14	1
1,2,4,5-Tetrachlorobenzene	U	0.0024	0.010	mg/l		8270 D	07/22/14	1
TCL Acid Extractables								
4-Chloro-3-methylphenol	U	0.00026	0.010	mg/l		8270 D	07/22/14	1
2-Chlorophenol	U	0.00028	0.010	mg/l		8270 D	07/22/14	1
2-Methylphenol	U	0.00031	0.010	mg/l		8270 D	07/22/14	1
3,4-Methyl Phenol	U	0.00027	0.010	mg/l		8270 D	07/22/14	1
2,4-Dichlorophenol	U	0.00028	0.010	mg/l		8270 D	07/22/14	1
2,4-Dimethylphenol	U	0.00026	0.010	mg/l		8270 D	07/22/14	1
4,6-Dinitro-2-methylphenol	U	0.0026	0.010	mg/l		8270 D	07/22/14	1
2,4-Dinitrophenol	U	0.0032	0.010	mg/l		8270 D	07/22/14	1
2-Nitrophenol	U	0.00032	0.010	mg/l		8270 D	07/22/14	1
4-Nitrophenol	U	0.0020	0.010	mg/l		8270 D	07/22/14	1
Pentachlorophenol	U	0.00031	0.010	mg/l		8270 D	07/22/14	1
Phenol	U	0.00033	0.010	mg/l		8270 D	07/22/14	1
2,4,5-Trichlorophenol	U	0.00024	0.010	mg/l		8270 D	07/22/14	1
2,4,6-Trichlorophenol	U	0.00030	0.010	mg/l		8270 D	07/22/14	1
Surrogate Recovery								
2-Fluorophenol	19.2			% Rec.		8270 D	07/22/14	1
Phenol-d5	11.4			% Rec.		8270 D	07/22/14	1
Nitrobenzene-d5	49.1			% Rec.		8270 D	07/22/14	1
2-Fluorobiphenyl	46.1			% Rec.		8270 D	07/22/14	1
2,4,6-Tribromophenol	54.9			% Rec.		8270 D	07/22/14	1
p-Terphenyl-d14	46.8			% Rec.		8270 D	07/22/14	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD = TRRP SDL

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Est. 1970

REPORT OF ANALYSIS

November 04, 2014

Mr. Dave Rowlinson
GHD
200 John James Audubon Pkwy; Ste 10
Amherst, NY 14228

Date Received : July 16, 2014
Description : Fillmore Ave.
Sample ID : TRIP BLANK
Collected By : Dave Rowlinson
Collection Date : 07/15/14 00:00

ESC Sample # : L710351-08

Site ID :

Project # : 8612199

Table with 9 columns: Parameter, Result, MDL, RDL, Units, Qualifier, Method, Date, Dil. Rows include Volatile Organics, Acetone, Benzene, Bromochloromethane, etc.

U = ND (Not Detected)
MDL = Minimum Detection Limit = LOD = TRRP SDL
RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL

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Mr. Dave Rowlinson  
 GHD  
 200 John James Audubon Pkwy; Ste 10  
 Amherst, NY 14228

November 04, 2014

Date Received : July 16, 2014  
 Description : Fillmore Ave.  
 Sample ID : TRIP BLANK  
 Collected By : Dave Rowlinson  
 Collection Date : 07/15/14 00:00

ESC Sample # : L710351-08

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qualifier	Method	Date	Dil.
1,2,4-Trichlorobenzene	U	0.00021	0.0010	mg/l		8260B	07/23/14	1
1,1,1-Trichloroethane	U	0.00032	0.0010	mg/l		8260B	07/23/14	1
1,1,2-Trichloroethane	U	0.00038	0.0010	mg/l		8260B	07/23/14	1
Trichloroethene	U	0.00040	0.0010	mg/l		8260B	07/23/14	1
Trichlorofluoromethane	U	0.0012	0.0050	mg/l		8260B	07/23/14	1
1,1,2-Trichlorotrifluoroethane	U	0.00030	0.0010	mg/l		8260B	07/23/14	1
Vinyl chloride	U	0.00026	0.0010	mg/l		8260B	07/23/14	1
Xylenes, Total	U	0.0011	0.0030	mg/l		8260B	07/23/14	1
Surrogate Recovery								
Toluene-d8	101.				Rec.	8260B	07/23/14	1
Dibromofluoromethane	92.9				Rec.	8260B	07/23/14	1
a,a,a-Trifluorotoluene	101.				Rec.	8260B	07/23/14	1
4-Bromofluorobenzene	100.				Rec.	8260B	07/23/14	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD = TRRP SDL

RDL = Reported Detection Limit = LOQ = PQL = EQL = TRRP MQL

Note:

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Attachment A  
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L710351-01	WG732882	SAMP	Silver	R2966729	J
	WG732340	SAMP	Bis(2-ethylhexyl)phthalate	R2966365	J
	WG732340	SAMP	Dimethyl phthalate	R2966365	J
	WG732340	SAMP	2,4-Dinitrophenol	R2966365	J3
	WG732340	SAMP	4-Nitrophenol	R2966365	J3J4
	WG732383	SAMP	Bromomethane	R2967088	J3
L710351-02	WG732383	SAMP	trans-1,2-Dichloroethene	R2967088	J
	WG732882	SAMP	Beryllium	R2966729	J
	WG732882	SAMP	Selenium	R2966729	J
	WG732882	SAMP	Silver	R2966729	J
	WG732174	SAMP	Antimony	R2964246	J
	WG732340	SAMP	Bis(2-ethylhexyl)phthalate	R2966365	J
	WG732340	SAMP	Di-n-butyl phthalate	R2966365	J
	WG732340	SAMP	Dimethyl phthalate	R2966365	J
	WG732340	SAMP	2,4-Dinitrophenol	R2966365	J3
	WG732340	SAMP	4-Nitrophenol	R2966365	J3J4
L710351-03	WG732383	SAMP	Bromomethane	R2967088	J3
	WG732383	SAMP	Chlorobenzene	R2967088	J
	WG732383	SAMP	Methyl Cyclohexane	R2967088	J
	WG732882	SAMP	Cadmium	R2966729	J
	WG732882	SAMP	Copper	R2966729	J
	WG732882	SAMP	Potassium	R2966729	J
	WG732174	SAMP	Antimony	R2964246	J
	WG732174	SAMP	Arsenic	R2964246	J
	WG732340	SAMP	Acenaphthene	R2966365	J
	WG732340	SAMP	Fluorene	R2966365	J
	WG732340	SAMP	Bis(2-ethylhexyl)phthalate	R2966365	J
	WG732340	SAMP	Di-n-butyl phthalate	R2966365	J
	WG732340	SAMP	Dimethyl phthalate	R2966365	J
	WG732340	SAMP	2,4-Dinitrophenol	R2966365	J3
L710351-04	WG732340	SAMP	4-Nitrophenol	R2966365	J3J4
	WG732383	SAMP	Bromomethane	R2967088	J3
	WG732383	SAMP	Isopropylbenzene	R2967088	J
	WG732882	SAMP	Calcium	R2966729	V
	WG732882	SAMP	Silver	R2966729	J6
	WG732882	SAMP	Sodium	R2966729	O1
	WG732882	SAMP	Zinc	R2966729	J
	WG732174	SAMP	Antimony	R2964246	J
	WG732340	SAMP	Acenaphthylene	R2966365	J
	WG732340	SAMP	3,3-Dichlorobenzidine	R2966365	J3
	WG732340	SAMP	Bis(2-ethylhexyl)phthalate	R2966365	J
	WG732340	SAMP	Di-n-butyl phthalate	R2966365	J
	WG732340	SAMP	Dimethyl phthalate	R2966365	J
	WG732340	SAMP	4-Nitrophenol	R2966365	J4
L710351-05	WG732882	SAMP	Cadmium	R2966729	J
	WG732882	SAMP	Chromium	R2966729	J
	WG732882	SAMP	Cobalt	R2966729	J
	WG732882	SAMP	Selenium	R2966729	J
	WG732882	SAMP	Vanadium	R2966729	J
	WG732340	SAMP	Anthracene	R2966365	J
	WG732340	SAMP	Bis(2-ethylhexyl)phthalate	R2966365	J
	WG732340	SAMP	Di-n-butyl phthalate	R2966365	J
	WG732340	SAMP	Diethyl phthalate	R2966365	J
	WG732340	SAMP	Dimethyl phthalate	R2966365	J
	WG732340	SAMP	2,4-Dinitrophenol	R2966365	J3
	WG732340	SAMP	4-Nitrophenol	R2966365	J3J4
	WG732383	SAMP	Benzene	R2967088	J
	WG732383	SAMP	Bromomethane	R2967088	J3
L710351-06	WG732383	SAMP	Ethylbenzene	R2967088	J
	WG732383	SAMP	Xylenes, Total	R2967088	J
	WG732882	SAMP	Aluminum	R2966729	J
	WG732882	SAMP	Selenium	R2966729	J
	WG732174	SAMP	Antimony	R2964246	J
	WG732340	SAMP	Bis(2-ethylhexyl)phthalate	R2966365	J
	WG732340	SAMP	Di-n-butyl phthalate	R2966365	J
	WG732340	SAMP	Dimethyl phthalate	R2966365	J
	WG732340	SAMP	2,4-Dinitrophenol	R2966365	J3
	WG732340	SAMP	4-Nitrophenol	R2966365	J3J4
	WG732383	SAMP	Bromomethane	R2967088	J3

Attachment A  
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L710351-07	WG732383	SAMP	Cyclohexane	R2967088	J
	WG732383	SAMP	Methyl Cyclohexane	R2967088	J
	WG732882	SAMP	Beryllium	R2966729	J
	WG732882	SAMP	Cadmium	R2966729	J
	WG732882	SAMP	Selenium	R2966729	J
	WG732453	SAMP	Antimony	R2966185	J
	WG732453	SAMP	Thallium	R2966185	J
	WG733134	SAMP	Bis(2-ethylhexyl)phthalate	R2967209	J
	WG733134	SAMP	Di-n-butyl phthalate	R2967209	J
	WG733134	SAMP	Dimethyl phthalate	R2967209	J
	WG732383	SAMP	Bromomethane	R2967088	J3

Attachment B  
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
O1	(ESC) The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.
V	(ESC) - Additional QC Info: The sample concentration is too high to evaluate accurate spike recoveries.

Qualifier Report Information

ESC utilizes sample and result qualifiers as set forth by the EPA Contract Laboratory Program and as required by most certifying bodies including NELAC. In addition to the EPA qualifiers adopted by ESC, we have implemented ESC qualifiers to provide more information pertaining to our analytical results. Each qualifier is designated in the qualifier explanation as either EPA or ESC. Data qualifiers are intended to provide the ESC client with more detailed information concerning the potential bias of reported data. Because of the wide range of constituents and variety of matrices incorporated by most EPA methods, it is common for some compounds to fall outside of established ranges. These exceptions are evaluated and all reported data is valid and useable "unless qualified as 'R' (Rejected)."

Definitions

- Accuracy** - The relationship of the observed value of a known sample to the true value of a known sample. Represented by percent recovery and relevant to samples such as: control samples, matrix spike recoveries, surrogate recoveries, etc.
- Precision** - The agreement between a set of samples or between duplicate samples. Relates to how close together the results are and is represented by Relative Percent Difference.
- Surrogate** - Organic compounds that are similar in chemical composition, extraction, and chromatography to analytes of interest. The surrogates are used to determine the probable response of the group of analytes that are chemically related to the surrogate compound. Surrogates are added to the sample and carried through all stages of preparation and analyses.
- TIC** - Tentatively Identified Compound: Compounds detected in samples that are not target compounds, internal standards, system monitoring compounds, or surrogates.



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Quality Assurance Report  
 Level II

L710351

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Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Antimony	< .001	mg/l			WG732174	07/17/14 17:02
Arsenic	< .001	mg/l			WG732174	07/17/14 17:02
Lead	< .001	mg/l			WG732174	07/17/14 17:02
Thallium	< .001	mg/l			WG732174	07/17/14 17:02
Mercury	< .0002	mg/l			WG732212	07/18/14 16:51
Mercury	< .0002	mg/l			WG732585	07/19/14 16:16
Antimony	< .001	mg/l			WG732453	07/20/14 19:51
Arsenic	< .001	mg/l			WG732453	07/20/14 19:51
Lead	< .001	mg/l			WG732453	07/20/14 19:51
Thallium	< .001	mg/l			WG732453	07/20/14 19:51
1,2,4,5-Tetrachlorobenzene	< .01	mg/l			WG732340	07/21/14 02:47
2,4,5-Trichlorophenol	< .01	mg/l			WG732340	07/21/14 02:47
2,4,6-Trichlorophenol	< .01	mg/l			WG732340	07/21/14 02:47
2,4-Dichlorophenol	< .01	mg/l			WG732340	07/21/14 02:47
2,4-Dimethylphenol	< .01	mg/l			WG732340	07/21/14 02:47
2,4-Dinitrophenol	< .01	mg/l			WG732340	07/21/14 02:47
2,4-Dinitrotoluene	< .01	mg/l			WG732340	07/21/14 02:47
2,6-Dinitrotoluene	< .01	mg/l			WG732340	07/21/14 02:47
2-Chloronaphthalene	< .001	mg/l			WG732340	07/21/14 02:47
2-Chlorophenol	< .01	mg/l			WG732340	07/21/14 02:47
2-Methylnaphthalene	< .001	mg/l			WG732340	07/21/14 02:47
2-Methylphenol	< .01	mg/l			WG732340	07/21/14 02:47
2-Nitroaniline	< .01	mg/l			WG732340	07/21/14 02:47
2-Nitrophenol	< .01	mg/l			WG732340	07/21/14 02:47
3,4-Methyl Phenol	< .01	mg/l			WG732340	07/21/14 02:47
3,3-Dichlorobenzidine	< .01	mg/l			WG732340	07/21/14 02:47
3-Nitroaniline	< .01	mg/l			WG732340	07/21/14 02:47
4,6-Dinitro-2-methylphenol	< .01	mg/l			WG732340	07/21/14 02:47
4-Bromophenyl-phenylether	< .01	mg/l			WG732340	07/21/14 02:47
4-Chloro-3-methylphenol	< .01	mg/l			WG732340	07/21/14 02:47
4-Chloroaniline	< .01	mg/l			WG732340	07/21/14 02:47
4-Chlorophenyl-phenylether	< .01	mg/l			WG732340	07/21/14 02:47
4-Nitroaniline	< .01	mg/l			WG732340	07/21/14 02:47
4-Nitrophenol	< .01	mg/l			WG732340	07/21/14 02:47
Acenaphthene	< .001	mg/l			WG732340	07/21/14 02:47
Acenaphthylene	< .001	mg/l			WG732340	07/21/14 02:47
Acetophenone	< .01	mg/l			WG732340	07/21/14 02:47
Anthracene	< .001	mg/l			WG732340	07/21/14 02:47
Atrazine	< .01	mg/l			WG732340	07/21/14 02:47
Benzaldehyde	< .01	mg/l			WG732340	07/21/14 02:47
Benzo (a) anthracene	< .001	mg/l			WG732340	07/21/14 02:47
Benzo (a) pyrene	< .001	mg/l			WG732340	07/21/14 02:47
Benzo (b) fluoranthene	< .001	mg/l			WG732340	07/21/14 02:47
Benzo (g, h, i) perylene	< .001	mg/l			WG732340	07/21/14 02:47
Benzo (k) fluoranthene	< .001	mg/l			WG732340	07/21/14 02:47
Benzylbutyl phthalate	< .003	mg/l			WG732340	07/21/14 02:47
Biphenyl	< .01	mg/l			WG732340	07/21/14 02:47
Bis (2-chloroethoxy) methane	< .01	mg/l			WG732340	07/21/14 02:47
Bis (2-chloroethyl) ether	< .01	mg/l			WG732340	07/21/14 02:47
Bis (2-chloroisopropyl) ether	< .01	mg/l			WG732340	07/21/14 02:47
Bis (2-ethylhexyl) phthalate	< .003	mg/l			WG732340	07/21/14 02:47

\* Performance of this Analyte is outside of established criteria.

For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Quality Assurance Report  
Level II

L710351

November 04, 2014

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
Caprolactam	< .01	mg/l			WG732340	07/21/14 02:47
Carbazole	< .01	mg/l			WG732340	07/21/14 02:47
Chrysene	< .001	mg/l			WG732340	07/21/14 02:47
Di-n-butyl phthalate	< .003	mg/l			WG732340	07/21/14 02:47
Di-n-octyl phthalate	< .003	mg/l			WG732340	07/21/14 02:47
Dibenz(a,h)anthracene	< .001	mg/l			WG732340	07/21/14 02:47
Dibenzofuran	< .01	mg/l			WG732340	07/21/14 02:47
Diethyl phthalate	< .003	mg/l			WG732340	07/21/14 02:47
Dimethyl phthalate	< .003	mg/l			WG732340	07/21/14 02:47
Fluoranthene	< .001	mg/l			WG732340	07/21/14 02:47
Fluorene	< .001	mg/l			WG732340	07/21/14 02:47
Hexachloro-1,3-butadiene	< .01	mg/l			WG732340	07/21/14 02:47
Hexachlorobenzene	< .001	mg/l			WG732340	07/21/14 02:47
Hexachlorocyclopentadiene	< .01	mg/l			WG732340	07/21/14 02:47
Hexachloroethane	< .01	mg/l			WG732340	07/21/14 02:47
Indeno(1,2,3-cd)pyrene	< .001	mg/l			WG732340	07/21/14 02:47
Isophorone	< .01	mg/l			WG732340	07/21/14 02:47
n-Nitrosodi-n-propylamine	< .01	mg/l			WG732340	07/21/14 02:47
n-Nitrosodiphenylamine	< .01	mg/l			WG732340	07/21/14 02:47
Naphthalene	< .001	mg/l			WG732340	07/21/14 02:47
Nitrobenzene	< .01	mg/l			WG732340	07/21/14 02:47
Pentachlorophenol	< .001	mg/l			WG732340	07/21/14 02:47
Phenanthrene	< .001	mg/l			WG732340	07/21/14 02:47
Phenol	< .01	mg/l			WG732340	07/21/14 02:47
Pyrene	< .001	mg/l			WG732340	07/21/14 02:47
2,4,6-Tribromophenol		% Rec.	71.30	11.2-130	WG732340	07/21/14 02:47
2-Fluorobiphenyl		% Rec.	70.00	29.5-131	WG732340	07/21/14 02:47
2-Fluorophenol		% Rec.	44.60	10-77.9	WG732340	07/21/14 02:47
Nitrobenzene-d5		% Rec.	45.80	21.8-123	WG732340	07/21/14 02:47
Phenol-d5		% Rec.	33.40	5-70.1	WG732340	07/21/14 02:47
p-Terphenyl-d14		% Rec.	65.80	29.3-137	WG732340	07/21/14 02:47
Aluminum	< .1	mg/l			WG732882	07/22/14 01:04
Barium	< .005	mg/l			WG732882	07/22/14 01:04
Beryllium	< .002	mg/l			WG732882	07/22/14 01:04
Cadmium	< .005	mg/l			WG732882	07/22/14 01:04
Calcium	< 1	mg/l			WG732882	07/22/14 01:04
Chromium	< .01	mg/l			WG732882	07/22/14 01:04
Cobalt	< .01	mg/l			WG732882	07/22/14 01:04
Copper	< .02	mg/l			WG732882	07/22/14 01:04
Iron	< .1	mg/l			WG732882	07/22/14 01:04
Magnesium	< 1	mg/l			WG732882	07/22/14 01:04
Manganese	< .01	mg/l			WG732882	07/22/14 01:04
Nickel	< .02	mg/l			WG732882	07/22/14 01:04
Potassium	< 1	mg/l			WG732882	07/22/14 01:04
Selenium	< .02	mg/l			WG732882	07/22/14 01:04
Silver	< .01	mg/l			WG732882	07/22/14 01:04
Sodium	< 1	mg/l			WG732882	07/22/14 01:04
Vanadium	< .01	mg/l			WG732882	07/22/14 01:04
Zinc	< .05	mg/l			WG732882	07/22/14 01:04
1,1,1-Trichloroethane	< .001	mg/l			WG732383	07/19/14 12:58
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG732383	07/19/14 12:58
1,1,2-Trichloroethane	< .001	mg/l			WG732383	07/19/14 12:58
1,1,2-Trichlorotrifluoroethane	< .001	mg/l			WG732383	07/19/14 12:58
1,1-Dichloroethane	< .001	mg/l			WG732383	07/19/14 12:58
1,1-Dichloroethene	< .001	mg/l			WG732383	07/19/14 12:58

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Quality Assurance Report  
 Level II

L710351

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 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

November 04, 2014

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
1,2,3-Trichlorobenzene	< .001	mg/l			WG732383	07/19/14 12:58
1,2,4-Trichlorobenzene	< .001	mg/l			WG732383	07/19/14 12:58
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG732383	07/19/14 12:58
1,2-Dibromoethane	< .001	mg/l			WG732383	07/19/14 12:58
1,2-Dichlorobenzene	< .001	mg/l			WG732383	07/19/14 12:58
1,2-Dichloroethane	< .001	mg/l			WG732383	07/19/14 12:58
1,2-Dichloropropane	< .001	mg/l			WG732383	07/19/14 12:58
1,3-Dichlorobenzene	< .001	mg/l			WG732383	07/19/14 12:58
1,4-Dichlorobenzene	< .001	mg/l			WG732383	07/19/14 12:58
2-Butanone (MEK)	< .01	mg/l			WG732383	07/19/14 12:58
2-Hexanone	< .01	mg/l			WG732383	07/19/14 12:58
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG732383	07/19/14 12:58
Acetone	< .05	mg/l			WG732383	07/19/14 12:58
Benzene	< .001	mg/l			WG732383	07/19/14 12:58
Bromochloromethane	< .001	mg/l			WG732383	07/19/14 12:58
Bromodichloromethane	< .001	mg/l			WG732383	07/19/14 12:58
Bromoform	< .001	mg/l			WG732383	07/19/14 12:58
Bromomethane	< .005	mg/l			WG732383	07/19/14 12:58
Carbon disulfide	< .001	mg/l			WG732383	07/19/14 12:58
Carbon tetrachloride	< .001	mg/l			WG732383	07/19/14 12:58
Chlorobenzene	< .001	mg/l			WG732383	07/19/14 12:58
Chlorodibromomethane	< .001	mg/l			WG732383	07/19/14 12:58
Chloroethane	< .005	mg/l			WG732383	07/19/14 12:58
Chloroform	< .005	mg/l			WG732383	07/19/14 12:58
cis-1,2-Dichloroethene	< .001	mg/l			WG732383	07/19/14 12:58
cis-1,3-Dichloropropene	< .001	mg/l			WG732383	07/19/14 12:58
Cyclohexane	< .001	mg/l			WG732383	07/19/14 12:58
Dichlorodifluoromethane	< .005	mg/l			WG732383	07/19/14 12:58
Ethylbenzene	< .001	mg/l			WG732383	07/19/14 12:58
Isopropylbenzene	< .001	mg/l			WG732383	07/19/14 12:58
Methyl Acetate	< .02	mg/l			WG732383	07/19/14 12:58
Methyl Cyclohexane	< .001	mg/l			WG732383	07/19/14 12:58
Methyl tert-butyl ether	< .001	mg/l			WG732383	07/19/14 12:58
Methylene Chloride	< .005	mg/l			WG732383	07/19/14 12:58
Styrene	< .001	mg/l			WG732383	07/19/14 12:58
Tetrachloroethene	< .001	mg/l			WG732383	07/19/14 12:58
Toluene	< .005	mg/l			WG732383	07/19/14 12:58
trans-1,2-Dichloroethene	< .001	mg/l			WG732383	07/19/14 12:58
trans-1,3-Dichloropropene	< .001	mg/l			WG732383	07/19/14 12:58
Trichloroethene	< .001	mg/l			WG732383	07/19/14 12:58
Trichlorofluoromethane	< .005	mg/l			WG732383	07/19/14 12:58
Vinyl chloride	< .001	mg/l			WG732383	07/19/14 12:58
Xylenes, Total	< .003	mg/l			WG732383	07/19/14 12:58
4-Bromofluorobenzene		% Rec.	106.0	71-126	WG732383	07/19/14 12:58
Dibromofluoromethane		% Rec.	100.0	78.3-121	WG732383	07/19/14 12:58
Toluene-d8		% Rec.	103.0	88.5-111	WG732383	07/19/14 12:58
a, a, a-Trifluorotoluene		% Rec.	99.70	85-114	WG732383	07/19/14 12:58
Mercury	< .0002	mg/l			WG732688	07/22/14 14:06
1,2,4,5-Tetrachlorobenzene	< .01	mg/l			WG733134	07/22/14 17:11
2,4,5-Trichlorophenol	< .01	mg/l			WG733134	07/22/14 17:11
2,4,6-Trichlorophenol	< .01	mg/l			WG733134	07/22/14 17:11
2,4-Dichlorophenol	< .01	mg/l			WG733134	07/22/14 17:11
2,4-Dimethylphenol	< .01	mg/l			WG733134	07/22/14 17:11
2,4-Dinitrophenol	< .01	mg/l			WG733134	07/22/14 17:11
2,4-Dinitrotoluene	< .01	mg/l			WG733134	07/22/14 17:11

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November 04, 2014

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
2,6-Dinitrotoluene	< .01	mg/l			WG733134	07/22/14 17:11
2-Chloronaphthalene	< .001	mg/l			WG733134	07/22/14 17:11
2-Chlorophenol	< .01	mg/l			WG733134	07/22/14 17:11
2-Methylnaphthalene	< .001	mg/l			WG733134	07/22/14 17:11
2-Methylphenol	< .01	mg/l			WG733134	07/22/14 17:11
2-Nitroaniline	< .01	mg/l			WG733134	07/22/14 17:11
2-Nitrophenol	< .01	mg/l			WG733134	07/22/14 17:11
3,4-Methyl Phenol	< .01	mg/l			WG733134	07/22/14 17:11
3,3-Dichlorobenzidine	< .01	mg/l			WG733134	07/22/14 17:11
3-Nitroaniline	< .01	mg/l			WG733134	07/22/14 17:11
4,6-Dinitro-2-methylphenol	< .01	mg/l			WG733134	07/22/14 17:11
4-Bromophenyl-phenylether	< .01	mg/l			WG733134	07/22/14 17:11
4-Chloro-3-methylphenol	< .01	mg/l			WG733134	07/22/14 17:11
4-Chloroaniline	< .01	mg/l			WG733134	07/22/14 17:11
4-Chlorophenyl-phenylether	< .01	mg/l			WG733134	07/22/14 17:11
4-Nitroaniline	< .01	mg/l			WG733134	07/22/14 17:11
4-Nitrophenol	< .01	mg/l			WG733134	07/22/14 17:11
Acenaphthene	< .001	mg/l			WG733134	07/22/14 17:11
Acenaphthylene	< .001	mg/l			WG733134	07/22/14 17:11
Acetophenone	< .01	mg/l			WG733134	07/22/14 17:11
Anthracene	< .001	mg/l			WG733134	07/22/14 17:11
Atrazine	< .01	mg/l			WG733134	07/22/14 17:11
Benzaldehyde	< .01	mg/l			WG733134	07/22/14 17:11
Benzo(a)anthracene	< .001	mg/l			WG733134	07/22/14 17:11
Benzo(a)pyrene	< .001	mg/l			WG733134	07/22/14 17:11
Benzo(b)fluoranthene	< .001	mg/l			WG733134	07/22/14 17:11
Benzo(g,h,i)perylene	< .001	mg/l			WG733134	07/22/14 17:11
Benzo(k)fluoranthene	< .001	mg/l			WG733134	07/22/14 17:11
Benzylbutyl phthalate	< .003	mg/l			WG733134	07/22/14 17:11
Biphenyl	< .01	mg/l			WG733134	07/22/14 17:11
Bis(2-chloroethoxy)methane	< .01	mg/l			WG733134	07/22/14 17:11
Bis(2-chloroethyl)ether	< .01	mg/l			WG733134	07/22/14 17:11
Bis(2-chloroisopropyl)ether	< .01	mg/l			WG733134	07/22/14 17:11
Bis(2-ethylhexyl)phthalate	< .003	mg/l			WG733134	07/22/14 17:11
Caprolactam	< .01	mg/l			WG733134	07/22/14 17:11
Carbazole	< .01	mg/l			WG733134	07/22/14 17:11
Chrysene	< .001	mg/l			WG733134	07/22/14 17:11
Di-n-butyl phthalate	< .003	mg/l			WG733134	07/22/14 17:11
Di-n-octyl phthalate	< .003	mg/l			WG733134	07/22/14 17:11
Dibenz(a,h)anthracene	< .001	mg/l			WG733134	07/22/14 17:11
Dibenzofuran	< .01	mg/l			WG733134	07/22/14 17:11
Diethyl phthalate	< .003	mg/l			WG733134	07/22/14 17:11
Dimethyl phthalate	< .003	mg/l			WG733134	07/22/14 17:11
Fluoranthene	< .001	mg/l			WG733134	07/22/14 17:11
Fluorene	< .001	mg/l			WG733134	07/22/14 17:11
Hexachloro-1,3-butadiene	< .01	mg/l			WG733134	07/22/14 17:11
Hexachlorobenzene	< .001	mg/l			WG733134	07/22/14 17:11
Hexachlorocyclopentadiene	< .01	mg/l			WG733134	07/22/14 17:11
Hexachloroethane	< .01	mg/l			WG733134	07/22/14 17:11
Indeno(1,2,3-cd)pyrene	< .001	mg/l			WG733134	07/22/14 17:11
Isophorone	< .01	mg/l			WG733134	07/22/14 17:11
n-Nitrosodi-n-propylamine	< .01	mg/l			WG733134	07/22/14 17:11
n-Nitrosodiphenylamine	< .01	mg/l			WG733134	07/22/14 17:11
Naphthalene	< .001	mg/l			WG733134	07/22/14 17:11
Nitrobenzene	< .01	mg/l			WG733134	07/22/14 17:11
Pentachlorophenol	< .001	mg/l			WG733134	07/22/14 17:11
Phenanthrene	< .001	mg/l			WG733134	07/22/14 17:11
Phenol	< .01	mg/l			WG733134	07/22/14 17:11
Pyrene	< .001	mg/l			WG733134	07/22/14 17:11

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Est. 1970

November 04, 2014

Analyte	Result	Laboratory Blank		Limit	Batch	Date Analyzed
		Units	% Rec			
2,4,6-Tribromophenol		% Rec.	91.60	11.2-130		07/22/14 17:11
2-Fluorobiphenyl		% Rec.	70.30	29.5-131		07/22/14 17:11
2-Fluorophenol		% Rec.	56.50	10-77.9		07/22/14 17:11
Nitrobenzene-d5		% Rec.	72.00	21.8-123		07/22/14 17:11
Phenol-d5		% Rec.	40.00	5-70.1		07/22/14 17:11
p-Terphenyl-d14		% Rec.	73.70	29.3-137		07/22/14 17:11
1,1,1-Trichloroethane	< .001	mg/l			WG733223	07/22/14 22:33
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG733223	07/22/14 22:33
1,1,2-Trichloroethane	< .001	mg/l			WG733223	07/22/14 22:33
1,1,2-Trichlorotrifluoroethane	< .001	mg/l			WG733223	07/22/14 22:33
1,1-Dichloroethane	< .001	mg/l			WG733223	07/22/14 22:33
1,1-Dichloroethene	< .001	mg/l			WG733223	07/22/14 22:33
1,2,3-Trichlorobenzene	< .001	mg/l			WG733223	07/22/14 22:33
1,2,4-Trichlorobenzene	< .001	mg/l			WG733223	07/22/14 22:33
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG733223	07/22/14 22:33
1,2-Dibromoethane	< .001	mg/l			WG733223	07/22/14 22:33
1,2-Dichlorobenzene	< .001	mg/l			WG733223	07/22/14 22:33
1,2-Dichloroethane	< .001	mg/l			WG733223	07/22/14 22:33
1,2-Dichloropropane	< .001	mg/l			WG733223	07/22/14 22:33
1,3-Dichlorobenzene	< .001	mg/l			WG733223	07/22/14 22:33
1,4-Dichlorobenzene	< .001	mg/l			WG733223	07/22/14 22:33
2-Butanone (MEK)	< .01	mg/l			WG733223	07/22/14 22:33
2-Hexanone	< .01	mg/l			WG733223	07/22/14 22:33
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG733223	07/22/14 22:33
Acetone	< .05	mg/l			WG733223	07/22/14 22:33
Benzene	< .001	mg/l			WG733223	07/22/14 22:33
Bromochloromethane	< .001	mg/l			WG733223	07/22/14 22:33
Bromodichloromethane	< .001	mg/l			WG733223	07/22/14 22:33
Bromoform	< .001	mg/l			WG733223	07/22/14 22:33
Bromomethane	< .005	mg/l			WG733223	07/22/14 22:33
Carbon disulfide	< .001	mg/l			WG733223	07/22/14 22:33
Carbon tetrachloride	< .001	mg/l			WG733223	07/22/14 22:33
Chlorobenzene	< .001	mg/l			WG733223	07/22/14 22:33
Chlorodibromomethane	< .001	mg/l			WG733223	07/22/14 22:33
Chloroethane	< .005	mg/l			WG733223	07/22/14 22:33
Chloroform	< .005	mg/l			WG733223	07/22/14 22:33
Chloromethane	< .0025	mg/l			WG733223	07/22/14 22:33
cis-1,2-Dichloroethene	< .001	mg/l			WG733223	07/22/14 22:33
cis-1,3-Dichloropropene	< .001	mg/l			WG733223	07/22/14 22:33
Cyclohexane	< .001	mg/l			WG733223	07/22/14 22:33
Dichlorodifluoromethane	< .005	mg/l			WG733223	07/22/14 22:33
Ethylbenzene	< .001	mg/l			WG733223	07/22/14 22:33
Isopropylbenzene	< .001	mg/l			WG733223	07/22/14 22:33
Methyl Acetate	< .02	mg/l			WG733223	07/22/14 22:33
Methyl Cyclohexane	< .001	mg/l			WG733223	07/22/14 22:33
Methyl tert-butyl ether	< .001	mg/l			WG733223	07/22/14 22:33
Methylene Chloride	< .005	mg/l			WG733223	07/22/14 22:33
Styrene	< .001	mg/l			WG733223	07/22/14 22:33
Tetrachloroethene	< .001	mg/l			WG733223	07/22/14 22:33
Toluene	< .005	mg/l			WG733223	07/22/14 22:33
trans-1,2-Dichloroethene	< .001	mg/l			WG733223	07/22/14 22:33
trans-1,3-Dichloropropene	< .001	mg/l			WG733223	07/22/14 22:33
Trichloroethene	< .001	mg/l			WG733223	07/22/14 22:33
Trichlorofluoromethane	< .005	mg/l			WG733223	07/22/14 22:33
Vinyl chloride	< .001	mg/l			WG733223	07/22/14 22:33
Xylenes, Total	< .003	mg/l			WG733223	07/22/14 22:33
4-Bromofluorobenzene		% Rec.	104.0	71-126		WG733223 07/22/14 22:33
Dibromofluoromethane		% Rec.	92.70	78.3-121		WG733223 07/22/14 22:33
Toluene-d8		% Rec.	100.0	88.5-111		WG733223 07/22/14 22:33

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Analyte	Units	Duplicate		RPD	Limit	Ref Samp	Batch
		Result	Duplicate				
a,a,a-Trifluorotoluene		% Rec.	102.0		85-114		07/22/14 22:33

Analyte	Units	Duplicate		RPD	Limit	Ref Samp	Batch
		Result	Duplicate				
Mercury	mg/l	0.0	0.0000209	15.0	20	L710397-02	WG732212
Mercury	mg/l	0.0	0.00000746	70.0*	20	L710397-03	WG732585
Mercury	mg/l	0.0	0.00000631	73.0*	20	L710351-04	WG732688

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Antimony	mg/l	.05	0.0497	99.0	85-115	WG732174
Arsenic	mg/l	.05	0.0480	96.0	85-115	WG732174
Lead	mg/l	.05	0.0499	100.	85-115	WG732174
Thallium	mg/l	.05	0.0504	101.	85-115	WG732174
Mercury	mg/l	.003	0.00285	95.0	85-115	WG732212
Mercury	mg/l	.003	0.00289	96.0	85-115	WG732585
Antimony	mg/l	.05	0.0499	100.	85-115	WG732453
Arsenic	mg/l	.05	0.0502	100.	85-115	WG732453
Lead	mg/l	.05	0.0503	101.	85-115	WG732453
Thallium	mg/l	.05	0.0507	101.	85-115	WG732453
1,2,4,5-Tetrachlorobenzene	mg/l	.025	0.0148	59.3	30.7-102	WG732340
2,4,5-Trichlorophenol	mg/l	.025	0.0171	68.2	34.9-112	WG732340
2,4,6-Trichlorophenol	mg/l	.025	0.0165	66.1	29.8-107	WG732340
2,4-Dichlorophenol	mg/l	.025	0.0168	67.0	31.4-103	WG732340
2,4-Dimethylphenol	mg/l	.025	0.0144	57.5	31.9-107	WG732340
2,4-Dinitrophenol	mg/l	.025	0.0120	48.1	24.2-128	WG732340
2,4-Dinitrotoluene	mg/l	.025	0.0183	73.1	31.2-105	WG732340
2,6-Dinitrotoluene	mg/l	.025	0.0171	68.6	30.6-106	WG732340
2-Chloronaphthalene	mg/l	.025	0.0171	68.6	33.6-105	WG732340
2-Chlorophenol	mg/l	.025	0.0172	68.6	26.2-91.5	WG732340
2-Methylnaphthalene	mg/l	.025	0.0174	69.4	33.8-98.6	WG732340
2-Methylphenol	mg/l	.025	0.0148	59.4	26.4-86.9	WG732340
2-Nitroaniline	mg/l	.025	0.0195	78.0	35.6-113	WG732340
2-Nitrophenol	mg/l	.025	0.0178	71.4	25.9-106	WG732340
3,4-Methyl Phenol	mg/l	.025	0.0169	67.5	27.9-92	WG732340
3,3-Dichlorobenzidine	mg/l	.025	0.0186	74.6	27.2-142	WG732340
3-Nitroaniline	mg/l	.025	0.0197	78.8	33.6-103	WG732340
4,6-Dinitro-2-methylphenol	mg/l	.025	0.0154	61.5	18.4-148	WG732340
4-Bromophenyl-phenylether	mg/l	.025	0.0175	70.1	40.7-116	WG732340
4-Chloro-3-methylphenol	mg/l	.025	0.0158	63.3	35.7-100	WG732340
4-Chloroaniline	mg/l	.025	0.0152	60.7	32-104	WG732340
4-Chlorophenyl-phenylether	mg/l	.025	0.0179	71.7	39-113	WG732340
4-Nitroaniline	mg/l	.025	0.0248	99.3	35.4-124	WG732340
4-Nitrophenol	mg/l	.025	0.00874	35.0	10-52.7	WG732340
Acenaphthene	mg/l	.025	0.0184	73.5	38.7-109	WG732340

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Quality Assurance Report  
 Level II

L710351

12065 Lebanon Rd.  
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 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

November 04, 2014

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Acenaphthylene	mg/l	.025	0.0176	70.2	36-106	WG732340
Acetophenone	mg/l	.025	0.0171	68.3	41.6-104	WG732340
Anthracene	mg/l	.025	0.0185	74.1	43.6-113	WG732340
Atrazine	mg/l	.025	0.0202	80.7	50-123	WG732340
Benzaldehyde	mg/l	.025	0.0223	89.2	11.7-132.2	WG732340
Benzo(a)anthracene	mg/l	.025	0.0178	71.1	51.2-112	WG732340
Benzo(a)pyrene	mg/l	.025	0.0164	65.5	45.6-106	WG732340
Benzo(b)fluoranthene	mg/l	.025	0.0190	76.2	47.6-111	WG732340
Benzo(g,h,i)perylene	mg/l	.025	0.0202	80.9	45.2-117	WG732340
Benzo(k)fluoranthene	mg/l	.025	0.0174	69.6	49.4-114	WG732340
Benzylbutyl phthalate	mg/l	.025	0.0179	71.5	31.8-123	WG732340
Biphenyl	mg/l	.025	0.0178	71.3	38-103	WG732340
Bis(2-chloroethoxy)methane	mg/l	.025	0.0154	61.5	37.2-111	WG732340
Bis(2-chloroethyl) ether	mg/l	.025	0.0195	77.9	22.6-108	WG732340
Bis(2-chloroisopropyl) ether	mg/l	.025	0.0206	82.3	32.9-100	WG732340
Bis(2-ethylhexyl)phthalate	mg/l	.025	0.0200	80.2	36.9-134	WG732340
Caprolactam	mg/l	.025	0.00560	22.4	10-40.4	WG732340
Carbazole	mg/l	.025	0.0210	83.9	49-110	WG732340
Chrysene	mg/l	.025	0.0185	74.1	54.6-120	WG732340
Di-n-butyl phthalate	mg/l	.025	0.0190	76.1	41.8-120	WG732340
Di-n-octyl phthalate	mg/l	.025	0.0176	70.5	39.7-112	WG732340
Dibenz(a,h)anthracene	mg/l	.025	0.0204	81.6	42.8-118	WG732340
Dibenzofuran	mg/l	.025	0.0190	76.0	42.4-105	WG732340
Diethyl phthalate	mg/l	.025	0.0183	73.1	36.5-129	WG732340
Dimethyl phthalate	mg/l	.025	0.0179	71.7	35.3-128	WG732340
Fluoranthene	mg/l	.025	0.0189	75.5	45.9-115	WG732340
Fluorene	mg/l	.025	0.0190	76.2	41-112	WG732340
Hexachloro-1,3-butadiene	mg/l	.025	0.0119	47.4	16.1-104	WG732340
Hexachlorobenzene	mg/l	.025	0.0183	73.2	38.5-116	WG732340
Hexachlorocyclopentadiene	mg/l	.025	0.00768	30.7	10-121	WG732340
Hexachloroethane	mg/l	.025	0.0137	54.8	16.5-89.8	WG732340
Indeno(1,2,3-cd)pyrene	mg/l	.025	0.0202	80.9	45-116	WG732340
Isophorone	mg/l	.025	0.0157	63.0	35.4-112	WG732340
n-Nitrosodi-n-propylamine	mg/l	.025	0.0157	63.0	33.2-106	WG732340
n-Nitrosodiphenylamine	mg/l	.025	0.0183	73.1	44.4-113	WG732340
Naphthalene	mg/l	.025	0.0156	62.4	32.2-101	WG732340
Nitrobenzene	mg/l	.025	0.0148	59.1	31.4-106	WG732340
Pentachlorophenol	mg/l	.025	0.0135	54.2	10-97.4	WG732340
Phenanthrene	mg/l	.025	0.0184	73.7	46.4-113	WG732340
Phenol	mg/l	.025	0.00870	34.8	10-57.9	WG732340
Pyrene	mg/l	.025	0.0175	69.9	46.3-117	WG732340
2,4,6-Tribromophenol				85.50	11.2-130	WG732340
2-Fluorobiphenyl				70.50	29.5-131	WG732340
2-Fluorophenol				44.10	10-77.9	WG732340
Nitrobenzene-d5				49.10	21.8-123	WG732340
Phenol-d5				33.00	5-70.1	WG732340
p-Terphenyl-d14				61.00	29.3-137	WG732340
Aluminum	mg/l	1	1.11	111.	80-120	WG732882
Barium	mg/l	1	1.07	107.	80-120	WG732882
Beryllium	mg/l	1	1.09	109.	80-120	WG732882
Cadmium	mg/l	1	1.15	115.	80-120	WG732882
Calcium	mg/l	10	10.9	109.	80-120	WG732882
Chromium	mg/l	1	1.11	111.	80-120	WG732882
Cobalt	mg/l	1	1.09	109.	80-120	WG732882
Copper	mg/l	1	1.09	109.	80-120	WG732882
Iron	mg/l	1	1.13	113.	80-120	WG732882
Magnesium	mg/l	10	11.7	117.	80-120	WG732882

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Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Manganese	mg/l	1	1.10	110.	80-120	WG732882
Nickel	mg/l	1	1.07	107.	80-120	WG732882
Potassium	mg/l	10	10.7	107.	80-120	WG732882
Selenium	mg/l	1	1.10	110.	80-120	WG732882
Silver	mg/l	1	1.12	112.	80-120	WG732882
Sodium	mg/l	10	10.9	109.	80-120	WG732882
Vanadium	mg/l	1	1.13	113.	80-120	WG732882
Zinc	mg/l	1	1.10	110.	80-120	WG732882
1,1,1-Trichloroethane	mg/l	.025	0.0268	107.	73.2-123	WG732383
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0263	105.	70.7-122	WG732383
1,1,2-Trichloroethane	mg/l	.025	0.0253	101.	77.7-118	WG732383
1,1,2-Trichlorotrifluoroethane	mg/l	.025	0.0251	100.	67.2-143	WG732383
1,1-Dichloroethane	mg/l	.025	0.0278	111.	70.7-126	WG732383
1,1-Dichloroethene	mg/l	.025	0.0244	97.5	67.8-129	WG732383
1,2,3-Trichlorobenzene	mg/l	.025	0.0221	88.3	64.9-135	WG732383
1,2,4-Trichlorobenzene	mg/l	.025	0.0228	91.1	69.7-136	WG732383
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0212	84.9	65.4-128	WG732383
1,2-Dibromoethane	mg/l	.025	0.0235	93.9	76.6-121	WG732383
1,2-Dichlorobenzene	mg/l	.025	0.0243	97.3	78.4-117	WG732383
1,2-Dichloroethane	mg/l	.025	0.0254	101.	68.8-124	WG732383
1,2-Dichloropropane	mg/l	.025	0.0264	106.	76.5-119	WG732383
1,3-Dichlorobenzene	mg/l	.025	0.0273	109.	70.8-128	WG732383
1,4-Dichlorobenzene	mg/l	.025	0.0240	96.1	78.8-115	WG732383
2-Butanone (MEK)	mg/l	.125	0.125	100.	55-149	WG732383
2-Hexanone	mg/l	.125	0.120	95.9	65.6-144	WG732383
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.127	102.	70.5-133	WG732383
Acetone	mg/l	.125	0.125	100.	35.6-163	WG732383
Benzene	mg/l	.025	0.0264	106.	74.8-121	WG732383
Bromochloromethane	mg/l	.025	0.0250	99.9	77.6-119	WG732383
Bromodichloromethane	mg/l	.025	0.0251	100.	75.1-116	WG732383
Bromoform	mg/l	.025	0.0237	94.9	67.5-130	WG732383
Bromomethane	mg/l	.025	0.0288	115.	49.9-162	WG732383
Carbon disulfide	mg/l	.025	0.0232	92.9	64.6-140	WG732383
Carbon tetrachloride	mg/l	.025	0.0253	101.	70.2-123	WG732383
Chlorobenzene	mg/l	.025	0.0254	101.	78.1-119	WG732383
Chlorodibromomethane	mg/l	.025	0.0233	93.3	74-121	WG732383
Chloroethane	mg/l	.025	0.0287	115.	61.7-135	WG732383
Chloroform	mg/l	.025	0.0244	97.7	76-121	WG732383
cis-1,2-Dichloroethene	mg/l	.025	0.0274	110.	76-119	WG732383
cis-1,3-Dichloropropene	mg/l	.025	0.0251	100.	78.2-120	WG732383
Dichlorodifluoromethane	mg/l	.025	0.0278	111.	54.8-135	WG732383
Ethylbenzene	mg/l	.025	0.0255	102.	78.8-122	WG732383
Isopropylbenzene	mg/l	.025	0.0270	108.	78.6-132	WG732383
Methyl tert-butyl ether	mg/l	.025	0.0266	107.	71.2-126	WG732383
Methylene Chloride	mg/l	.025	0.0249	99.5	70.3-120	WG732383
Styrene	mg/l	.025	0.0272	109.	80.4-126	WG732383
Tetrachloroethene	mg/l	.025	0.0241	96.2	72.6-126	WG732383
Toluene	mg/l	.025	0.0254	102.	79.7-116	WG732383
trans-1,2-Dichloroethene	mg/l	.025	0.0267	107.	72.6-121	WG732383
trans-1,3-Dichloropropene	mg/l	.025	0.0247	98.8	74.3-123	WG732383
Trichloroethene	mg/l	.025	0.0258	103.	77.7-118	WG732383
Trichlorofluoromethane	mg/l	.025	0.0243	97.0	63.5-135	WG732383
Vinyl chloride	mg/l	.025	0.0270	108.	65.9-128	WG732383
Xylenes, Total	mg/l	.075	0.0782	104.	78.7-121	WG732383
4-Bromofluorobenzene				111.0	71-126	WG732383
Dibromofluoromethane				101.0	78.3-121	WG732383
Toluene-d8				104.0	88.5-111	WG732383

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Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
a, a, a-Trifluorotoluene				105.0	85-114	
Mercury	mg/l	.003	0.00285	95.0	85-115	WG732688
1,2,4,5-Tetrachlorobenzene	mg/l	.025	0.0180	72.2	30.7-102	WG733134
2,4,5-Trichlorophenol	mg/l	.025	0.0199	79.5	34.9-112	WG733134
2,4,6-Trichlorophenol	mg/l	.025	0.0197	78.6	29.8-107	WG733134
2,4-Dichlorophenol	mg/l	.025	0.0187	75.0	31.4-103	WG733134
2,4-Dimethylphenol	mg/l	.025	0.0218	87.1	31.9-107	WG733134
2,4-Dinitrophenol	mg/l	.025	0.0153	61.0	24.2-128	WG733134
2,4-Dinitrotoluene	mg/l	.025	0.0227	90.8	31.2-105	WG733134
2,6-Dinitrotoluene	mg/l	.025	0.0226	90.5	30.6-106	WG733134
2-Chloronaphthalene	mg/l	.025	0.0192	77.0	33.6-105	WG733134
2-Chlorophenol	mg/l	.025	0.0173	69.3	26.2-91.5	WG733134
2-Methylnaphthalene	mg/l	.025	0.0182	72.8	33.8-98.6	WG733134
2-Methylphenol	mg/l	.025	0.0180	72.1	26.4-86.9	WG733134
2-Nitroaniline	mg/l	.025	0.0227	90.9	35.6-113	WG733134
2-Nitrophenol	mg/l	.025	0.0222	88.6	25.9-106	WG733134
3,4-Methyl Phenol	mg/l	.025	0.0188	75.3	27.9-92	WG733134
3,3-Dichlorobenzidine	mg/l	.025	0.0205	82.1	27.2-142	WG733134
3-Nitroaniline	mg/l	.025	0.0214	85.6	33.6-103	WG733134
4,6-Dinitro-2-methylphenol	mg/l	.025	0.0247	98.7	18.4-148	WG733134
4-Bromophenyl-phenylether	mg/l	.025	0.0206	82.3	40.7-116	WG733134
4-Chloro-3-methylphenol	mg/l	.025	0.0222	88.7	35.7-100	WG733134
4-Chloroaniline	mg/l	.025	0.0187	74.7	32-104	WG733134
4-Chlorophenyl-phenylether	mg/l	.025	0.0197	78.9	39-113	WG733134
4-Nitroaniline	mg/l	.025	0.0256	103.	35.4-124	WG733134
4-Nitrophenol	mg/l	.025	0.0108	43.3	10-52.7	WG733134
Acenaphthene	mg/l	.025	0.0190	75.8	38.7-109	WG733134
Acenaphthylene	mg/l	.025	0.0183	73.3	36-106	WG733134
Acetophenone	mg/l	.025	0.0190	76.0	41.6-104	WG733134
Anthracene	mg/l	.025	0.0200	80.0	43.6-113	WG733134
Atrazine	mg/l	.025	0.0213	85.3	50-123	WG733134
Benzaldehyde	mg/l	.025	0.0252	101.	11.7-132.2	WG733134
Benzo(a)anthracene	mg/l	.025	0.0210	84.0	51.2-112	WG733134
Benzo(a)pyrene	mg/l	.025	0.0189	75.4	45.6-106	WG733134
Benzo(b)fluoranthene	mg/l	.025	0.0197	78.9	47.6-111	WG733134
Benzo(g,h,i)perylene	mg/l	.025	0.0221	88.4	45.2-117	WG733134
Benzo(k)fluoranthene	mg/l	.025	0.0205	82.1	49.4-114	WG733134
Benzylbutyl phthalate	mg/l	.025	0.0230	92.0	31.8-123	WG733134
Biphenyl	mg/l	.025	0.0193	77.1	38-103	WG733134
Bis(2-chloroethoxy)methane	mg/l	.025	0.0198	79.3	37.2-111	WG733134
Bis(2-chloroethyl)ether	mg/l	.025	0.0177	70.7	22.6-108	WG733134
Bis(2-chloroisopropyl)ether	mg/l	.025	0.0188	75.3	32.9-100	WG733134
Bis(2-ethylhexyl)phthalate	mg/l	.025	0.0241	96.4	36.9-134	WG733134
Caprolactam	mg/l	.025	0.00596	23.8	10-40.4	WG733134
Carbazole	mg/l	.025	0.0214	85.5	49-110	WG733134
Chrysene	mg/l	.025	0.0214	85.8	54.6-120	WG733134
Di-n-butyl phthalate	mg/l	.025	0.0217	86.7	41.8-120	WG733134
Di-n-octyl phthalate	mg/l	.025	0.0247	98.7	39.7-112	WG733134
Dibenz(a,h)anthracene	mg/l	.025	0.0217	86.8	42.8-118	WG733134
Dibenzofuran	mg/l	.025	0.0195	77.8	42.4-105	WG733134
Diethyl phthalate	mg/l	.025	0.0201	80.4	36.5-129	WG733134
Dimethyl phthalate	mg/l	.025	0.0202	80.9	35.3-128	WG733134
Fluoranthene	mg/l	.025	0.0198	79.1	45.9-115	WG733134
Fluorene	mg/l	.025	0.0207	83.0	41-112	WG733134
Hexachloro-1,3-butadiene	mg/l	.025	0.0160	64.1	16.1-104	WG733134
Hexachlorobenzene	mg/l	.025	0.0206	82.5	38.5-116	WG733134
Hexachlorocyclopentadiene	mg/l	.025	0.00675	27.0	10-121	WG733134

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Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Hexachloroethane	mg/l	.025	0.0172	68.7	16.5-89.8	WG733134
Indeno (1, 2, 3-cd) pyrene	mg/l	.025	0.0219	87.7	45-116	WG733134
Isophorone	mg/l	.025	0.0230	92.0	35.4-112	WG733134
n-Nitrosodi-n-propylamine	mg/l	.025	0.0219	87.4	33.2-106	WG733134
n-Nitrosodiphenylamine	mg/l	.025	0.0203	81.1	44.4-113	WG733134
Naphthalene	mg/l	.025	0.0171	68.4	32.2-101	WG733134
Nitrobenzene	mg/l	.025	0.0204	81.4	31.4-106	WG733134
Pentachlorophenol	mg/l	.025	0.0195	78.2	10-97.4	WG733134
Phenanthrene	mg/l	.025	0.0201	80.5	46.4-113	WG733134
Phenol	mg/l	.025	0.0105	42.1	10-57.9	WG733134
Pyrene	mg/l	.025	0.0217	86.8	46.3-117	WG733134
2, 4, 6-Tribromophenol				99.00	11.2-130	WG733134
2-Fluorobiphenyl				76.20	29.5-131	WG733134
2-Fluorophenol				51.90	10-77.9	WG733134
Nitrobenzene-d5				87.70	21.8-123	WG733134
Phenol-d5				41.00	5-70.1	WG733134
p-Terphenyl-d14				76.20	29.3-137	WG733134
1, 1, 1-Trichloroethane	mg/l	.025	0.0225	89.8	73.2-123	WG733223
1, 1, 2-Tetrachloroethane	mg/l	.025	0.0237	94.8	70.7-122	WG733223
1, 1, 2-Trichloroethane	mg/l	.025	0.0245	98.0	77.7-118	WG733223
1, 1, 2-Trichlorotrifluoroethane	mg/l	.025	0.0212	84.9	67.2-143	WG733223
1, 1-Dichloroethane	mg/l	.025	0.0241	96.5	70.7-126	WG733223
1, 1-Dichloroethene	mg/l	.025	0.0205	82.1	67.8-129	WG733223
1, 2, 3-Trichlorobenzene	mg/l	.025	0.0208	83.3	64.9-135	WG733223
1, 2, 4-Trichlorobenzene	mg/l	.025	0.0230	92.1	69.7-136	WG733223
1, 2-Dibromo-3-Chloropropane	mg/l	.025	0.0195	77.9	65.4-128	WG733223
1, 2-Dibromoethane	mg/l	.025	0.0232	93.0	76.6-121	WG733223
1, 2-Dichlorobenzene	mg/l	.025	0.0237	94.7	78.4-117	WG733223
1, 2-Dichloroethane	mg/l	.025	0.0227	90.7	68.8-124	WG733223
1, 2-Dichloropropane	mg/l	.025	0.0252	101.	76.5-119	WG733223
1, 3-Dichlorobenzene	mg/l	.025	0.0246	98.4	70.8-128	WG733223
1, 4-Dichlorobenzene	mg/l	.025	0.0236	94.4	78.8-115	WG733223
2-Butanone (MEK)	mg/l	.125	0.121	97.0	55-149	WG733223
2-Hexanone	mg/l	.125	0.121	96.4	65.6-144	WG733223
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.121	97.0	70.5-133	WG733223
Acetone	mg/l	.125	0.113	90.4	35.6-163	WG733223
Benzene	mg/l	.025	0.0243	97.2	74.8-121	WG733223
Bromochloromethane	mg/l	.025	0.0227	90.7	77.6-119	WG733223
Bromodichloromethane	mg/l	.025	0.0225	89.9	75.1-116	WG733223
Bromoform	mg/l	.025	0.0210	84.1	67.5-130	WG733223
Bromomethane	mg/l	.025	0.0219	87.5	49.9-162	WG733223
Carbon disulfide	mg/l	.025	0.0187	74.7	64.6-140	WG733223
Carbon tetrachloride	mg/l	.025	0.0216	86.6	70.2-123	WG733223
Chlorobenzene	mg/l	.025	0.0243	97.1	78.1-119	WG733223
Chlorodibromomethane	mg/l	.025	0.0212	84.8	74-121	WG733223
Chloroethane	mg/l	.025	0.0231	92.2	61.7-135	WG733223
Chloroform	mg/l	.025	0.0216	86.5	76-121	WG733223
Chloromethane	mg/l	.025	0.0254	102.	61.5-129	WG733223
cis-1, 2-Dichloroethene	mg/l	.025	0.0248	99.1	76-119	WG733223
cis-1, 3-Dichloropropene	mg/l	.025	0.0243	97.2	78.2-120	WG733223
Dichlorodifluoromethane	mg/l	.025	0.0251	100.	54.8-135	WG733223
Ethylbenzene	mg/l	.025	0.0244	97.4	78.8-122	WG733223
Isopropylbenzene	mg/l	.025	0.0249	99.5	78.6-132	WG733223
Methyl tert-butyl ether	mg/l	.025	0.0228	91.4	71.2-126	WG733223
Methylene Chloride	mg/l	.025	0.0217	86.8	70.3-120	WG733223
Styrene	mg/l	.025	0.0252	101.	80.4-126	WG733223
Tetrachloroethene	mg/l	.025	0.0244	97.6	72.6-126	WG733223

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Tax I.D. 62-0814289

Est. 1970

November 04, 2014

Analyte	Units	Laboratory Control Sample		% Rec	Limit	Batch
		Known Val	Result			
Toluene	mg/l	.025	0.0242	96.6	79.7-116	WG733223
trans-1,2-Dichloroethene	mg/l	.025	0.0236	94.6	72.6-121	WG733223
trans-1,3-Dichloropropene	mg/l	.025	0.0240	96.1	74.3-123	WG733223
Trichloroethene	mg/l	.025	0.0249	99.7	77.7-110	WG733223
Trichlorofluoromethane	mg/l	.025	0.0206	82.5	63.5-135	WG733223
Vinyl chloride	mg/l	.025	0.0236	94.3	65.9-128	WG733223
Xylenes, Total	mg/l	.075	0.0733	97.7	78.7-121	WG733223
4-Bromofluorobenzene				102.0	71-126	WG733223
Dibromofluoromethane				93.80	78.3-121	WG733223
Toluene-d8				101.0	88.5-111	WG733223
a,a,a-Trifluorotoluene				103.0	85-114	WG733223

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Antimony	mg/l	0.0497	0.0497	99.0	85-115	0.0	20	WG732174
Arsenic	mg/l	0.0481	0.0480	96.0	85-115	0.0	20	WG732174
Lead	mg/l	0.0497	0.0499	99.0	85-115	1.00	20	WG732174
Thallium	mg/l	0.0503	0.0504	100.	85-115	0.0	20	WG732174
Antimony	mg/l	0.0525	0.0499	105.	85-115	5.00	20	WG732453
Arsenic	mg/l	0.0509	0.0502	102.	85-115	1.00	20	WG732453
Lead	mg/l	0.0506	0.0503	101.	85-115	1.00	20	WG732453
Thallium	mg/l	0.0519	0.0507	104.	85-115	2.00	20	WG732453
1,2,4,5-Tetrachlorobenzene	mg/l	0.0159	0.0148	64.0	30.7-102	7.15	27.7	WG732340
2,4,5-Trichlorophenol	mg/l	0.0181	0.0171	72.0	34.9-112	6.15	23.9	WG732340
2,4,6-Trichlorophenol	mg/l	0.0168	0.0165	67.0	29.8-107	1.72	24.1	WG732340
2,4-Dichlorophenol	mg/l	0.0175	0.0168	70.0	31.4-103	4.04	24.9	WG732340
2,4-Dimethylphenol	mg/l	0.0157	0.0144	63.0	31.9-107	8.87	25.7	WG732340
2,4-Dinitrophenol	mg/l	0.0168	0.0120	67.0	24.2-120	33.0*	20.5	WG732340
2,4-Dinitrotoluene	mg/l	0.0204	0.0183	82.0	31.2-105	11.0	22	WG732340
2,6-Dinitrotoluene	mg/l	0.0200	0.0171	80.0	30.6-106	15.6	23.1	WG732340
2-Chloronaphthalene	mg/l	0.0186	0.0171	74.0	33.6-105	8.22	23	WG732340
2-Chlorophenol	mg/l	0.0181	0.0172	72.0	26.2-91.5	5.16	26.5	WG732340
2-Methylnaphthalene	mg/l	0.0182	0.0174	73.0	33.8-98.6	4.68	24.2	WG732340
2-Methylphenol	mg/l	0.0163	0.0148	65.0	26.4-86.9	9.46	26.5	WG732340
2-Nitroaniline	mg/l	0.0217	0.0195	87.0	35.6-113	10.7	20.9	WG732340
2-Nitrophenol	mg/l	0.0187	0.0178	75.0	25.9-106	4.47	26.9	WG732340
3,4-Methyl Phenol	mg/l	0.0177	0.0169	71.0	27.9-92	4.48	27	WG732340
3,3-Dichlorobenzidine	mg/l	0.0206	0.0186	82.0	27.2-142	9.74	22.3	WG732340
3-Nitroaniline	mg/l	0.0222	0.0197	89.0	33.6-103	11.8	21.8	WG732340
4,6-Dinitro-2-methylphenol	mg/l	0.0185	0.0154	74.0	18.4-148	18.5	24.4	WG732340
4-Bromophenyl-phenylether	mg/l	0.0188	0.0175	75.0	40.7-116	6.91	21	WG732340
4-Chloro-3-methylphenol	mg/l	0.0170	0.0158	68.0	35.7-100	7.16	22.9	WG732340
4-Chloroaniline	mg/l	0.0161	0.0152	64.0	32-104	5.68	26.4	WG732340
4-Chlorophenyl-phenylether	mg/l	0.0190	0.0179	76.0	39-113	5.81	20.9	WG732340
4-Nitroaniline	mg/l	0.0272	0.0248	109.	35.4-124	9.24	23.1	WG732340
4-Nitrophenol	mg/l	0.0135	0.00874	54*	10-52.7	42.5*	40	WG732340
Acenaphthene	mg/l	0.0196	0.0184	78.0	38.7-109	6.66	21.5	WG732340
Acenaphthylene	mg/l	0.0184	0.0176	74.0	36-106	4.93	21	WG732340
Acetophenone	mg/l	0.0178	0.0171	71.0	41.6-104	4.20	24.8	WG732340
Anthracene	mg/l	0.0202	0.0185	81.0	43.6-113	8.58	18.8	WG732340
Atrazine	mg/l	0.0229	0.0202	92.0	50-123	12.7	21.5	WG732340
Benzaldehyde	mg/l	0.0226	0.0223	90.0	11.7-132.2	1.51	25.2	WG732340
Benzo(a)anthracene	mg/l	0.0202	0.0178	81.0	51.2-112	12.6	20	WG732340
Benzo(a)pyrene	mg/l	0.0183	0.0164	73.0	45.6-106	10.8	20	WG732340

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Lab I.D. 62-0814289

Est. 1970

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Analyte	Units	Laboratory Control		Sample Duplicate	Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Benzo(b)fluoranthene	mg/l	0.0207	0.0190	83.0	47.6-111	8.19	20	WG732340
Benzo(g,h,i)perylene	mg/l	0.0221	0.0202	88.0	45.2-117	8.71	20	WG732340
Benzo(k)fluoranthene	mg/l	0.0201	0.0174	80.0	49.4-114	14.1	20	WG732340
Benzybutyl phthalate	mg/l	0.0199	0.0179	79.0	31.8-123	10.5	20.7	WG732340
Biphenyl	mg/l	0.0193	0.0178	77.0	38-103	7.92	20.1	WG732340
Bis(2-chloroethoxy)methane	mg/l	0.0160	0.0154	64.0	37.2-111	4.18	24.1	WG732340
Bis(2-chloroethyl)ether	mg/l	0.0198	0.0195	79.0	22.6-108	1.75	27.9	WG732340
Bis(2-chloroisopropyl)ether	mg/l	0.0200	0.0206	80.0	32.9-100	2.93	25.1	WG732340
Bis(2-ethylhexyl)phthalate	mg/l	0.0214	0.0200	86.0	36.9-134	6.74	23.6	WG732340
Caprolactam	mg/l	0.00615	0.00560	24.0	10-40.4	9.35	40	WG732340
Carbazole	mg/l	0.0225	0.0210	90.0	49-110	6.93	20	WG732340
Chrysene	mg/l	0.0202	0.0185	81.0	54.6-120	8.66	20	WG732340
Di-n-butyl phthalate	mg/l	0.0213	0.0190	85.0	41.8-120	11.4	20.2	WG732340
Di-n-octyl phthalate	mg/l	0.0198	0.0176	79.0	39.7-112	11.6	21.1	WG732340
Dibenz(a,h)anthracene	mg/l	0.0220	0.0204	88.0	42.8-118	7.44	20	WG732340
Dibenzofuran	mg/l	0.0201	0.0190	80.0	42.4-105	5.73	20	WG732340
Diethyl phthalate	mg/l	0.0209	0.0183	84.0	36.5-129	13.6	20	WG732340
Dimethyl phthalate	mg/l	0.0197	0.0179	79.0	35.3-128	9.30	20.8	WG732340
Fluoranthene	mg/l	0.0211	0.0189	84.0	45.9-115	11.1	20	WG732340
Fluorene	mg/l	0.0209	0.0190	84.0	41-112	9.43	20.2	WG732340
Hexachloro-1,3-butadiene	mg/l	0.0132	0.0119	53.0	16.1-104	10.9	31.2	WG732340
Hexachlorobenzene	mg/l	0.0201	0.0183	80.0	38.5-116	9.13	20.1	WG732340
Hexachlorocyclopentadiene	mg/l	0.00843	0.00768	34.0	10-121	9.26	27.9	WG732340
Hexachloroethane	mg/l	0.0156	0.0137	62.0	16.5-89.8	12.7	30.7	WG732340
Indeno(1,2,3-cd)pyrene	mg/l	0.0223	0.0202	89.0	45-116	9.91	20	WG732340
Isophorone	mg/l	0.0168	0.0157	67.0	35.4-112	6.44	21.5	WG732340
n-Nitrosodi-n-propylamine	mg/l	0.0170	0.0157	68.0	33.2-106	7.70	23.7	WG732340
n-Nitrosodiphenylamine	mg/l	0.0195	0.0183	78.0	44.4-113	6.38	20	WG732340
Naphthalene	mg/l	0.0168	0.0156	67.0	32.2-101	7.61	23.8	WG732340
Nitrobenzene	mg/l	0.0146	0.0148	58.0	31.4-106	1.47	25.7	WG732340
Pentachlorophenol	mg/l	0.0159	0.0135	64.0	10-97.4	16.0	35.1	WG732340
Phenanthrene	mg/l	0.0209	0.0184	83.0	46.4-113	12.4	20	WG732340
Phenol	mg/l	0.00999	0.00870	40.0	10-57.9	13.8	35	WG732340
Pyrene	mg/l	0.0195	0.0175	78.0	46.3-117	10.8	20	WG732340
2,4,6-Tribromophenol				87.70	11.2-130			WG732340
2-Fluorobiphenyl				71.80	29.5-131			WG732340
2-Fluorophenol				48.50	10-77.9			WG732340
Nitrobenzene-d5				48.20	21.8-123			WG732340
Phenol-d5				37.60	5-70.1			WG732340
p-Terphenyl-d14				65.50	29.3-137			WG732340
Aluminum	mg/l	1.08	1.11	108.	80-120	3.00	20	WG732882
Barium	mg/l	1.03	1.07	103.	80-120	3.00	20	WG732882
Beryllium	mg/l	1.06	1.09	106.	80-120	3.00	20	WG732882
Cadmium	mg/l	1.10	1.15	110.	80-120	4.00	20	WG732882
Calcium	mg/l	10.6	10.9	106.	80-120	3.00	20	WG732882
Chromium	mg/l	1.08	1.11	108.	80-120	3.00	20	WG732882
Cobalt	mg/l	1.06	1.09	106.	80-120	3.00	20	WG732882
Copper	mg/l	1.06	1.09	106.	80-120	3.00	20	WG732882
Iron	mg/l	1.09	1.13	109.	80-120	3.00	20	WG732882
Magnesium	mg/l	11.4	11.7	114.	80-120	3.00	20	WG732882
Manganese	mg/l	1.07	1.10	107.	80-120	3.00	20	WG732882
Nickel	mg/l	1.03	1.07	103.	80-120	3.00	20	WG732882
Potassium	mg/l	10.4	10.7	104.	80-120	2.00	20	WG732882
Selenium	mg/l	1.06	1.10	106.	80-120	4.00	20	WG732882
Silver	mg/l	1.09	1.12	109.	80-120	3.00	20	WG732882
Sodium	mg/l	10.6	10.9	106.	80-120	3.00	20	WG732882
Vanadium	mg/l	1.10	1.13	110.	80-120	3.00	20	WG732882

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Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Zinc	mg/l	1.06	1.10	106.	80-120	4.00	20	WG732882
1,1,1-Trichloroethane	mg/l	0.0238	0.0268	95.0	73.2-123	12.0	20	WG732383
1,1,2,2-Tetrachloroethane	mg/l	0.0239	0.0263	95.0	70.7-122	9.53	20	WG732383
1,1,2-Trichloroethane	mg/l	0.0255	0.0253	102.	77.7-118	0.810	20	WG732383
1,1,2-Trichlorotrifluoroethane	mg/l	0.0232	0.0251	93.0	67.2-143	7.61	20	WG732383
1,1-Dichloroethane	mg/l	0.0262	0.0278	105.	70.7-126	5.85	20	WG732383
1,1-Dichloroethene	mg/l	0.0236	0.0244	94.0	67.8-129	3.18	20	WG732383
1,2,3-Trichlorobenzene	mg/l	0.0228	0.0221	91.0	64.9-135	3.17	20	WG732383
1,2,4-Trichlorobenzene	mg/l	0.0234	0.0228	94.0	69.7-136	2.93	20	WG732383
1,2-Dibromo-3-Chloropropane	mg/l	0.0215	0.0212	86.0	65.4-128	1.15	20	WG732383
1,2-Dibromoethane	mg/l	0.0240	0.0235	96.0	76.6-121	2.05	20	WG732383
1,2-Dichlorobenzene	mg/l	0.0246	0.0243	98.0	78.4-117	1.08	20	WG732383
1,2-Dichloroethane	mg/l	0.0255	0.0254	102.	68.8-124	0.570	20	WG732383
1,2-Dichloropropane	mg/l	0.0267	0.0264	107.	76.5-119	1.25	20	WG732383
1,3-Dichlorobenzene	mg/l	0.0249	0.0273	100.	70.8-128	9.17	20	WG732383
1,4-Dichlorobenzene	mg/l	0.0243	0.0240	97.0	78.8-115	1.05	20	WG732383
2-Butanone (MEK)	mg/l	0.129	0.125	103.	55-149	2.84	20	WG732383
2-Hexanone	mg/l	0.122	0.120	97.0	65.6-144	1.40	20	WG732383
4-Methyl-2-pentanone (MIBK)	mg/l	0.127	0.127	102.	70.5-133	0.140	20	WG732383
Acetone	mg/l	0.118	0.125	94.0	35.6-163	5.70	23.9	WG732383
Benzene	mg/l	0.0262	0.0264	105.	74.8-121	0.950	20	WG732383
Bromochloromethane	mg/l	0.0241	0.0250	96.0	77.6-119	3.76	20	WG732383
Bromodichloromethane	mg/l	0.0246	0.0251	98.0	75.1-116	1.79	20	WG732383
Bromoform	mg/l	0.0222	0.0237	89.0	67.5-130	6.82	20	WG732383
Bromomethane	mg/l	0.0232	0.0288	93.0	49.9-162	21.5*	20	WG732383
Carbon disulfide	mg/l	0.0214	0.0232	86.0	64.6-140	8.05	20	WG732383
Carbon tetrachloride	mg/l	0.0233	0.0253	93.0	70.2-123	8.18	20	WG732383
Chlorobenzene	mg/l	0.0249	0.0254	100.	78.1-119	1.82	20	WG732383
Chlorodibromomethane	mg/l	0.0230	0.0233	92.0	74-121	1.45	20	WG732383
Chloroethane	mg/l	0.0247	0.0287	99.0	61.7-135	14.8	20	WG732383
Chloroform	mg/l	0.0235	0.0244	94.0	76-121	3.69	20	WG732383
cis-1,2-Dichloroethene	mg/l	0.0262	0.0274	105.	76-119	4.42	20	WG732383
cis-1,3-Dichloropropene	mg/l	0.0261	0.0251	104.	78.2-120	3.97	20	WG732383
Dichlorodifluoromethane	mg/l	0.0248	0.0278	99.0	54.8-135	11.3	20	WG732383
Ethylbenzene	mg/l	0.0248	0.0255	99.0	78.8-122	2.87	20	WG732383
Isopropylbenzene	mg/l	0.0253	0.0270	101.	78.6-132	6.55	20	WG732383
Methyl tert-butyl ether	mg/l	0.0246	0.0266	98.0	71.2-126	8.01	20	WG732383
Methylene Chloride	mg/l	0.0231	0.0249	92.0	70.3-120	7.53	20	WG732383
Styrene	mg/l	0.0258	0.0272	103.	80.4-126	5.52	20	WG732383
Tetrachloroethene	mg/l	0.0242	0.0241	97.0	72.6-126	0.620	20	WG732383
Toluene	mg/l	0.0255	0.0254	102.	79.7-116	0.110	20	WG732383
trans-1,2-Dichloroethene	mg/l	0.0248	0.0267	99.0	72.6-121	7.39	20	WG732383
trans-1,3-Dichloropropene	mg/l	0.0257	0.0247	103.	74.3-123	4.02	20	WG732383
Trichloroethene	mg/l	0.0258	0.0258	103.	77.7-118	0.0600	20	WG732383
Trichlorofluoromethane	mg/l	0.0209	0.0243	84.0	63.5-135	14.7	20	WG732383
Vinyl chloride	mg/l	0.0248	0.0270	99.0	65.9-128	8.73	20	WG732383
Xylenes, Total	mg/l	0.0752	0.0782	100.	78.7-121	3.99	20	WG732383
4-Bromofluorobenzene				101.0	71-126			WG732383
Dibromofluoromethane				96.00	78.3-121			WG732383
Toluene-d8				102.0	88.5-111			WG732383
a,a,a-Trifluorotoluene				99.70	85-114			WG732383
1,2,4,5-Tetrachlorobenzene	mg/l	0.0199	0.0180	80.0	30.7-102	9.89	27.7	WG733134
2,4,5-Trichlorophenol	mg/l	0.0220	0.0199	88.0	34.9-112	9.95	23.9	WG733134
2,4,6-Trichlorophenol	mg/l	0.0211	0.0197	84.0	29.8-107	6.94	24.1	WG733134
2,4-Dichlorophenol	mg/l	0.0205	0.0187	82.0	31.4-103	8.92	24.9	WG733134

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200 John James Audubon Pkwy; Ste 101

Quality Assurance Report  
Level II

Amherst, NY 14228

L710351

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1-800-767-5859  
Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

November 04, 2014

Analyte	Units	Laboratory Control		Sample Duplicate		Limit	RPD	Limit	Batch
		Result	Ref	%Rec	%Rec				
2,4-Dimethylphenol	mg/l	0.0219	0.0218	88.0	88.0	31.9-107	0.550	25.7	WG733134
2,4-Dinitrophenol	mg/l	0.0153	0.0153	61.0	61.0	24.2-128	0.500	20.5	WG733134
2,4-Dinitrotoluene	mg/l	0.0222	0.0227	89.0	89.0	31.2-105	2.23	22	WG733134
2,6-Dinitrotoluene	mg/l	0.0219	0.0226	88.0	88.0	30.6-106	3.15	23.1	WG733134
2-Chloronaphthalene	mg/l	0.0195	0.0192	78.0	78.0	33.6-105	1.48	23	WG733134
2-Chlorophenol	mg/l	0.0204	0.0173	81.0	81.0	26.2-91.5	16.1	26.5	WG733134
2-Methylnaphthalene	mg/l	0.0190	0.0182	76.0	76.0	33.8-98.6	4.33	24.2	WG733134
2-Methylphenol	mg/l	0.0200	0.0180	80.0	80.0	26.4-86.9	10.5	26.5	WG733134
2-Nitroaniline	mg/l	0.0214	0.0227	86.0	86.0	35.6-113	5.98	20.9	WG733134
2-Nitrophenol	mg/l	0.0229	0.0222	92.0	92.0	25.9-106	3.25	26.9	WG733134
3,4-Methyl Phenol	mg/l	0.0209	0.0188	83.0	83.0	27.9-92	10.3	27	WG733134
3,3-Dichlorobenzidine	mg/l	0.0201	0.0205	80.0	80.0	27.2-142	2.12	22.3	WG733134
3-Nitroaniline	mg/l	0.0208	0.0214	83.0	83.0	33.6-103	2.85	21.8	WG733134
4,6-Dinitro-2-methylphenol	mg/l	0.0255	0.0247	102.	102.	18.4-148	3.41	24.4	WG733134
4-Bromophenyl-phenylether	mg/l	0.0216	0.0206	86.0	86.0	40.7-116	4.81	21	WG733134
4-Chloro-3-methylphenol	mg/l	0.0241	0.0222	96.0	96.0	35.7-100	8.41	22.9	WG733134
4-Chloroaniline	mg/l	0.0202	0.0187	81.0	81.0	32-104	7.74	26.4	WG733134
4-Chlorophenyl-phenylether	mg/l	0.0195	0.0197	78.0	78.0	39-113	1.38	20.9	WG733134
4-Nitroaniline	mg/l	0.0249	0.0256	100.	100.	35.4-124	2.77	23.1	WG733134
4-Nitrophenol	mg/l	0.0113	0.0108	45.0	45.0	10-52.7	4.25	40	WG733134
Acenaphthene	mg/l	0.0195	0.0190	78.0	78.0	38.7-109	2.79	21.5	WG733134
Acenaphthylene	mg/l	0.0181	0.0183	72.0	72.0	36-106	1.29	21	WG733134
Acetophenone	mg/l	0.0212	0.0190	85.0	85.0	41.6-104	11.0	24.8	WG733134
Anthracene	mg/l	0.0207	0.0200	83.0	83.0	43.6-113	3.28	18.8	WG733134
Atrazine	mg/l	0.0212	0.0213	85.0	85.0	50-123	0.690	21.5	WG733134
Benzaldehyde	mg/l	0.0294	0.0252	118.	118.	11.7-132.2	15.3	25.2	WG733134
Benzo(a)anthracene	mg/l	0.0213	0.0210	85.0	85.0	51.2-112	1.51	20	WG733134
Benzo(a)pyrene	mg/l	0.0187	0.0189	75.0	75.0	45.6-106	1.03	20	WG733134
Benzo(b)fluoranthene	mg/l	0.0208	0.0197	83.0	83.0	47.6-111	5.47	20	WG733134
Benzo(g,h,i)perylene	mg/l	0.0230	0.0221	92.0	92.0	45.2-117	4.05	20	WG733134
Benzo(k)fluoranthene	mg/l	0.0213	0.0205	85.0	85.0	49.4-114	3.46	20	WG733134
Benzylbutyl phthalate	mg/l	0.0245	0.0230	98.0	98.0	31.8-123	6.27	20.7	WG733134
Biphenyl	mg/l	0.0199	0.0193	80.0	80.0	38-103	3.27	20.1	WG733134
Bis(2-chloroethoxy)methane	mg/l	0.0211	0.0198	84.0	84.0	37.2-111	6.09	24.1	WG733134
Bis(2-chloroethyl)ether	mg/l	0.0204	0.0177	82.0	82.0	22.6-108	14.5	27.9	WG733134
Bis(2-chloroisopropyl)ether	mg/l	0.0202	0.0188	81.0	81.0	32.9-100	7.04	25.1	WG733134
Bis(2-ethylhexyl)phthalate	mg/l	0.0249	0.0241	99.0	99.0	36.9-134	3.20	23.6	WG733134
Caprolactam	mg/l	0.00575	0.00596	23.0	23.0	10-40.4	3.59	40	WG733134
Carbazole	mg/l	0.0215	0.0214	86.0	86.0	49-110	0.480	20	WG733134
Chrysene	mg/l	0.0218	0.0214	87.0	87.0	54.6-120	1.76	20	WG733134
Di-n-butyl phthalate	mg/l	0.0231	0.0217	92.0	92.0	41.8-120	6.14	20.2	WG733134
Di-n-octyl phthalate	mg/l	0.0253	0.0247	101.	101.	39.7-112	2.65	21.1	WG733134
Dibenz(a,h)anthracene	mg/l	0.0229	0.0217	91.0	91.0	42.8-118	5.22	20	WG733134
Dibenzofuran	mg/l	0.0194	0.0195	78.0	78.0	42.4-105	0.110	20	WG733134
Diethyl phthalate	mg/l	0.0203	0.0201	81.0	81.0	36.5-129	0.920	20	WG733134
Dimethyl phthalate	mg/l	0.0204	0.0202	82.0	82.0	35.3-128	0.760	20.8	WG733134
Fluoranthene	mg/l	0.0205	0.0198	82.0	82.0	45.9-115	3.41	20	WG733134
Fluorene	mg/l	0.0204	0.0207	82.0	82.0	41-112	1.57	20.2	WG733134
Hexachloro-1,3-butadiene	mg/l	0.0176	0.0160	70.0	70.0	16.1-104	9.19	31.2	WG733134
Hexachlorobenzene	mg/l	0.0219	0.0206	88.0	88.0	38.5-116	6.08	20.1	WG733134
Hexachlorocyclopentadiene	mg/l	0.00750	0.00675	30.0	30.0	10-121	10.5	27.9	WG733134
Hexachloroethane	mg/l	0.0190	0.0172	76.0	76.0	16.5-89.8	10.2	30.7	WG733134
Indeno(1,2,3-cd)pyrene	mg/l	0.0230	0.0219	92.0	92.0	45-116	5.03	20	WG733134
Isophorone	mg/l	0.0242	0.0230	97.0	97.0	35.4-112	4.97	21.5	WG733134
n-Nitrosodi-n-propylamine	mg/l	0.0239	0.0219	96.0	96.0	33.2-106	8.86	23.7	WG733134
n-Nitrosodiphenylamine	mg/l	0.0212	0.0203	85.0	85.0	44.4-113	4.48	20	WG733134
Naphthalene	mg/l	0.0184	0.0171	74.0	74.0	32.2-101	7.32	23.8	WG733134
Nitrobenzene	mg/l	0.0220	0.0204	88.0	88.0	31.4-106	7.84	25.7	WG733134
Pentachlorophenol	mg/l	0.0209	0.0195	84.0	84.0	10-97.4	6.59	35.1	WG733134

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Quality Assurance Report  
 Level II

L710351

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Tax I.D. 62-0814289

Est. 1970

November 04, 2014

Analyte	Units	Laboratory Control Sample Duplicate			Limit	RPD	Limit	Batch
		Result	Ref	%Rec				
Phenanthrene	mg/l	0.0208	0.0201	83.0	46.4-113	3.04	20	WG733134
Phenol	mg/l	0.0119	0.0105	48.0	10-57.9	12.1	35	WG733134
Pyrene	mg/l	0.0230	0.0217	92.0	46.3-117	5.69	20	WG733134
2,4,6-Tribromophenol				104.0	11.2-130			WG733134
2-Fluorobiphenyl				76.10	29.5-131			WG733134
2-Fluorophenol				60.10	10-77.9			WG733134
Nitrobenzene-d5				98.90	21.8-123			WG733134
Phenol-d5				46.20	5-70.1			WG733134
p-Terphenyl-d14				78.60	29.3-137			WG733134
1,1,1-Trichloroethane	mg/l	0.0229	0.0225	91.0	73.2-123	1.82	20	WG733223
1,1,2,2-Tetrachloroethane	mg/l	0.0234	0.0237	94.0	70.7-122	1.30	20	WG733223
1,1,2-Trichloroethane	mg/l	0.0242	0.0245	97.0	77.7-118	1.21	20	WG733223
1,1,2-Trichlorotrifluoroethane	mg/l	0.0216	0.0212	86.0	67.2-143	1.67	20	WG733223
1,1-Dichloroethane	mg/l	0.0239	0.0241	96.0	70.7-126	1.02	20	WG733223
1,1-Dichloroethene	mg/l	0.0207	0.0205	83.0	67.8-129	1.05	20	WG733223
1,2,3-Trichlorobenzene	mg/l	0.0212	0.0208	85.0	64.9-135	2.06	20	WG733223
1,2,4-Trichlorobenzene	mg/l	0.0235	0.0230	94.0	69.7-136	1.88	20	WG733223
1,2-Dibromo-3-Chloropropane	mg/l	0.0199	0.0195	80.0	65.4-128	2.17	20	WG733223
1,2-Dibromoethane	mg/l	0.0231	0.0232	92.0	76.6-121	0.750	20	WG733223
1,2-Dichlorobenzene	mg/l	0.0238	0.0237	95.0	78.4-117	0.680	20	WG733223
1,2-Dichloroethane	mg/l	0.0226	0.0227	90.0	68.8-124	0.470	20	WG733223
1,2-Dichloropropane	mg/l	0.0247	0.0252	99.0	76.5-119	1.87	20	WG733223
1,3-Dichlorobenzene	mg/l	0.0250	0.0246	100.	70.8-128	1.44	20	WG733223
1,4-Dichlorobenzene	mg/l	0.0241	0.0236	96.0	78.8-115	1.94	20	WG733223
2-Butanone (MEK)	mg/l	0.127	0.121	101.	55-149	4.32	20	WG733223
2-Hexanone	mg/l	0.124	0.121	100.	65.6-144	3.14	20	WG733223
4-Methyl-2-Pentanone (MIBK)	mg/l	0.121	0.121	97.0	70.5-133	0.320	20	WG733223
Acetone	mg/l	0.119	0.113	95.0	35.6-163	5.35	23.9	WG733223
Benzene	mg/l	0.0244	0.0243	97.0	74.8-121	0.250	20	WG733223
Bromochloromethane	mg/l	0.0224	0.0227	90.0	77.6-119	1.20	20	WG733223
Bromodichloromethane	mg/l	0.0224	0.0225	90.0	75.1-116	0.220	20	WG733223
Bromoform	mg/l	0.0209	0.0210	84.0	67.5-130	0.370	20	WG733223
Bromomethane	mg/l	0.0228	0.0219	91.0	49.9-162	4.34	20	WG733223
Carbon disulfide	mg/l	0.0196	0.0187	78.0	64.6-140	4.96	20	WG733223
Carbon tetrachloride	mg/l	0.0220	0.0216	88.0	70.2-123	1.64	20	WG733223
Chlorobenzene	mg/l	0.0245	0.0243	98.0	78.1-119	0.880	20	WG733223
Chlorodibromomethane	mg/l	0.0216	0.0212	86.0	74-121	2.00	20	WG733223
Chloroethane	mg/l	0.0233	0.0231	93.0	61.7-135	1.14	20	WG733223
Chloroform	mg/l	0.0213	0.0216	85.0	76-121	1.72	20	WG733223
Chloromethane	mg/l	0.0249	0.0254	99.0	61.5-129	2.34	20	WG733223
cis-1,2-Dichloroethene	mg/l	0.0248	0.0248	99.0	76-119	0.0700	20	WG733223
cis-1,3-Dichloropropene	mg/l	0.0242	0.0243	97.0	78.2-120	0.270	20	WG733223
Dichlorodifluoromethane	mg/l	0.0239	0.0251	96.0	54.8-135	4.92	20	WG733223
Ethylbenzene	mg/l	0.0246	0.0244	98.0	78.8-122	0.830	20	WG733223
Isopropylbenzene	mg/l	0.0249	0.0249	99.0	78.6-132	0.0200	20	WG733223
Methyl tert-butyl ether	mg/l	0.0225	0.0228	90.0	71.2-126	1.41	20	WG733223
Methylene Chloride	mg/l	0.0217	0.0217	87.0	70.3-120	0.100	20	WG733223
Styrene	mg/l	0.0252	0.0252	101.	80.4-126	0.0500	20	WG733223
Tetrachloroethene	mg/l	0.0252	0.0244	101.	72.6-126	3.12	20	WG733223
Toluene	mg/l	0.0242	0.0242	97.0	79.7-116	0.220	20	WG733223
trans-1,2-Dichloroethene	mg/l	0.0240	0.0236	96.0	72.6-121	1.61	20	WG733223
trans-1,3-Dichloropropene	mg/l	0.0244	0.0240	97.0	74.3-123	1.47	20	WG733223
Trichloroethene	mg/l	0.0248	0.0249	99.0	77.7-118	0.540	20	WG733223
Trichlorofluoromethane	mg/l	0.0205	0.0206	82.0	63.5-135	0.450	20	WG733223
Vinyl chloride	mg/l	0.0231	0.0236	92.0	65.9-128	1.83	20	WG733223
Xylenes, Total	mg/l	0.0740	0.0733	99.0	78.7-121	0.970	20	WG733223
4-Bromofluorobenzene				100.0	71-126			WG733223

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Quality Assurance Report  
Level II

L710351

November 04, 2014

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
Dibromofluoromethane				93.10		78.3-121		
Toluene-d8				101.0		88.5-111		
a,a,a-Trifluorotoluene				102.0		85-114		

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
Antimony	mg/l	0.0515	0.000840	.05	100.	75-125	L710351-04	WG732174
Arsenic	mg/l	0.0513	0.00114	.05	100.	75-125	L710351-04	WG732174
Lead	mg/l	0.0517	0.00376	.05	96.0	75-125	L710351-04	WG732174
Thallium	mg/l	0.0497	0.000120	.05	99.0	75-125	L710351-04	WG732174
Mercury	mg/l	0.00193	0.0000209	.003	64.0*	80-120	L710397-02	WG732212
Mercury	mg/l	0.00208	0.0000074	.003	69.0*	80-120	L710397-03	WG732585
1,2,4,5-Tetrachlorobenzene	mg/l	0.0162	0.0	.025	65.0	26.2-113	L710351-04	WG732340
2,4,5-Trichlorophenol	mg/l	0.0173	0.0	.025	69.0	30.6-120	L710351-04	WG732340
2,4,6-Trichlorophenol	mg/l	0.0145	0.0	.025	58.0	19.1-114	L710351-04	WG732340
2,4-Dichlorophenol	mg/l	0.0171	0.0	.025	68.0	34.7-107	L710351-04	WG732340
2,4-Dimethylphenol	mg/l	0.0133	0.0	.025	53.0	10-152	L710351-04	WG732340
2,4-Dinitrophenol	mg/l	0.0190	0.0	.025	76.0	10-136	L710351-04	WG732340
2,4-Dinitrotoluene	mg/l	0.0210	0.0	.025	84.0	16.2-135	L710351-04	WG732340
2,6-Dinitrotoluene	mg/l	0.0201	0.0	.025	80.0	25.2-124	L710351-04	WG732340
2-Chloronaphthalene	mg/l	0.0185	0.0	.025	74.0	29.7-114	L710351-04	WG732340
2-Chlorophenol	mg/l	0.0143	0.0	.025	57.0	13.9-105	L710351-04	WG732340
2-Methylnaphthalene	mg/l	0.0189	0.0	.025	75.0	24.6-114	L710351-04	WG732340
2-Methylphenol	mg/l	0.00965	0.0	.025	39.0	10-133	L710351-04	WG732340
2-Nitroaniline	mg/l	0.0226	0.0	.025	90.0	23.5-134	L710351-04	WG732340
2-Nitrophenol	mg/l	0.0199	0.0	.025	80.0	26.7-114	L710351-04	WG732340
3&4-Methyl Phenol	mg/l	0.0102	0.0	.025	41.0	17.4-100	L710351-04	WG732340
3,3-Dichlorobenzidine	mg/l	0.00633	0.0	.025	25.0	10-162	L710351-04	WG732340
3-Nitroaniline	mg/l	0.0207	0.0	.025	83.0	10-128	L710351-04	WG732340
4,6-Dinitro-2-methylphenol	mg/l	0.0190	0.0	.025	76.0	10-151	L710351-04	WG732340
4-Bromophenyl-phenylether	mg/l	0.0185	0.0	.025	74.0	34.3-135	L710351-04	WG732340
4-Chloro-3-methylphenol	mg/l	0.0151	0.0	.025	61.0	35.7-110	L710351-04	WG732340
4-Chloroaniline	mg/l	0.0150	0.0	.025	60.0	10-123	L710351-04	WG732340
4-Chlorophenyl-phenylether	mg/l	0.0188	0.0	.025	75.0	35.6-127	L710351-04	WG732340
4-Nitroaniline	mg/l	0.0278	0.0	.025	110.	10-168	L710351-04	WG732340
4-Nitrophenol	mg/l	0.0108	0.0	.025	43.0	10-130	L710351-04	WG732340
Acenaphthene	mg/l	0.0222	0.00301	.025	77.0	30.7-124	L710351-04	WG732340
Acenaphthylene	mg/l	0.0192	0.000656	.025	74.0	29-122	L710351-04	WG732340
Acetophenone	mg/l	0.0165	0.0	.025	66.0	24.2-127	L710351-04	WG732340
Anthracene	mg/l	0.0196	0.0	.025	78.0	34.2-135	L710351-04	WG732340
Atrazine	mg/l	0.0217	0.0	.025	87.0	23.1-172	L710351-04	WG732340
Benzaldehyde	mg/l	0.0212	0.0	.025	85.0	10-152	L710351-04	WG732340
Benzo(a)anthracene	mg/l	0.0200	0.0	.025	80.0	35.7-138	L710351-04	WG732340
Benzo(a)pyrene	mg/l	0.0180	0.0	.025	72.0	23.3-135	L710351-04	WG732340
Benzo(b)fluoranthene	mg/l	0.0209	0.0	.025	84.0	23-145	L710351-04	WG732340
Benzo(g,h,i)perylene	mg/l	0.0217	0.0	.025	87.0	10-148	L710351-04	WG732340
Benzo(k)fluoranthene	mg/l	0.0188	0.0	.025	75.0	29.5-143	L710351-04	WG732340
Benzylbutyl phthalate	mg/l	0.0207	0.0	.025	83.0	13.3-159	L710351-04	WG732340
Biphenyl	mg/l	0.0194	0.0	.025	78.0	26.4-118	L710351-04	WG732340
Bis(2-chloroethoxy)methane	mg/l	0.0165	0.0	.025	66.0	26.4-127	L710351-04	WG732340
Bis(2-chloroethyl)ether	mg/l	0.0192	0.0	.025	77.0	10-154	L710351-04	WG732340
Bis(2-chloroisopropyl)ether	mg/l	0.0186	0.0	.025	74.0	19.4-126	L710351-04	WG732340

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Quality Assurance Report  
 Level II

L710351

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 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

November 04, 2014

Analyte	Units	MS Res	Matrix Spike		TV	% Rec	Limit	Ref Samp	Batch
			Ref Res						
Bis(2-ethylhexyl)phthalate	mg/l	0.0216	0.00194	.025	78.0	15.5-152	L710351-04	WG732340	
Caprolactam	mg/l	0.00632	0.0	.025	25.0	10-64	L710351-04	WG732340	
Carbazole	mg/l	0.0222	0.0	.025	89.0	33.3-134	L710351-04	WG732340	
Chrysene	mg/l	0.0203	0.0	.025	81.0	37-145	L710351-04	WG732340	
Di-n-butyl phthalate	mg/l	0.0215	0.000486	.025	84.0	26-152	L710351-04	WG732340	
Di-n-octyl phthalate	mg/l	0.0197	0.0	.025	79.0	12.3-145	L710351-04	WG732340	
Dibenz(a,h)anthracene	mg/l	0.0217	0.0	.025	87.0	10-147	L710351-04	WG732340	
Dibenzofuran	mg/l	0.0200	0.0	.025	80.0	28-127	L710351-04	WG732340	
Diethyl phthalate	mg/l	0.0200	0.0	.025	80.0	21.6-154	L710351-04	WG732340	
Dimethyl phthalate	mg/l	0.0200	0.00125	.025	75.0	10-157	L710351-04	WG732340	
Fluoranthene	mg/l	0.0204	0.0	.025	82.0	37.1-139	L710351-04	WG732340	
Fluorene	mg/l	0.0202	0.0	.025	81.0	10-162	L710351-04	WG732340	
Hexachloro-1,3-butadiene	mg/l	0.0138	0.0	.025	55.0	15.7-109	L710351-04	WG732340	
Hexachlorobenzene	mg/l	0.0194	0.0	.025	78.0	31.9-135	L710351-04	WG732340	
Hexachlorocyclopentadiene	mg/l	0.00939	0.0	.025	38.0	10-123	L710351-04	WG732340	
Hexachloroethane	mg/l	0.0156	0.0	.025	62.0	10.4-105	L710351-04	WG732340	
Indeno(1,2,3-cd)pyrene	mg/l	0.0218	0.0	.025	87.0	10-145	L710351-04	WG732340	
Isophorone	mg/l	0.0167	0.0	.025	67.0	25.9-133	L710351-04	WG732340	
n-Nitrosodipropylamine	mg/l	0.0163	0.0	.025	65.0	23.9-125	L710351-04	WG732340	
n-Nitrosodiphenylamine	mg/l	0.0207	0.0	.025	83.0	20.6-150	L710351-04	WG732340	
Naphthalene	mg/l	0.0168	0.000288	.025	66.0	20.2-114	L710351-04	WG732340	
Nitrobenzene	mg/l	0.0150	0.0	.025	60.0	23.1-121	L710351-04	WG732340	
Pentachlorophenol	mg/l	0.0140	0.0	.025	56.0	10-108	L710351-04	WG732340	
Phenanthrene	mg/l	0.0192	0.0	.025	77.0	33-139	L710351-04	WG732340	
Phenol	mg/l	0.00359	0.0	.025	14.0	10-64.1	L710351-04	WG732340	
Pyrene	mg/l	0.0191	0.0	.025	76.0	35.5-139	L710351-04	WG732340	
2,4,6-Tribromophenol					84.70	11.2-130		WG732340	
2-Fluorobiphenyl					69.50	29.5-131		WG732340	
2-Fluorophenol					22.10	10-77.9		WG732340	
Nitrobenzene-d5					50.80	21.8-123		WG732340	
Phenol-d5					13.20	5-70.1		WG732340	
p-Terphenyl-d14					67.40	29.3-137		WG732340	
Aluminum	mg/l	1.27	0.175	1	110.	75-125	L710351-04	WG732882	
Barium	mg/l	1.25	0.177	1	110.	75-125	L710351-04	WG732882	
Beryllium	mg/l	1.12	0.000315	1	110.	75-125	L710351-04	WG732882	
Cadmium	mg/l	1.14	0.0000431	1	110.	75-125	L710351-04	WG732882	
Calcium	mg/l	156.	143.	10	130.*	75-125	L710351-04	WG732882	
Chromium	mg/l	1.12	0.000318	1	110.	75-125	L710351-04	WG732882	
Cobalt	mg/l	1.16	0.000382	1	120.	75-125	L710351-04	WG732882	
Copper	mg/l	1.10	0.00218	1	110.	75-125	L710351-04	WG732882	
Iron	mg/l	9.13	7.96	1	120.	75-125	L710351-04	WG732882	
Magnesium	mg/l	40.9	28.7	10	120.	75-125	L710351-04	WG732882	
Manganese	mg/l	2.82	1.69	1	110.	75-125	L710351-04	WG732882	
Nickel	mg/l	1.06	0.000808	1	100.	75-125	L710351-04	WG732882	
Potassium	mg/l	14.2	2.94	10	110.	75-125	L710351-04	WG732882	
Selenium	mg/l	1.20	0.0231	1	120.	75-125	L710351-04	WG732882	
Silver	mg/l	0.236	-0.000793	1	24.0*	75-125	L710351-04	WG732882	
Sodium	mg/l	24.4	12.5	10	120.	75-125	L710351-04	WG732882	
Vanadium	mg/l	1.14	-0.000009	1	110.	75-125	L710351-04	WG732882	
Zinc	mg/l	1.17	0.0399	1	110.	75-125	L710351-04	WG732882	
1,1,1-Trichloroethane	mg/l	0.0200	0.0	.025	80.0	58.7-134	L710351-04	WG732383	
1,1,2,2-Tetrachloroethane	mg/l	0.0261	0.0	.025	100.	56-132	L710351-04	WG732383	
1,1,2-Trichloroethane	mg/l	0.0237	0.0	.025	95.0	66.3-125	L710351-04	WG732383	
1,1,2-Trichlorotrifluoroethane	mg/l	0.0179	0.0	.025	72.0	54.8-154	L710351-04	WG732383	
1,1-Dichloroethane	mg/l	0.0224	0.0	.025	90.0	58.5-132	L710351-04	WG732383	

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Quality Assurance Report  
Level II

L710351

November 04, 2014

Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
1,1-Dichloroethene	mg/l	0.0175	0.0	.025	70.0	51.1-140	L710351-04	WG732383
1,2,3-Trichlorobenzene	mg/l	0.0188	0.0	.025	75.0	59.1-138	L710351-04	WG732383
1,2,4-Trichlorobenzene	mg/l	0.0185	0.0	.025	74.0	63.6-143	L710351-04	WG732383
1,2-Dibromo-3-Chloropropane	mg/l	0.0225	0.0	.025	90.0	57.3-136	L710351-04	WG732383
1,2-Dibromoethane	mg/l	0.0229	0.0	.025	92.0	67.1-125	L710351-04	WG732383
1,2-Dichlorobenzene	mg/l	0.0217	0.0	.025	87.0	60.2-123	L710351-04	WG732383
1,2-Dichloroethane	mg/l	0.0235	0.0	.025	94.0	60-126	L710351-04	WG732383
1,2-Dichloropropane	mg/l	0.0232	0.0	.025	93.0	64.2-123	L710351-04	WG732383
1,3-Dichlorobenzene	mg/l	0.0217	0.0	.025	87.0	63.1-131	L710351-04	WG732383
1,4-Dichlorobenzene	mg/l	0.0203	0.0	.025	81.0	68.6-123	L710351-04	WG732383
2-Butanone (MEK)	mg/l	0.129	0.0	.125	100.	22.4-138	L710351-04	WG732383
2-Hexanone	mg/l	0.125	0.0	.125	100.	43.3-137	L710351-04	WG732383
4-Methyl-2-pentanone (MIBK)	mg/l	0.129	0.0	.125	100.	60.8-140	L710351-04	WG732383
Acetone	mg/l	0.122	0.00273	.125	95.0	10-130	L710351-04	WG732383
Benzene	mg/l	0.0215	0.0	.025	86.0	54.3-133	L710351-04	WG732383
Bromochloromethane	mg/l	0.0221	0.0	.025	88.0	66.5-122	L710351-04	WG732383
Bromodichloromethane	mg/l	0.0224	0.0	.025	89.0	63.9-121	L710351-04	WG732383
Bromoform	mg/l	0.0226	0.0	.025	90.0	59.5-134	L710351-04	WG732383
Bromomethane	mg/l	0.0186	0.0	.025	74.0	41.7-155	L710351-04	WG732383
Carbon disulfide	mg/l	0.0139	0.0	.025	56.0	43.3-149	L710351-04	WG732383
Carbon tetrachloride	mg/l	0.0184	0.0	.025	74.0	55.7-134	L710351-04	WG732383
Chlorobenzene	mg/l	0.0215	0.0	.025	86.0	67-125	L710351-04	WG732383
Chlorodibromomethane	mg/l	0.0217	0.0	.025	87.0	64.3-125	L710351-04	WG732383
Chloroethane	mg/l	0.0200	0.0	.025	80.0	51.5-136	L710351-04	WG732383
Chloroform	mg/l	0.0207	0.0	.025	83.0	63-129	L710351-04	WG732383
cis-1,2-Dichloroethene	mg/l	0.0230	0.0	.025	92.0	59.2-129	L710351-04	WG732383
cis-1,3-Dichloropropene	mg/l	0.0223	0.0	.025	89.0	66.4-125	L710351-04	WG732383
Dichlorodifluoromethane	mg/l	0.0188	0.0	.025	75.0	40.6-144	L710351-04	WG732383
Ethylbenzene	mg/l	0.0204	0.0	.025	82.0	61.4-133	L710351-04	WG732383
Isopropylbenzene	mg/l	0.0208	0.0	.025	83.0	66.8-141	L710351-04	WG732383
Methyl tert-butyl ether	mg/l	0.0246	0.0	.025	98.0	57.7-134	L710351-04	WG732383
Methylene Chloride	mg/l	0.0210	0.000311	.025	83.0	58.1-122	L710351-04	WG732383
Styrene	mg/l	0.0226	0.0	.025	90.0	66.8-133	L710351-04	WG732383
Tetrachloroethene	mg/l	0.0179	0.0	.025	72.0	53-139	L710351-04	WG732383
Toluene	mg/l	0.0203	0.0	.025	81.0	61.4-130	L710351-04	WG732383
trans-1,2-Dichloroethene	mg/l	0.0196	0.0	.025	79.0	56.5-129	L710351-04	WG732383
trans-1,3-Dichloropropene	mg/l	0.0229	0.0	.025	92.0	64.1-128	L710351-04	WG732383
Trichloroethene	mg/l	0.0198	0.0	.025	79.0	44.1-149	L710351-04	WG732383
Trichlorofluoromethane	mg/l	0.0165	0.0	.025	66.0	49.6-145	L710351-04	WG732383
Vinyl chloride	mg/l	0.0184	0.0	.025	74.0	47.8-137	L710351-04	WG732383
Xylenes, Total	mg/l	0.0622	0.0	.075	83.0	63.3-131	L710351-04	WG732383
4-Bromofluorobenzene					107.0	71-126		WG732383
Dibromofluoromethane					99.40	78.3-121		WG732383
Toluene-d8					103.0	88.5-111		WG732383
a,a,a-Trifluorotoluene					103.0	85-114		WG732383
Mercury	mg/l	0.00294	0.000063	.003	98.0	80-120	L710351-04	WG732688
1,1,1-Trichloroethane	mg/l	0.0244	0.0	.025	98.0	58.7-134	L711295-02	WG733223
1,1,2,2-Tetrachloroethane	mg/l	0.0257	0.0	.025	100.	56-132	L711295-02	WG733223
1,1,2-Trichloroethane	mg/l	0.0249	0.0	.025	100.	66.3-125	L711295-02	WG733223
1,1,2-Trichlorotrifluoroethane	mg/l	0.0233	0.0	.025	93.0	54.8-154	L711295-02	WG733223
1,1-Dichloroethane	mg/l	0.0247	0.0	.025	99.0	58.5-132	L711295-02	WG733223
1,1-Dichloroethene	mg/l	0.0211	0.0	.025	84.0	51.1-140	L711295-02	WG733223
1,2,3-Trichlorobenzene	mg/l	0.0217	0.0	.025	87.0	59.1-138	L711295-02	WG733223
1,2,4-Trichlorobenzene	mg/l	0.0238	0.0	.025	95.0	63.6-143	L711295-02	WG733223
1,2-Dibromo-3-Chloropropane	mg/l	0.0209	0.0	.025	84.0	57.3-136	L711295-02	WG733223

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Analyte	Units	MS Res	Matrix Spike		% Rec	Limit	Ref Samp	Batch
			Ref Res	TV				
1,2-Dibromoethane	mg/l	0.0241	0.0	.025	96.0	67.1-125	L711295-02	WG733223
1,2-Dichlorobenzene	mg/l	0.0237	0.0	.025	95.0	68.2-123	L711295-02	WG733223
1,2-Dichloroethane	mg/l	0.0230	0.0	.025	92.0	60-126	L711295-02	WG733223
1,2-Dichloropropane	mg/l	0.0250	0.0	.025	100.	64.2-123	L711295-02	WG733223
1,3-Dichlorobenzene	mg/l	0.0256	0.0	.025	100.	63.1-131	L711295-02	WG733223
1,4-Dichlorobenzene	mg/l	0.0237	0.0	.025	95.0	68.6-123	L711295-02	WG733223
2-Butanone (MEK)	mg/l	0.129	0.000411	.125	100.	22.4-136	L711295-02	WG733223
2-Hexanone	mg/l	0.129	0.0	.125	100.	43.3-137	L711295-02	WG733223
4-Methyl-2-pentanone (MIBK)	mg/l	0.131	0.0	.125	100.	60.8-140	L711295-02	WG733223
Acetone	mg/l	0.120	0.00313	.125	94.0	10-130	L711295-02	WG733223
Benzene	mg/l	0.0247	0.0	.025	99.0	54.3-133	L711295-02	WG733223
Bromochloromethane	mg/l	0.0232	0.0	.025	93.0	66.5-122	L711295-02	WG733223
Bromodichloromethane	mg/l	0.0226	0.0	.025	90.0	63.9-121	L711295-02	WG733223
Bromoform	mg/l	0.0226	0.0	.025	90.0	59.5-134	L711295-02	WG733223
Bromomethane	mg/l	0.0242	0.0	.025	97.0	41.7-155	L711295-02	WG733223
Carbon disulfide	mg/l	0.0196	0.0	.025	78.0	43.3-149	L711295-02	WG733223
Carbon tetrachloride	mg/l	0.0232	0.0	.025	93.0	55.7-134	L711295-02	WG733223
Chlorobenzene	mg/l	0.0247	0.0	.025	99.0	67-125	L711295-02	WG733223
Chlorodibromomethane	mg/l	0.0223	0.0	.025	89.0	64.3-125	L711295-02	WG733223
Chloroethane	mg/l	0.0250	0.0	.025	100.	51.5-136	L711295-02	WG733223
Chloroform	mg/l	0.0220	0.0	.025	88.0	63-129	L711295-02	WG733223
Chloromethane	mg/l	0.0264	0.0	.025	100.	42.4-135	L711295-02	WG733223
cis-1,2-Dichloroethene	mg/l	0.0251	0.0	.025	100.	59.2-129	L711295-02	WG733223
cis-1,3-Dichloropropene	mg/l	0.0240	0.0	.025	96.0	66.4-125	L711295-02	WG733223
Dichlorodifluoromethane	mg/l	0.0275	0.0	.025	110.	40.6-144	L711295-02	WG733223
Ethylbenzene	mg/l	0.0250	0.0	.025	100.	61.4-133	L711295-02	WG733223
Isopropylbenzene	mg/l	0.0255	0.0	.025	100.	66.8-141	L711295-02	WG733223
Methyl tert-butyl ether	mg/l	0.0239	0.0	.025	96.0	57.7-134	L711295-02	WG733223
Methylene Chloride	mg/l	0.0223	0.0	.025	89.0	58.1-122	L711295-02	WG733223
Styrene	mg/l	0.0256	0.0	.025	100.	66.8-133	L711295-02	WG733223
Tetrachloroethene	mg/l	0.0248	0.0	.025	99.0	53-139	L711295-02	WG733223
Toluene	mg/l	0.0244	0.0	.025	98.0	61.4-130	L711295-02	WG733223
trans-1,2-Dichloroethene	mg/l	0.0243	0.0	.025	97.0	56.5-129	L711295-02	WG733223
trans-1,3-Dichloropropene	mg/l	0.0248	0.0	.025	99.0	64.1-128	L711295-02	WG733223
Trichloroethene	mg/l	0.0246	0.0	.025	98.0	44.1-149	L711295-02	WG733223
Trichlorofluoromethane	mg/l	0.0229	0.0	.025	92.0	49.6-145	L711295-02	WG733223
Vinyl chloride	mg/l	0.0249	0.0	.025	100.	47.8-137	L711295-02	WG733223
Xylenes, Total	mg/l	0.0754	0.0	.075	100.	63.3-131	L711295-02	WG733223
4-Bromofluorobenzene					104.0	71-126		WG733223
Dibromofluoromethane					95.60	78.3-121		WG733223
Toluene-d8					102.0	86.5-111		WG733223
a,a,a-Trifluorotoluene					104.0	85-114		WG733223

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Antimony	mg/l	0.0515	0.0515	101.	75-125	0.0	20	L710351-04	WG732174
Arsenic	mg/l	0.0531	0.0513	104.	75-125	3.00	20	L710351-04	WG732174
Lead	mg/l	0.0518	0.0517	96.0	75-125	0.0	20	L710351-04	WG732174
Thallium	mg/l	0.0489	0.0497	97.6	75-125	2.00	20	L710351-04	WG732174
Mercury	mg/l	0.00190	0.00193	62.8*	80-120	1.00	20	L710397-02	WG732212
Mercury	mg/l	0.00209	0.00208	69.3*	80-120	0.0	20	L710397-03	WG732585
1,2,4,5-Tetrachlorobenzene	mg/l	0.0169	0.0162	67.6	26.2-113	4.52	29.8	L710351-04	WG732340

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Quality Assurance Report  
Level II

L710351

November 04, 2014

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
2,4,5-Trichlorophenol	mg/l	0.0175	0.0173	69.9	30.6-120	1.20	33.8	L710351-04	WG732340
2,4,6-Trichlorophenol	mg/l	0.0158	0.0145	63.4	19.1-114	8.78	29.9	L710351-04	WG732340
2,4-Dichlorophenol	mg/l	0.0169	0.0171	67.5	34.7-107	1.27	27.3	L710351-04	WG732340
2,4-Dimethylphenol	mg/l	0.0141	0.0133	56.3	10-152	5.37	35.4	L710351-04	WG732340
2,4-Dinitrophenol	mg/l	0.0153	0.0190	61.3	10-136	21.3	40	L710351-04	WG732340
2,4-Dinitrotoluene	mg/l	0.0211	0.0210	84.6	16.2-135	0.800	20.6	L710351-04	WG732340
2,6-Dinitrotoluene	mg/l	0.0207	0.0201	82.8	25.2-124	3.05	22.2	L710351-04	WG732340
2-Chloronaphthalene	mg/l	0.0199	0.0185	79.6	29.7-114	7.35	24.2	L710351-04	WG732340
2-Chlorophenol	mg/l	0.0145	0.0143	58.0	13.9-105	1.74	32.4	L710351-04	WG732340
2-Methylnaphthalene	mg/l	0.0190	0.0189	76.0	24.6-114	0.740	23.7	L710351-04	WG732340
2-Methylphenol	mg/l	0.0105	0.00965	42.0	10-133	8.44	40	L710351-04	WG732340
2-Nitroaniline	mg/l	0.0242	0.0226	96.9	23.5-134	7.03	21.8	L710351-04	WG732340
2-Nitrophenol	mg/l	0.0201	0.0199	80.6	26.7-114	0.990	34	L710351-04	WG732340
3,4-Methyl Phenol	mg/l	0.0110	0.0102	43.8	17.4-100	6.77	27.7	L710351-04	WG732340
3,3-Dichlorobenzidine	mg/l	0.00831	0.00633	33.2	10-162	27.0*	26.9	L710351-04	WG732340
3-Nitroaniline	mg/l	0.0225	0.0207	90.1	10-128	8.18	23	L710351-04	WG732340
4,6-Dinitro-2-methylphenol	mg/l	0.0181	0.0190	72.5	10-151	4.60	37.4	L710351-04	WG732340
4-Bromophenyl-phenylether	mg/l	0.0197	0.0185	78.6	34.3-135	6.25	23.2	L710351-04	WG732340
4-Chloro-3-methylphenol	mg/l	0.0150	0.0151	59.9	35.7-110	1.13	20	L710351-04	WG732340
4-Chloroaniline	mg/l	0.0150	0.0150	60.1	10-123	0.520	21.9	L710351-04	WG732340
4-Chlorophenyl-phenylether	mg/l	0.0187	0.0188	74.9	35.6-127	0.360	20	L710351-04	WG732340
4-Nitroaniline	mg/l	0.0280	0.0278	112.	10-168	0.940	22.4	L710351-04	WG732340
4-Nitrophenol	mg/l	0.00909	0.0108	36.4	10-130	17.2	40	L710351-04	WG732340
Acenaphthene	mg/l	0.0230	0.0222	79.8	30.7-124	3.45	22.6	L710351-04	WG732340
Acenaphthylene	mg/l	0.0205	0.0192	79.2	29-122	6.28	23.9	L710351-04	WG732340
Acetophenone	mg/l	0.0181	0.0165	72.5	24.2-127	9.47	34.9	L710351-04	WG732340
Anthracene	mg/l	0.0208	0.0196	83.2	34.2-135	6.16	20	L710351-04	WG732340
Atrazine	mg/l	0.0232	0.0217	92.8	23.1-172	6.65	20	L710351-04	WG732340
Benzaldehyde	mg/l	0.0231	0.0212	92.3	10-152	8.55	37.7	L710351-04	WG732340
Benzo(a)anthracene	mg/l	0.0202	0.0200	80.6	35.7-138	0.980	20	L710351-04	WG732340
Benzo(a)pyrene	mg/l	0.0191	0.0180	76.4	23.3-135	6.15	20	L710351-04	WG732340
Benzo(b)fluoranthene	mg/l	0.0208	0.0209	83.2	23-145	0.560	20	L710351-04	WG732340
Benzo(g,h,i)perylene	mg/l	0.0230	0.0217	91.9	10-148	5.52	21	L710351-04	WG732340
Benzo(k)fluoranthene	mg/l	0.0210	0.0188	84.0	29.5-143	11.0	20	L710351-04	WG732340
Benzylbutyl phthalate	mg/l	0.0218	0.0207	87.2	13.3-159	5.02	21.2	L710351-04	WG732340
Biphenyl	mg/l	0.0207	0.0194	82.7	26.4-118	6.27	20	L710351-04	WG732340
Bis(2-chloroethoxy)methane	mg/l	0.0172	0.0165	68.6	26.4-127	3.76	25.8	L710351-04	WG732340
Bis(2-chloroethyl) ether	mg/l	0.0192	0.0192	76.7	10-154	0.0100	40	L710351-04	WG732340
Bis(2-chloroisopropyl) ether	mg/l	0.0202	0.0186	80.6	19.4-126	8.14	37.2	L710351-04	WG732340
Bis(2-ethylhexyl)phthalate	mg/l	0.0229	0.0216	83.9	15.5-152	6.12	27.6	L710351-04	WG732340
Caprolactam	mg/l	0.00713	0.00632	28.5	10-64	12.0	37.3	L710351-04	WG732340
Carbazole	mg/l	0.0229	0.0222	91.8	33.3-134	3.07	20	L710351-04	WG732340
Chrysene	mg/l	0.0208	0.0203	83.4	37-145	2.43	20	L710351-04	WG732340
Di-n-butyl phthalate	mg/l	0.0224	0.0215	87.7	26-152	4.30	20	L710351-04	WG732340
Di-n-octyl phthalate	mg/l	0.0207	0.0197	82.9	12.3-145	5.13	22.9	L710351-04	WG732340
Dibenz(a,h)anthracene	mg/l	0.0234	0.0217	93.5	10-147	7.42	22.3	L710351-04	WG732340
Dibenzofuran	mg/l	0.0212	0.0200	84.6	28-127	5.48	20	L710351-04	WG732340
Diethyl phthalate	mg/l	0.0209	0.0200	83.7	21.6-154	4.54	20	L710351-04	WG732340
Dimethyl phthalate	mg/l	0.0203	0.0200	76.2	10-157	1.60	20	L710351-04	WG732340
Fluoranthene	mg/l	0.0210	0.0204	83.9	37.1-139	2.64	20	L710351-04	WG732340
Fluorene	mg/l	0.0207	0.0202	82.9	10-162	2.81	20	L710351-04	WG732340
Hexachloro-1,3-butadiene	mg/l	0.0146	0.0138	58.4	15.7-109	5.36	37.6	L710351-04	WG732340
Hexachlorobenzene	mg/l	0.0204	0.0194	81.5	31.9-135	4.80	20	L710351-04	WG732340
Hexachlorocyclopentadiene	mg/l	0.0108	0.00939	43.1	10-123	13.7	27.8	L710351-04	WG732340
Hexachloroethane	mg/l	0.0162	0.0156	65.0	10.4-105	3.96	40	L710351-04	WG732340
Indeno(1,2,3-cd)pyrene	mg/l	0.0234	0.0218	93.5	10-145	7.04	20	L710351-04	WG732340
Isophorone	mg/l	0.0177	0.0167	70.9	25.9-133	6.10	22.9	L710351-04	WG732340
n-Nitrosodi-n-propylamine	mg/l	0.0177	0.0163	70.8	23.9-125	8.26	29.7	L710351-04	WG732340
n-Nitrosodiphenylamine	mg/l	0.0216	0.0207	86.6	20.6-150	4.44	20	L710351-04	WG732340

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Est. 1970

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Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Naphthalene	mg/l	0.0179	0.0168	70.4	20.2-114	6.20	27.5	L710351-04	WG732340
Nitrobenzene	mg/l	0.0164	0.0150	65.5	23.1-121	8.63	29	L710351-04	WG732340
Pentachlorophenol	mg/l	0.0143	0.0140	57.2	10-108	2.11	40	L710351-04	WG732340
Phenanthrene	mg/l	0.0208	0.0192	83.1	33-139	7.74	20	L710351-04	WG732340
Phenol	mg/l	0.00369	0.00359	14.8	10-64.1	2.63	40	L710351-04	WG732340
Pyrene	mg/l	0.0198	0.0191	79.0	35.5-139	3.37	20	L710351-04	WG732340
2,4,6-Tribromophenol				84.30	11.2-130				WG732340
2-Fluorobiphenyl				74.10	29.5-131				WG732340
2-Fluorophenol				23.80	10-77.9				WG732340
Nitrobenzene-d5				54.40	21.8-123				WG732340
Phenol-d5				14.80	5-70.1				WG732340
p-Terphenyl-d14				69.10	29.3-137				WG732340
Aluminum	mg/l	1.27	1.27	110.	75-125	0.0	20	L710351-04	WG732882
Barium	mg/l	1.26	1.25	108.	75-125	1.00	20	L710351-04	WG732882
Beryllium	mg/l	1.13	1.12	113.	75-125	1.00	20	L710351-04	WG732882
Cadmium	mg/l	1.15	1.14	115.	75-125	1.00	20	L710351-04	WG732882
Calcium	mg/l	156.	156.	134.*	75-125	0.0	20	L710351-04	WG732882
Chromium	mg/l	1.13	1.12	113.	75-125	1.00	20	L710351-04	WG732882
Cobalt	mg/l	1.16	1.16	116.	75-125	0.0	20	L710351-04	WG732882
Copper	mg/l	1.12	1.10	112.	75-125	1.00	20	L710351-04	WG732882
Iron	mg/l	9.18	9.13	123.	75-125	1.00	20	L710351-04	WG732882
Magnesium	mg/l	41.1	40.9	124.	75-125	1.00	20	L710351-04	WG732882
Manganese	mg/l	2.83	2.82	114.	75-125	0.0	20	L710351-04	WG732882
Nickel	mg/l	1.06	1.06	106.	75-125	0.0	20	L710351-04	WG732882
Potassium	mg/l	14.2	14.2	112.	75-125	0.0	20	L710351-04	WG732882
Selenium	mg/l	1.20	1.20	118.	75-125	0.0	20	L710351-04	WG732882
Silver	mg/l	0.272	0.236	27.3*	75-125	15.0	20	L710351-04	WG732882
Sodium	mg/l	24.3	24.4	118.	75-125	0.0	20	L710351-04	WG732882
Vanadium	mg/l	1.15	1.14	115.	75-125	1.00	20	L710351-04	WG732882
Zinc	mg/l	1.18	1.17	114.	75-125	1.00	20	L710351-04	WG732882
1,1,1-Trichloroethane	mg/l	0.0233	0.0200	93.0	58.7-134	15.1	20	L710351-04	WG732383
1,1,2,2-Tetrachloroethane	mg/l	0.0269	0.0261	108.	56-132	3.18	22.2	L710351-04	WG732383
1,1,2-Trichloroethane	mg/l	0.0246	0.0237	98.6	66.3-125	3.79	20	L710351-04	WG732383
1,1,2-Trichlorotrifluoroethane	mg/l	0.0221	0.0179	88.3	54.8-154	20.7	22.5	L710351-04	WG732383
1,1-Dichloroethane	mg/l	0.0248	0.0224	99.1	58.5-132	10.2	20	L710351-04	WG732383
1,1-Dichloroethene	mg/l	0.0206	0.0175	82.5	51.1-140	16.5	20.2	L710351-04	WG732383
1,2,3-Trichlorobenzene	mg/l	0.0191	0.0188	76.5	59.1-138	1.83	23.7	L710351-04	WG732383
1,2,4-Trichlorobenzene	mg/l	0.0194	0.0185	77.4	63.6-143	4.75	21.9	L710351-04	WG732383
1,2-Dibromo-3-Chloropropane	mg/l	0.0223	0.0225	89.1	57.3-136	1.15	27	L710351-04	WG732383
1,2-Dibromoethane	mg/l	0.0231	0.0229	92.5	67.1-125	0.930	20	L710351-04	WG732383
1,2-Dichlorobenzene	mg/l	0.0224	0.0217	89.6	68.2-123	3.10	20	L710351-04	WG732383
1,2-Dichloroethane	mg/l	0.0240	0.0235	96.0	60-126	1.90	20	L710351-04	WG732383
1,2-Dichloropropane	mg/l	0.0246	0.0232	98.4	64.2-123	5.71	20	L710351-04	WG732383
1,3-Dichlorobenzene	mg/l	0.0238	0.0217	95.3	63.1-131	9.25	20	L710351-04	WG732383
1,4-Dichlorobenzene	mg/l	0.0215	0.0203	86.0	68.6-123	5.94	20	L710351-04	WG732383
2-Butanone (MEK)	mg/l	0.135	0.129	108.	22.4-138	4.30	27	L710351-04	WG732383
2-Hexanone	mg/l	0.129	0.125	103.	43.3-137	3.34	25.5	L710351-04	WG732383
4-Methyl-2-pentanone (MIBK)	mg/l	0.134	0.129	107.	60.8-140	4.24	25.1	L710351-04	WG732383
Acetone	mg/l	0.131	0.122	103.	10-130	7.16	27.9	L710351-04	WG732383
Benzene	mg/l	0.0235	0.0215	94.0	54.3-133	9.07	20	L710351-04	WG732383
Bromochloromethane	mg/l	0.0233	0.0221	93.4	66.5-122	5.32	20.8	L710351-04	WG732383
Bromodichloromethane	mg/l	0.0234	0.0224	93.4	63.9-121	4.36	20	L710351-04	WG732383
Bromoform	mg/l	0.0232	0.0226	92.8	59.5-134	2.72	20.5	L710351-04	WG732383
Bromomethane	mg/l	0.0207	0.0186	83.0	41.7-155	11.0	21.9	L710351-04	WG732383
Carbon disulfide	mg/l	0.0164	0.0139	65.6	43.3-149	16.6	20.3	L710351-04	WG732383

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Analyte	Units	MSD	Matrix Spike Ref	Duplicate %Rec	Limit	RPD	Limit Ref	Samp	Batch
Carbon tetrachloride	mg/l	0.0220	0.0184	87.9	55.7-134	17.7	20	L710351-04	WG732383
Chlorobenzene	mg/l	0.0229	0.0215	91.7	67-125	6.59	20	L710351-04	WG732383
Chlorodibromomethane	mg/l	0.0221	0.0217	88.2	64.3-125	1.63	20.8	L710351-04	WG732383
Chloroethane	mg/l	0.0232	0.0200	92.9	51.5-136	14.8	40	L710351-04	WG732383
Chloroform	mg/l	0.0222	0.0207	89.0	63-129	7.40	20	L710351-04	WG732383
cis-1,2-Dichloroethene	mg/l	0.0248	0.0230	99.1	59.2-129	7.41	20	L710351-04	WG732383
cis-1,3-Dichloropropene	mg/l	0.0231	0.0223	92.6	66.4-125	3.85	20	L710351-04	WG732383
Dichlorodifluoromethane	mg/l	0.0229	0.0188	91.6	40.6-144	19.8	20.2	L710351-04	WG732383
Ethylbenzene	mg/l	0.0229	0.0204	91.4	61.4-133	11.3	20	L710351-04	WG732383
Isopropylbenzene	mg/l	0.0239	0.0208	95.5	66.8-141	13.6	20	L710351-04	WG732383
Methyl tert-butyl ether	mg/l	0.0253	0.0246	101.	57.7-134	2.92	20	L710351-04	WG732383
Methylene Chloride	mg/l	0.0221	0.0210	87.2	58.1-122	5.16	20	L710351-04	WG732383
Styrene	mg/l	0.0242	0.0226	96.6	66.8-133	6.74	20	L710351-04	WG732383
Tetrachloroethene	mg/l	0.0207	0.0179	82.9	53-139	14.5	20	L710351-04	WG732383
Toluene	mg/l	0.0223	0.0203	89.4	61.4-130	9.58	20	L710351-04	WG732383
trans-1,2-Dichloroethene	mg/l	0.0225	0.0196	89.8	56.5-129	13.4	20	L710351-04	WG732383
trans-1,3-Dichloropropene	mg/l	0.0236	0.0229	94.6	64.1-128	3.35	20	L710351-04	WG732383
Trichloroethene	mg/l	0.0224	0.0198	89.7	44.1-149	12.3	20	L710351-04	WG732383
Trichlorofluoromethane	mg/l	0.0199	0.0165	79.6	49.6-145	18.8	21.2	L710351-04	WG732383
Vinyl chloride	mg/l	0.0220	0.0184	87.8	47.8-137	17.7	20	L710351-04	WG732383
Xylenes, Total	mg/l	0.0685	0.0622	91.3	63.3-131	9.71	20	L710351-04	WG732383
4-Bromofluorobenzene				109.0	71-126				WG732383
Dibromofluoromethane				102.0	78.3-121				WG732383
Toluene-d8				102.0	88.5-111				WG732383
a,a,a-Trifluorotoluene				102.0	85-114				WG732383
Mercury	mg/l	0.00291	0.00294	96.9	80-120	1.00	20	L710351-04	WG732688
1,1,1-Trichloroethane	mg/l	0.0216	0.0244	86.5	58.7-134	12.1	20	L711295-02	WG733223
1,1,2,2-Tetrachloroethane	mg/l	0.0227	0.0257	90.7	56-132	12.3	22.2	L711295-02	WG733223
1,1,2-Trichloroethane	mg/l	0.0229	0.0249	91.6	66.3-125	8.38	20	L711295-02	WG733223
1,1,2-Trichlorotrifluoroethane	mg/l	0.0202	0.0233	80.7	54.8-154	14.3	22.5	L711295-02	WG733223
1,1-Dichloroethane	mg/l	0.0223	0.0247	89.4	58.5-132	9.98	20	L711295-02	WG733223
1,1-Dichloroethene	mg/l	0.0187	0.0211	74.9	51.1-140	11.9	20.2	L711295-02	WG733223
1,2,3-Trichlorobenzene	mg/l	0.0196	0.0217	78.6	59.1-138	10.1	23.7	L711295-02	WG733223
1,2,4-Trichlorobenzene	mg/l	0.0211	0.0238	84.3	63.6-143	12.1	21.9	L711295-02	WG733223
1,2-Dibromo-3-Chloropropane	mg/l	0.0190	0.0209	76.1	57.3-136	9.48	27	L711295-02	WG733223
1,2-Dibromoethane	mg/l	0.0218	0.0241	87.1	67.1-125	10.2	20	L711295-02	WG733223
1,2-Dichlorobenzene	mg/l	0.0216	0.0237	86.5	68.2-123	9.12	20	L711295-02	WG733223
1,2-Dichloroethane	mg/l	0.0209	0.0230	83.4	60-126	9.77	20	L711295-02	WG733223
1,2-Dichloropropane	mg/l	0.0234	0.0250	93.6	64.2-123	6.65	20	L711295-02	WG733223
1,3-Dichlorobenzene	mg/l	0.0229	0.0256	91.8	63.1-131	11.0	20	L711295-02	WG733223
1,4-Dichlorobenzene	mg/l	0.0216	0.0237	86.2	68.6-123	9.41	20	L711295-02	WG733223
2-Butanone (MEK)	mg/l	0.110	0.129	87.6	22.4-138	15.8	27	L711295-02	WG733223
2-Hexanone	mg/l	0.110	0.129	87.7	43.3-137	16.0	25.5	L711295-02	WG733223
4-Methyl-2-pentanone (MIBK)	mg/l	0.112	0.131	89.8	60.8-140	15.3	25.1	L711295-02	WG733223
Acetone	mg/l	0.101	0.120	78.6	10-130	16.8	27.9	L711295-02	WG733223
Benzene	mg/l	0.0226	0.0247	90.2	54.3-133	9.15	20	L711295-02	WG733223
Bromochloromethane	mg/l	0.0214	0.0232	85.6	66.5-122	7.98	20.8	L711295-02	WG733223
Bromodichloromethane	mg/l	0.0211	0.0226	84.5	63.9-121	6.92	20	L711295-02	WG733223
Bromoform	mg/l	0.0202	0.0226	80.6	59.5-134	11.3	20.5	L711295-02	WG733223
Bromomethane	mg/l	0.0216	0.0242	86.2	41.7-155	11.5	21.9	L711295-02	WG733223
Carbon disulfide	mg/l	0.0176	0.0196	70.3	43.3-149	10.8	20.3	L711295-02	WG733223
Carbon tetrachloride	mg/l	0.0208	0.0232	83.3	55.7-134	10.7	20	L711295-02	WG733223
Chlorobenzene	mg/l	0.0226	0.0247	90.2	67-125	9.10	20	L711295-02	WG733223
Chlorodibromomethane	mg/l	0.0203	0.0223	81.0	64.3-125	9.58	20.8	L711295-02	WG733223
Chloroethane	mg/l	0.0224	0.0250	89.8	51.5-136	10.9	40	L711295-02	WG733223

\* Performance of this Analyte is outside of established criteria.  
For additional information, please see Attachment A "List of Analytes with QC Qualifiers."



YOUR LAB OF CHOICE

GHD  
 Mr. Dave Rowlinson  
 200 John James Audubon Pkwy; Ste 101  
 Amherst, NY 14228

Quality Assurance Report  
 Level II

L710351

12065 Lebanon Rd.  
 Mt. Juliet, TN 37122  
 (615) 758-5858  
 1-800-767-5859  
 Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

November 04, 2014

Analyte	Units	MSD	Matrix Spike Duplicate		Limit	RPD	Limit	Ref Samp	Batch
			Ref	%Rec					
Chloroform	mg/l	0.0201	0.0220	80.5	63-129	8.96	20	L711295-02	WG733223
Chloromethane	mg/l	0.0236	0.0264	94.4	42.4-135	11.0	20	L711295-02	WG733223
cis-1,2-Dichloroethene	mg/l	0.0229	0.0251	91.5	59.2-129	9.24	20	L711295-02	WG733223
cis-1,3-Dichloropropene	mg/l	0.0222	0.0240	88.9	66.4-125	7.57	20	L711295-02	WG733223
Dichlorodifluoromethane	mg/l	0.0246	0.0275	98.3	40.6-144	11.1	20.2	L711295-02	WG733223
Ethylbenzene	mg/l	0.0226	0.0250	90.3	61.4-133	10.3	20	L711295-02	WG733223
Isopropylbenzene	mg/l	0.0229	0.0255	91.7	66.8-141	10.8	20	L711295-02	WG733223
Methyl tert-butyl ether	mg/l	0.0211	0.0239	84.5	57.7-134	12.6	20	L711295-02	WG733223
Methylene Chloride	mg/l	0.0203	0.0223	81.3	58.1-122	9.38	20	L711295-02	WG733223
Styrene	mg/l	0.0231	0.0256	92.3	66.8-133	10.6	20	L711295-02	WG733223
Tetrachloroethene	mg/l	0.0222	0.0248	88.8	53-139	11.0	20	L711295-02	WG733223
Toluene	mg/l	0.0225	0.0244	89.8	61.4-130	8.37	20	L711295-02	WG733223
trans-1,2-Dichloroethene	mg/l	0.0221	0.0243	88.4	56.5-129	9.46	20	L711295-02	WG733223
trans-1,3-Dichloropropene	mg/l	0.0230	0.0248	92.0	64.1-128	7.66	20	L711295-02	WG733223
Trichloroethene	mg/l	0.0227	0.0246	90.6	44.1-149	8.35	20	L711295-02	WG733223
Trichlorofluoromethane	mg/l	0.0202	0.0229	81.0	49.6-145	12.4	21.2	L711295-02	WG733223
Vinyl chloride	mg/l	0.0220	0.0249	87.9	47.8-137	12.3	20	L711295-02	WG733223
Xylenes, Total	mg/l	0.0677	0.0754	90.3	63.3-131	10.7	20	L711295-02	WG733223
4-Bromofluorobenzene				102.0	71-126				WG733223
Dibromofluoromethane				95.10	78.3-121				WG733223
Toluene-d8				101.0	88.5-111				WG733223
a,a,a-Trifluorotoluene				102.0	85-114				WG733223

Post Spike

\* Performance of this Analyte is outside of established criteria.  
 For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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YOUR LAB OF CHOICE

GHD  
Mr. Dave Rowlinson  
200 John James Audubon Pkwy; Ste 101  
Amherst, NY 14228

Quality Assurance Report  
Level II

L710351

November 04, 2014

Serial Dilution

Batch number /Run number / Sample number cross reference

WG732174: R2964246: L710351-01 02 03 04 05 06  
WG732212: R2965086: L710351-01 02 03 05 06  
WG732585: R2965468: L710351-07  
WG732453: R2966185: L710351-07  
WG732340: R2966365: L710351-01 02 03 04 05 06  
WG732882: R2966729: L710351-01 02 03 04 05 06 07  
WG732383: R2967088: L710351-01 02 03 04 05 06 07  
WG732688: R2967132: L710351-04  
WG733134: R2967209 R2967447: L710351-07  
WG733223: R2967334: L710351-01 02 03 04 05 06 07 08

- \* \* Calculations are performed prior to rounding of reported values.
- \* Performance of this Analyte is outside of established criteria.  
For additional information, please see Attachment A 'List of Analytes with QC Qualifiers.'



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Level II

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Fax (615) 758-5859

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Est. 1970

November 04, 2014

The data package includes a summary of the analytic results of the quality control samples required by the SW-846 or CWA methods. The quality control samples include a method blank, a laboratory control sample, and the matrix spike/matrix spike duplicate analysis. If a target parameter is outside the method limits, every sample that is effected is flagged with the appropriate qualifier in Appendix B of the analytic report.

Method Blank - an aliquot of reagent water carried through the entire analytic process. The method blank results indicate if any possible contamination exposure during the sample handling, digestion or extraction process, and analysis. Concentrations of target analytes above the reporting limit in the method blank are qualified with the "B" qualifier.

Laboratory Control Sample - is a sample of known concentration that is carried through the digestion/extraction and analysis process. The percent recovery, expressed as a percentage of the theoretical concentration, has statistical control limits indicating that the analytic process is "in control". If a target analyte is outside the control limits for the laboratory control sample or any other control sample, the parameter is flagged with a "J4" qualifier for all effected samples.

Matrix Spike and Matrix Spike Duplicate - is two aliquots of an environmental sample that is spiked with known concentrations of target analytes. The percent recovery of the target analytes also has statistical control limits. If any recoveries that are outside the method control limits, the sample that was selected for matrix spike/matrix spike duplicate analysis is flagged with either a "J5" or a "J6". The relative percent difference (%RPD) between the matrix spike and the matrix spike duplicate recoveries is all calculated. If the RPD is above the method limit, the effected samples are flagged with a "J3" qualifier.

**GHD**  
 200 John James Audubon Pkwy; Ste 101  
 Amherst, NY 14228

**Mr. Dave Rowlinson**  
 200 John James Audubon Pkwy; Ste 101  
 Amherst, NY 14228

Report to: **Mr. Dave Rowlinson**  
 Email To: **dave\_rowlinson@ghd.com**

Project Description: **Fillmore Ave.**  
 Client Project #: **8612199**  
 City/State: **Tonawanda, New York**  
 Lab Project #: **STEARNANSY-FILLMORE**

Collected by (print): **D. Rowlinson**  
 P.O. #: **9612199**  
 Date Results Needed: **J**

Collected by (signature): **D. Rowlinson**  
 Rush? (Lab MUST be Notified)  
 Same Day ..... 200%  
 Next Day ..... 100%  
 Two Day ..... 50%  
 Three Day ..... 25%

Sample ID	Comp/Grab	Matrix	Depth	Date		Time		Mo. of Chits
				Email? No X Yes	FAX? No X Yes	Date	Time	
MW-1	G	GW			7/15/14		12:00	5
MW-2		GW					12:30	5
MW-5		GW					11:00	5
MW-6		GW					10:30	5
MW-7		GW					10:00	5
MW-8		GW					9:30	5
FIELD DUP	G	GW			7/15/14			2
TRIP BLANK		GW			7/15/14			1

Matrix: **SS - Soil GW - Groundwater WW - WasteWater DW - Drinking Water of - Other**  
 Remarks: **Please mark sample used for MS and MSD.**

Analysis / Container / Preservative	Hold #
82707GL 100ml Amb NoPres	
TAL Metals 500ml HPE HNO3	
V82607CL 40ml Amb HCl	
V82607CL 40ml Amb HCl-BIK	

**RESO**  
 L.A.B. S.C.I.E.N.C.E.S.  
 12205 Lubbert Rd  
 Mount Laurel, NJ 08054  
 Phone: 609-784-8600  
 Fax: 609-784-8600

Account: **STEARNANSY**  
 Template: **T87989**  
 Prelogin: **P475594**  
 TSR: **044 - Leslie Newtyn**  
 PB: **7.7 Mfg**  
 Shipped via: **FedEX Ground**  
 Sample # (lab only):  
 -01  
 -02  
 -03  
 -04  
 -05  
 -06  
 -07  
 -08

PH:            Temp:             
 Flow:            Other:             
 Condition: **F**  
 (lab use only)

Temp: **3.4** °C Bottles Received: **46**  
 Date: **7-16-14** Time: **0900**  
 COC Seal Intact: **Y**  **N**  **NA**  
 pH Checked: **22**  
 YES

## ESC Lab Sciences Non-Conformance Form

Login #: 710351	Client: STEARNSANY	Date: 07/16/14	Evaluated by: D. Busby
-----------------	--------------------	----------------	------------------------

**Non-Conformance (check applicable items)**

<input type="checkbox"/>	Sample Integrity	<input type="checkbox"/>	Chain of Custody Clarification
<input type="checkbox"/>	Parameter(s) past holding time	<input checked="" type="checkbox"/>	Login Clarification Needed
<input type="checkbox"/>	Improper temperature	<input type="checkbox"/>	Chain of custody is incomplete
<input type="checkbox"/>	Improper container type	<input type="checkbox"/>	Please specify Metals requested
<input type="checkbox"/>	Improper preservation	<input type="checkbox"/>	Please specify TCLP requested
<input type="checkbox"/>	Insufficient sample volume.	<input type="checkbox"/>	Received additional samples not listed on coc
<input type="checkbox"/>	Sample is biphasic	<input type="checkbox"/>	Sample ids on containers do not match ids on coc
<input type="checkbox"/>	Vials received with headspace.	<input type="checkbox"/>	Trip Blank not received.
<input type="checkbox"/>	Broken container	<input type="checkbox"/>	Client did not "X" analysts.
<input type="checkbox"/>	Broken container:	<input type="checkbox"/>	Chain of Custody is missing
<input type="checkbox"/>	Sufficient sample remains	<input type="checkbox"/>	Date / Time:
<input type="checkbox"/>		<input type="checkbox"/>	Temp / Cont. Rec / pH:
<input type="checkbox"/>		<input type="checkbox"/>	Carrier:
<input type="checkbox"/>		<input type="checkbox"/>	Trading#

**Login Comments:**

Received 2 100ml amb and 500mlHPDE w/HNO3 for sample id, along with 2 vials

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Client Informed by:	TSR Initials: LN	Client Contact: Dave Rowlinson
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Call		
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Email		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Voice Mail		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Date: 7/16/14		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Time: 16:00		

**Login Instructions:**

This is for the MS/MSD of MW-6.

This E-mail and any attached files are confidential, and may be copyright protected. If you are not the addressee, any dissemination of this communication is strictly prohibited. If you have received this message in error, please contact the sender immediately and delete/destroy all information received.

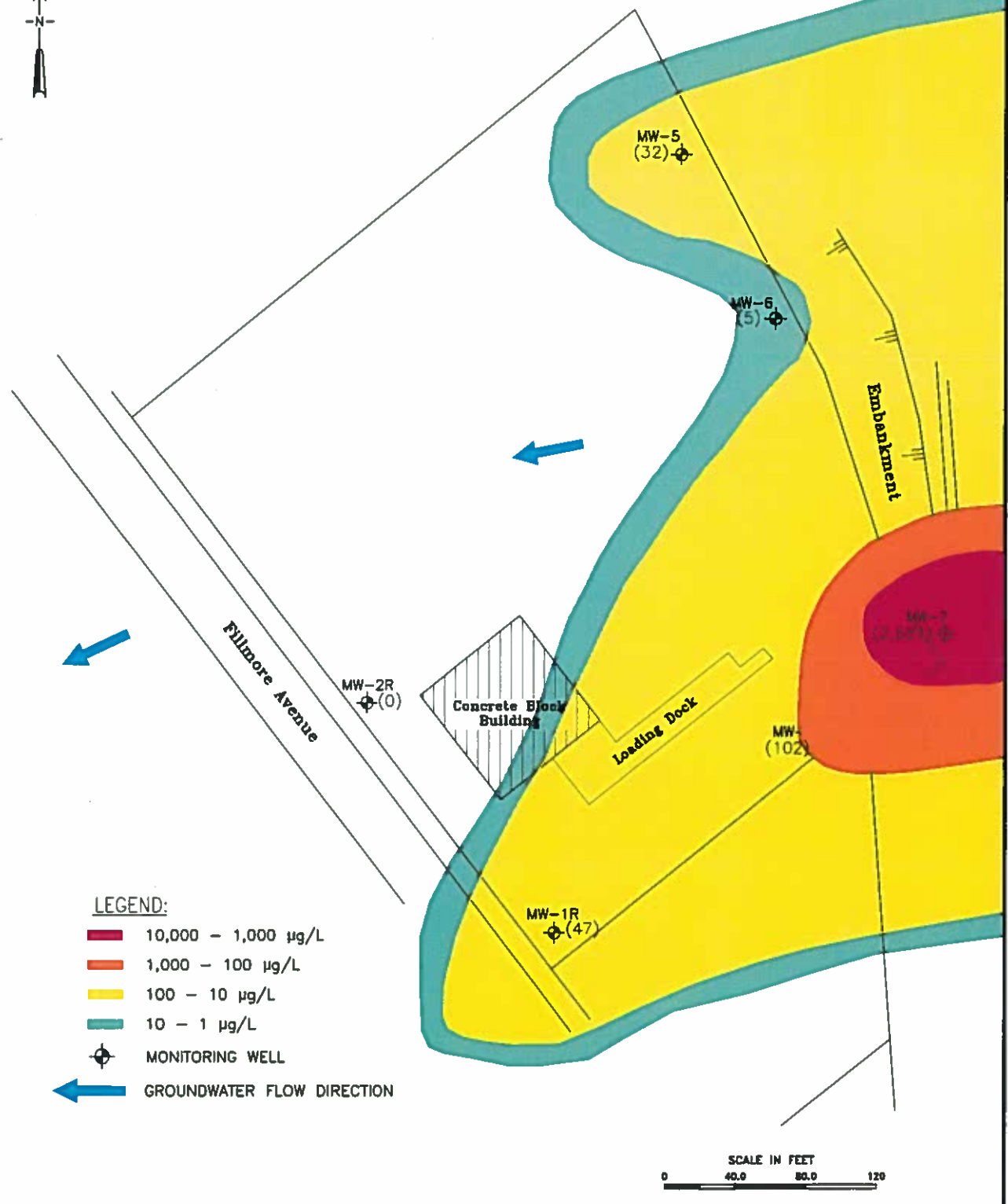


# **APPENDIX C**

---

## **HISTORICAL GROUNDWATER TOTAL VOC CONCENTRATION FIGURES**





**LEGEND:**

- 10,000 - 1,000 µg/L
- 1,000 - 100 µg/L
- 100 - 10 µg/L
- 10 - 1 µg/L

MONITORING WELL

GROUNDWATER FLOW DIRECTION

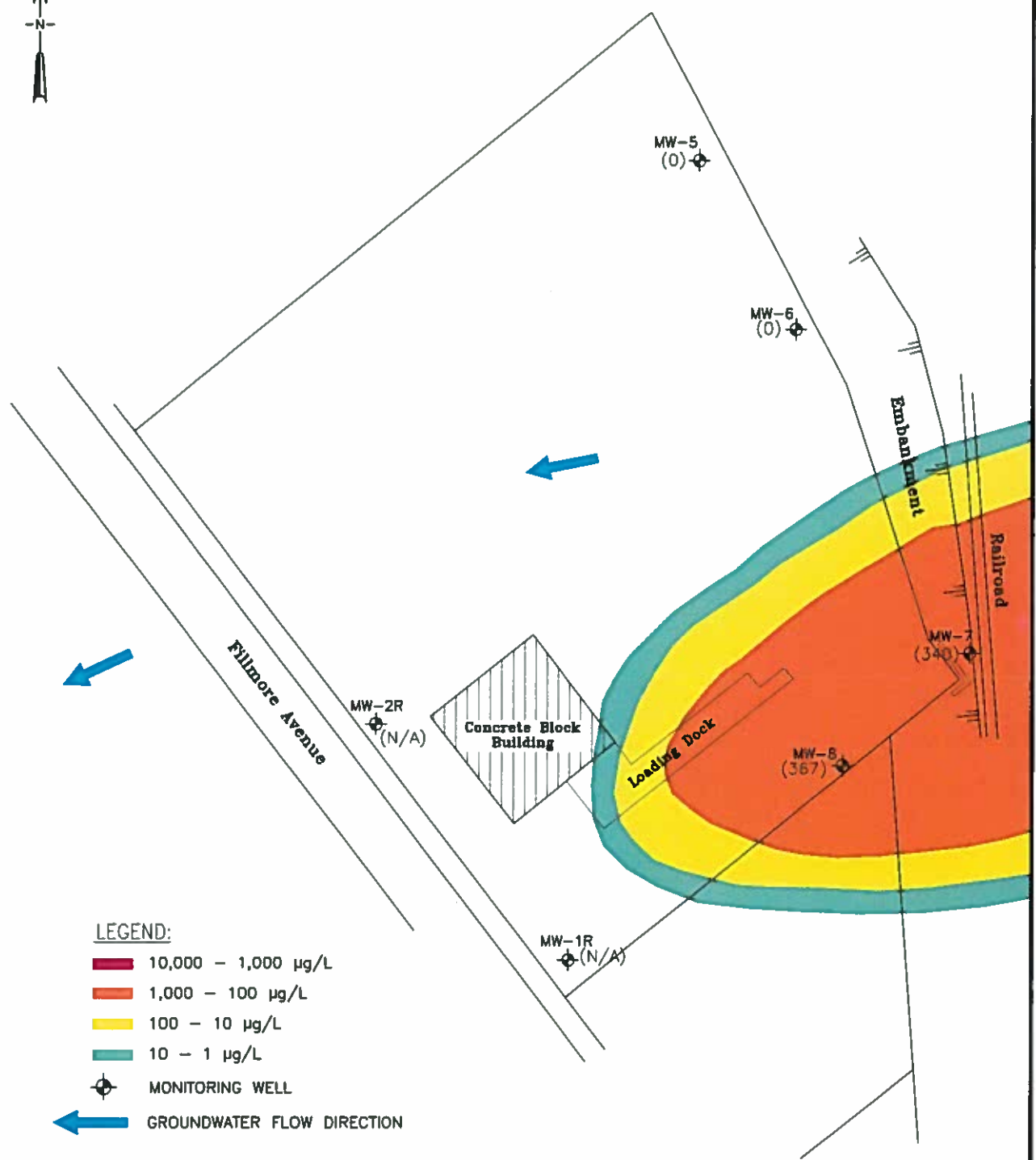
SCALE IN FEET  
0 40.0 80.0 120

**STEARNS & WHEELER**<sup>SM</sup>  
Environmental Engineers & Scientists

153 FILLMORE AVENUE SITE  
TONAWANDA, NEW YORK  
GROUNDWATER MONITORING REPORT

DATE:09/10      JOB No.:71164

APPENDIX C - TOTAL GROUNDWATER VOC  
CONCENTRATION MAP - 10/17/01



**LEGEND:**

- 10,000 - 1,000 µg/L
- 1,000 - 100 µg/L
- 100 - 10 µg/L
- 10 - 1 µg/L

- MONITORING WELL
- GROUNDWATER FLOW DIRECTION

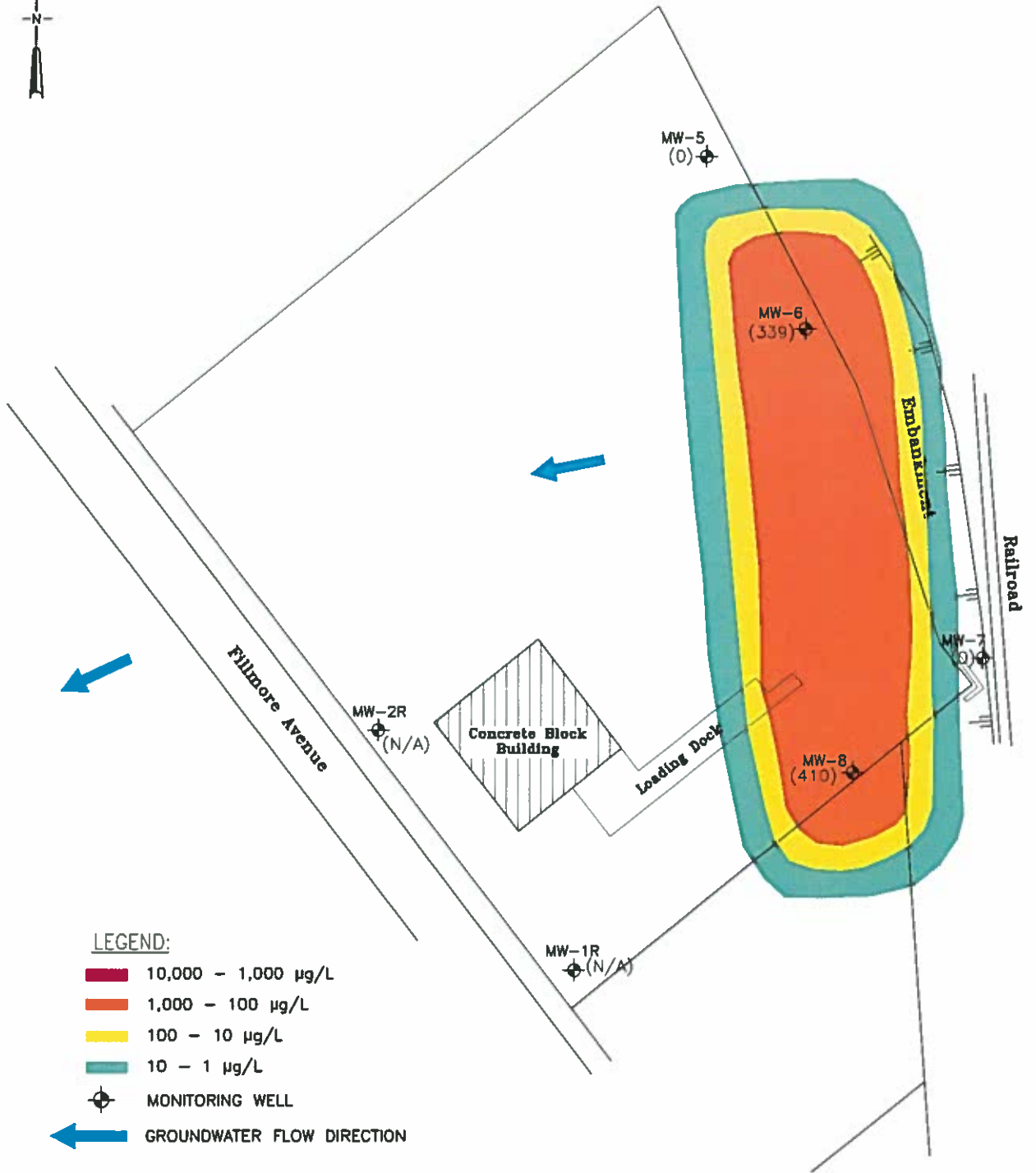
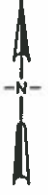
NOTE:  
 MONITORING WELLS MW-1 & MW-2 WERE NOT  
 FUNCTIONAL UNTIL BEING REDRILLED IN JULY 2009.



DATE: 09/10      JOB No.: 71164

153 FILLMORE AVENUE SITE  
 TONAWANDA, NEW YORK  
 GROUNDWATER MONITORING REPORT

APPENDIX C - TOTAL GROUNDWATER VOC  
 CONCENTRATION MAP - 07/26/07



NOTE:  
 MONITORING WELLS MW-1 & MW-2 WERE NOT  
 FUNCTIONAL UNTIL BEING REDRILLED IN JULY 2009.

SCALE IN FEET  
 0 40.0 80.0 120



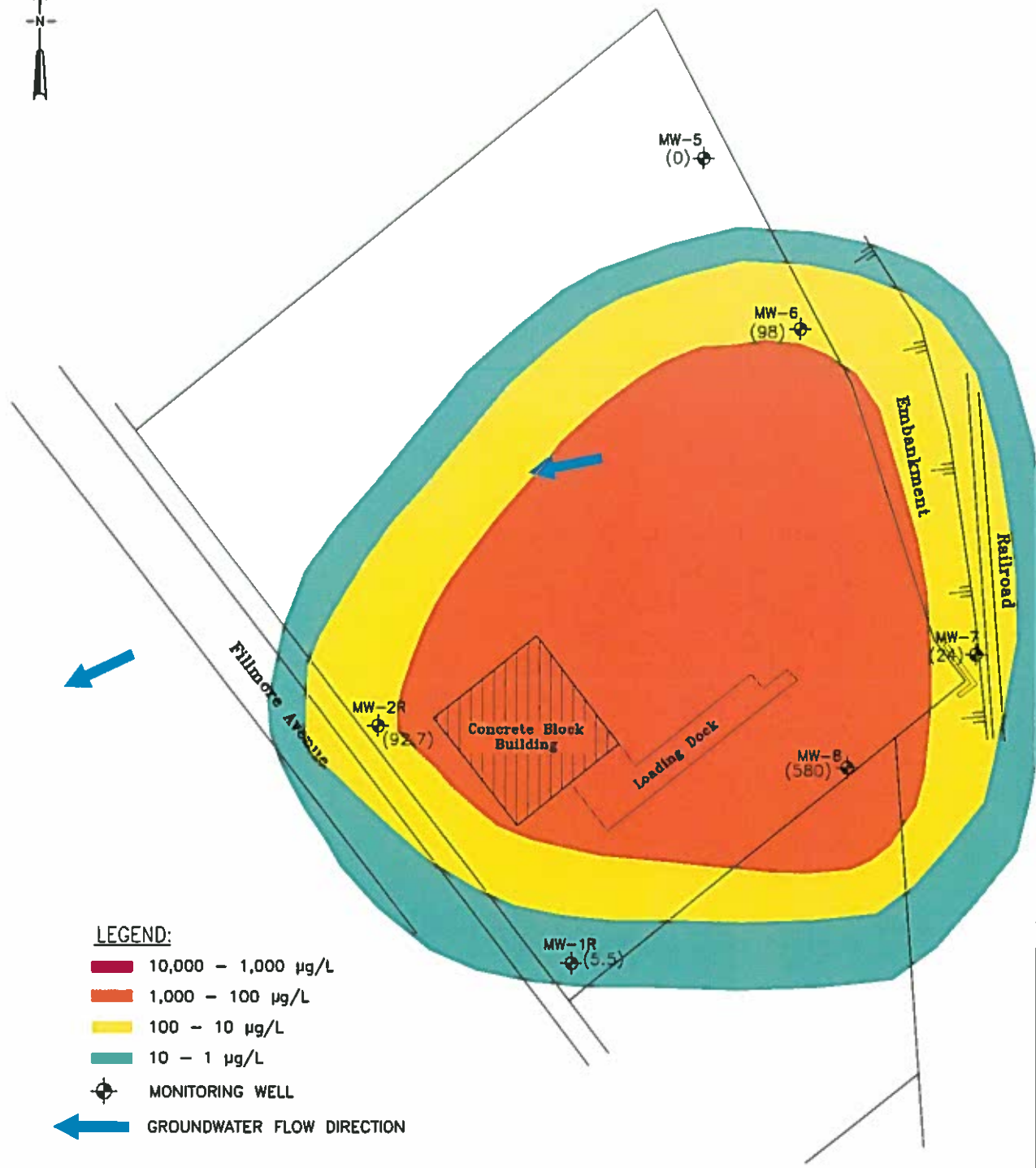
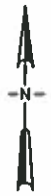
**STEARNS & WHEELER**<sup>SM</sup>  
 Environmental Engineers & Scientists

DATE:09/10







JOB No.:71164

153 FILLMORE AVENUE SITE  
 TONAWANDA, NEW YORK  
 GROUNDWATER MONITORING REPORT

APPENDIX C - TOTAL GROUNDWATER VOC  
 CONCENTRATION MAP - 08/27/08



**LEGEND:**

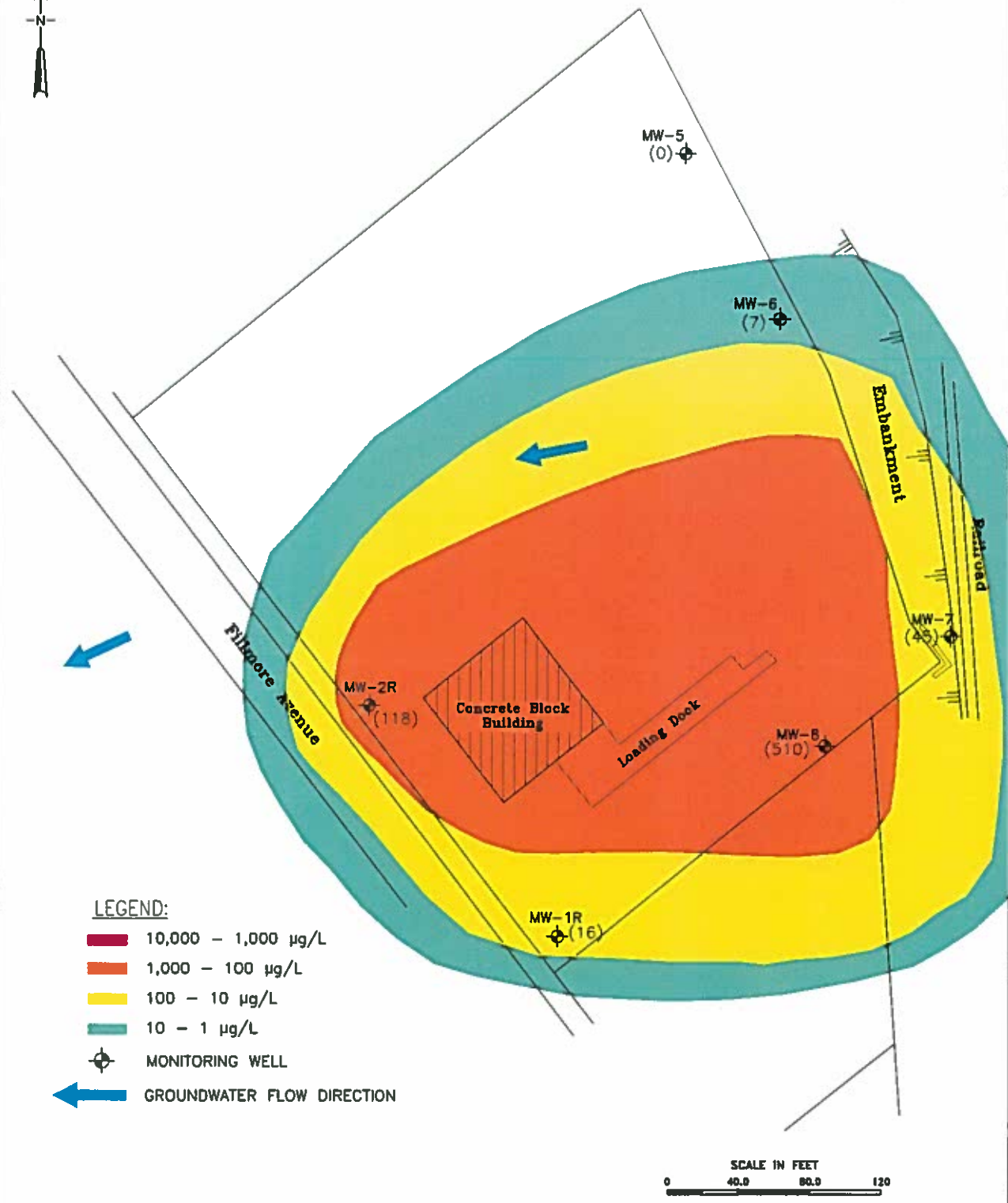
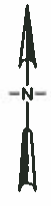
-  10,000 - 1,000 µg/L
-  1,000 - 100 µg/L
-  100 - 10 µg/L
-  10 - 1 µg/L
-  MONITORING WELL
-  GROUNDWATER FLOW DIRECTION









DATE:09/10      JOB No.:71164

153 FILLMORE AVENUE SITE  
TONAWANDA, NEW YORK  
GROUNDWATER MONITORING REPORT

APPENDIX C - TOTAL GROUNDWATER VOC  
CONCENTRATION MAP - 07/22/09



**LEGEND:**

-  10,000 - 1,000 µg/L
-  1,000 - 100 µg/L
-  100 - 10 µg/L
-  10 - 1 µg/L
-  MONITORING WELL
-  GROUNDWATER FLOW DIRECTION

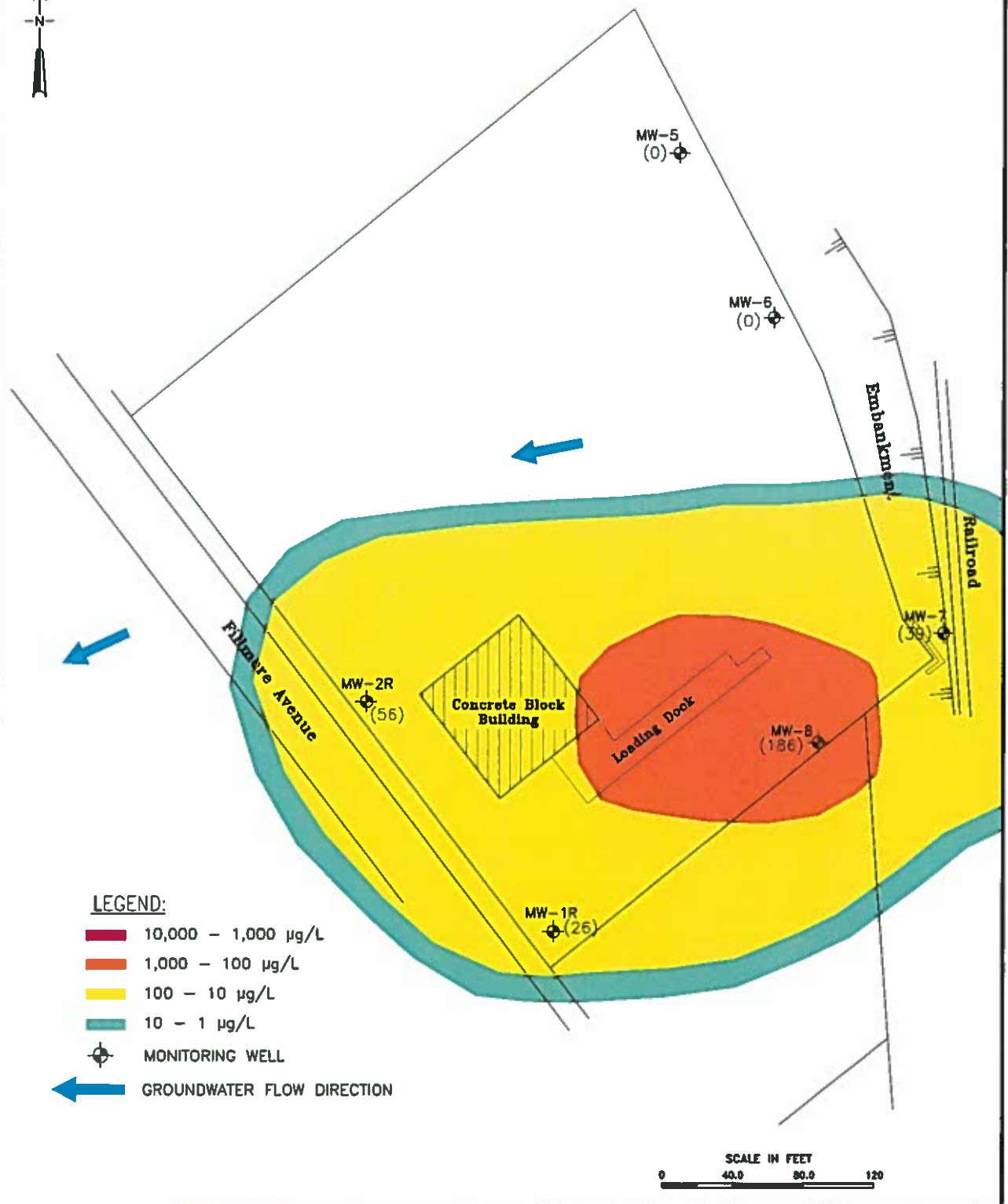
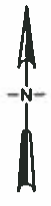


 **STEARNS & WHEELER**<sup>™</sup>  
Environmental Engineers & Scientists

153 FILLMORE AVENUE SITE  
TONAWANDA, NEW YORK  
GROUNDWATER MONITORING REPORT

DATE:09/10      JOB No.:71164

APPENDIX C - TOTAL GROUNDWATER VOC  
CONCENTRATION MAP - 07/14/10



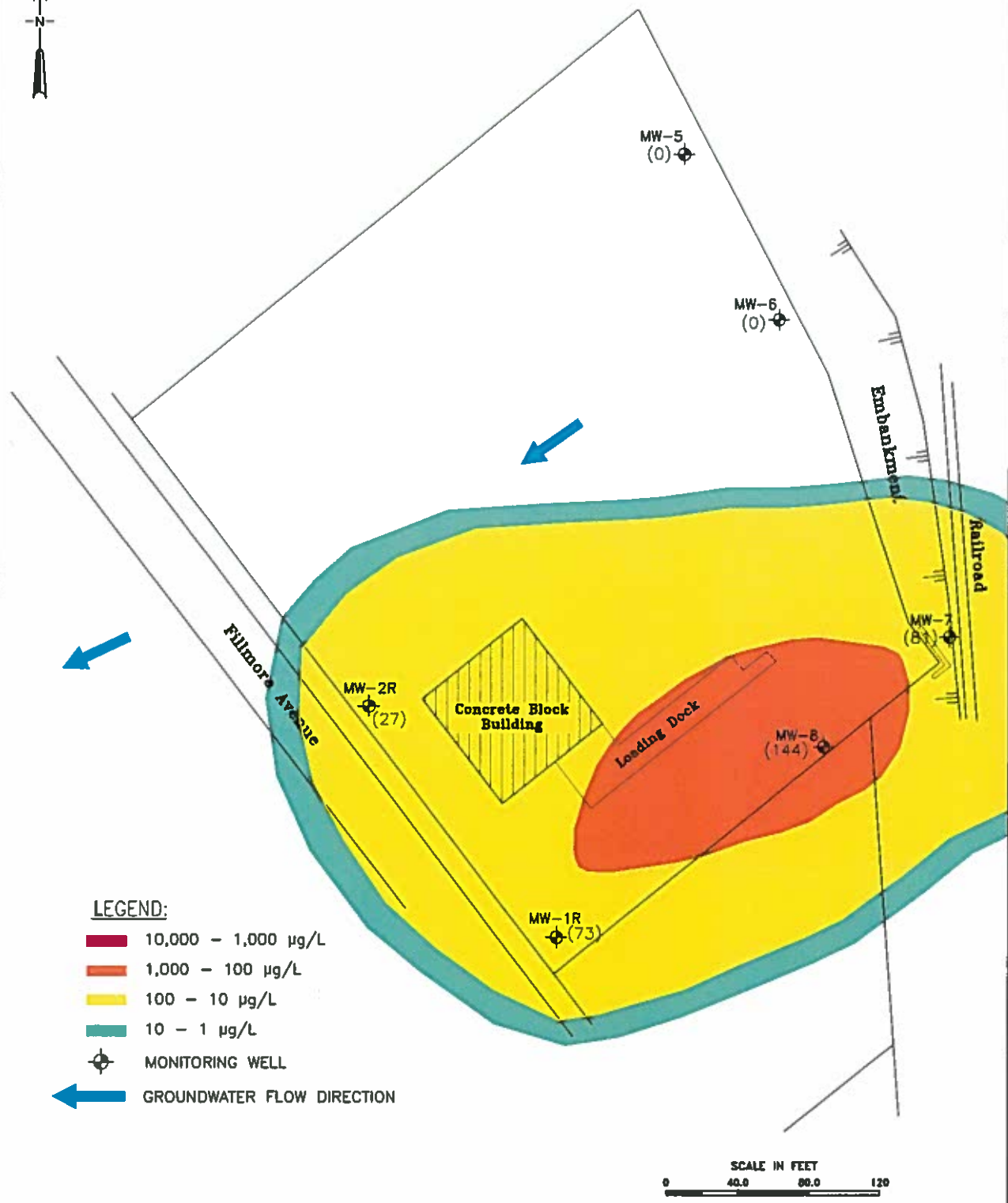
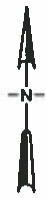
**LEGEND:**

- 10,000 - 1,000 µg/L
- 1,000 - 100 µg/L
- 100 - 10 µg/L
- 10 - 1 µg/L
- MONITORING WELL
- GROUNDWATER FLOW DIRECTION



**GHD** CLIENTS PEOPLE PERFORMANCE  
 AMHERST, NEW YORK  
 DATE:09/11 JOB No.:8612199

153 FILLMORE AVENUE SITE  
 TONAWANDA, NEW YORK  
 GROUNDWATER MONITORING REPORT  
**APPENDIX C - TOTAL GROUNDWATER VOC  
 CONCENTRATION MAP - 07/22/11**



**LEGEND:**

10,000 - 1,000 µg/L

1,000 - 100 µg/L

100 - 10 µg/L

10 - 1 µg/L

MONITORING WELL

GROUNDWATER FLOW DIRECTION

SCALE IN FEET  
0 40.0 80.0 120



CLIENTS PEOPLE PERFORMANCE

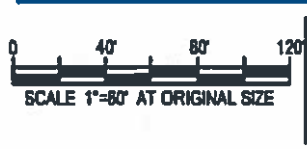
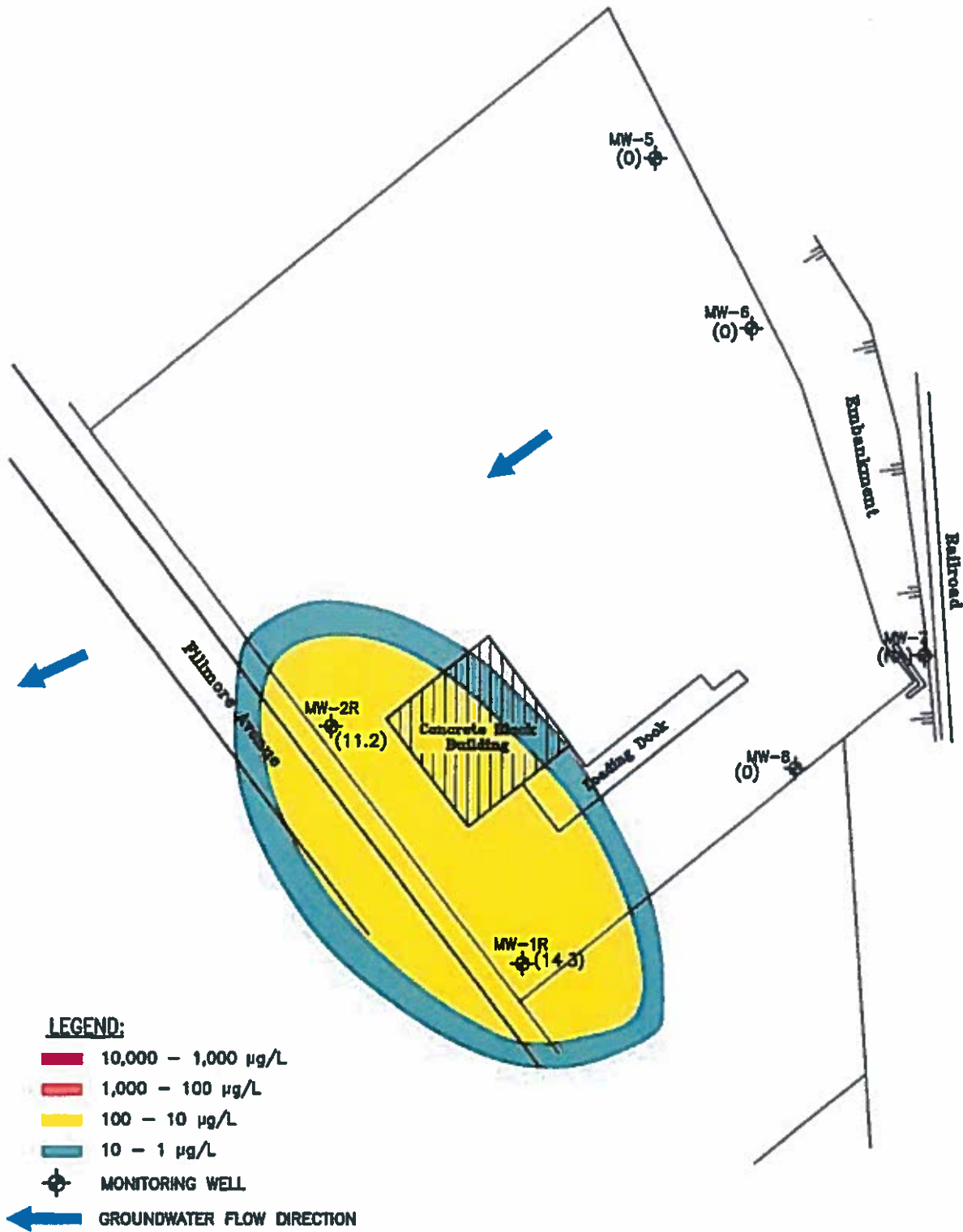
AMHERST, NEW YORK

DATE:09/12 JOB No.:8612199

153 FILLMORE AVENUE SITE  
TONAWANDA, NEW YORK  
GROUNDWATER MONITORING REPORT

FIGURE 4 - TOTAL GROUNDWATER VOC  
CONCENTRATION MAP - 07/24/12





153 FILLMORE AVENUE SITE  
 TONAWANDA, NEW YORK  
 GROUNDWATER MONITORING REPORT  
 TOTAL GROUNDWATER VOC  
 CONCENTRATION MAP - 07/24/13

Job Number 86-12199  
 Revision A  
 Date 09 13  
**Figure 04**

# **APPENDIX D**

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## **Data Usability Summary Report**



## **Data Usability Summary Report**

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

**153 Fillmore Ave.  
ESC laboratory Sciences SDG#L710351  
October 31, 2014  
Sampling date: 07/15/14**

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

**153 Fillmore Ave.  
SDG#L710351**

## **DELIVERABLES**

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package for Stearns and Wheler GHD, project located in the 153 Fillmore Ave., SDG#L710351, ESC Laboratory Sciences, submitted to Vali-Data of WNY, LLC on September 23, 2014. 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, 8260 (Volatile Organics), 8270 (Semi-Volatile Organics), 6010B/6020 (Inorganics) and 7470A (Mercury).

## **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 Compound Quantitation.

### **DATA COMPLETENESS**

All criteria were met.

### **NARRATIVE AND DATA REPORTING FORMS**

All criteria were met except no MDL's were included in the original package. 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.

**LABORATORY CONTROL SAMPLES**

All criteria were met except the RPD of Bromomethane was outside QC limits between LCS WG732383 and LCSD WG732383.

**MS/MSD**

All criteria were met.

**COMPOUND QUANTITATION**

All criteria were met except some target analytes were detected in samples; MW-1, MW-2, MW-7 and Field Dup above the MDL, below the reporting limit and should be qualified as estimated.

**INITIAL CALIBRATION**

All criteria were met except linear regression was used for Methyl cyclohexane with acceptable results on VOCMS23.

**CONTINUING CALIBRATION**

All criteria were met.

**GC/MS PERFORMANCE CHECK**

All criteria were met.

## **SEMIVOLATILE 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 Surrogate Spike Recoveries, Method Blank and Continuing Calibration.

#### **DATA COMPLETENESS**

All criteria were met.

#### **NARRATIVE AND DATA REPORTING FORMS**

All criteria were met except no MDL's were included in the original package. 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 there was no injection log for ICal MS19 in the original package. Those pages are attached.

#### **HOLDING TIMES**

All holding times were met.

#### **INTERNAL STANDARD (IS)**

All criteria were met.

#### **SURROGATE SPIKE RECOVERIES**

All criteria were met except the %Rec of 2-Fluorophenol was outside ASP QC limits, low in Field Duplicate. Associated target analytes should be qualified as estimated in this sample.

#### **METHOD BLANK**

All criteria were met except Diethyl phthalate and Dimethyl phthalate were detected above the MDL, below the reporting limit in Blank WG 733134 and should be qualified as estimated. Dimethyl phthalate and Bis(2-ethyl hexyl)phthalate were detected above the MDL, below the reporting limit in Blank WG 732340 and should be qualified as estimated. Detects of these target analytes in the samples above the MDL, below the reporting limits should be recorded as undetected at the reporting limit. Detects of these target analytes in the samples above the reporting limits, should be qualified as estimated.

#### **FIELD DUPLICATE SAMPLE PRECISION**

All criteria were met. (See Surrogate Spike Recoveries, above)

#### **LABORATORY CONTROL SAMPLES**

All criteria were met except the %Rec of 4-Nitrophenol was outside QC limits in LCSD WG732340. The %RPD of 2,4-Dinitrophenol and 4-Nitrophenol was outside QC limits between LCS WG732340 and LCSD WG732340.

#### **MS/MSD**

All criteria were met except the RPD of 3,3-Dichlorobenzidine was outside laboratory QC limits but within ASP limits, so no further action is required.

#### **COMPOUND QUANTITATION**

All criteria were met.

#### **INITIAL CALIBRATION**

All criteria were met.

Alternate forms of regression were used with acceptable results.

#### **CONTINUING CALIBRATION**

All criteria were met except the % D of 3 &4-Methylphenol in continuing calibration file 0720\_04.D and 0722a\_04.D, was outside ASP outer QC limits and should be qualified as estimated in all associated samples, blanks and spikes. The %D of Hexachlorocyclopentadiene in continuing calibration file 0722a\_04.D and Benzaldehyde in continuing calibration 0722a\_05.D were outside ASP outer QC limits and should be qualified as estimated in the associated samples, blanks and spikes.

#### **GC/MS PERFORMANCE CHECK**

All criteria were met.

## **METALS**

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
- Blanks
- Laboratory Control Sample
- MS/MSD
- Field Duplicate
- Serial Dilution
- Compound Quantitation
- Calibration

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.

### **OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES**

The data are acceptable for use but are qualified below in Blanks, Serial Dilution and Calibration.

### **DATA COMPLETENESS**

All criteria were met.

### **NARRATIVE AND DATA REPORTING FORMS**

All criteria were met except no MDL's were included in the original package. The MDL's are recorded on the 'Report of Analysis'. Data was not reported to 3 significant figures. No MS/MSD, blanks, post digest spike or serial dilutions were recorded on the run logs #072114ICP8 and #071414ICPMS4. This does not affect the usability of the data.

### **CHAIN OF CUSTODY AND TRAFFIC REPORTS**

All criteria were met.

### **HOLDING TIMES**

All criteria were met.

### **BLANKS**

All criteria were met except Se was detected above the MDL, below the reporting limit in Blank WG732882 and should be recorded as estimated. Sb and Pb were detected above the MDL, below the reporting limit in Blank WG732174 and should be recorded as estimated. Detects of these target analytes in the samples above the MDL, below the reporting limits should be

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SDG#L710351



recorded as undetected at the reporting limit. Detects of these target analytes in the samples above the reporting limits, should be qualified as estimated.

#### **LABORATORY CONTROL SAMPLE**

All criteria were met.

#### **MS/MSD**

All criteria were met except the %Rec of Ag was outside QC limits; low, in MW-6MS/MSD. The %Rec of Ag in the post digest spike was within QC limits, so no further action is required.

#### **FIELD DUPLICATE**

All criteria were met.

#### **SERIAL DILUTION**

All criteria were met except the %D of Al, K, Se, Na, As and Pb were outside QC limits in MW-6SD. These target analytes should be qualified as estimated in the samples.

#### **COMPOUND QUANTITATION**

All criteria were met.

#### **CALIBRATION**

All criteria were met except the %Rec of Fe and Se were outside ASP QC limits, high in ICVLL024850 and should be qualified as estimated high if detected in the samples, blanks and spikes. The %Rec of Al, Ba, Ca, Cd, Co, Fe, K, Mg, Mn, Na, Se and Zn were outside ASP QC limits, high in CCVLL235825 and should be qualified as estimated high if detected in the associated samples, blanks and spikes. The %Rec of Be, Cu, Cd, Co, Cr, Fe, Mn, Se and Zn were outside ASP QC limits, high in CCVLL015443 and should be qualified as estimated high if detected in the associated samples, blanks and spikes. The %Rec of Al, Ca, Cd, Co, Cr, Fe, Mg, Mn, Ni, Se and Zn were outside ASP QC limits, high in CCVLL015759 and should be qualified as estimated high if detected in the associated samples, blanks and spikes. The %Rec of Ca, Cd, Co, K, Mg, Mn, Ni, Se and Zn were outside ASP QC limits, high in CCVLL025743 and should be qualified as estimated high if detected in the associated samples, blanks and spikes.

The %Rec of As was outside ASP QC limits, low in ICV1221 and should be qualified as estimated in associated samples, blanks and spikes. The %Rec of As, Sb, Pb and Tl was outside ASP QC limits, low in CCV1759 and should be qualified as estimated in associated samples, blanks and spikes.

**MERCURY**

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
- Method Blank
- Laboratory Control Samples
- MS/MSD
- Duplicate
- Field Duplicate
- Compound Quantitation
- Calibration

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

**OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES**

The data are acceptable for use.

**DATA COMPLETENESS**

All criteria were met.

**NARRATIVE AND DATA REPORTING FORMS**

All criteria were met.

**CHAIN OF CUSTODY**

All criteria were met.

**HOLDING TIMES**

All holding times were met.

**METHOD BLANK**

All criteria were met.

**LABORATORY CONTROL SAMPLES**

All criteria were met.

**MS/MSD**

All criteria were met.

**DUPLICATE**

All criteria were met.

**FIELD DUPLICATE**

All criteria were met.

**COMPOUND QUANTITATION**

All criteria were met.

**CALIBRATION**

All criteria were met.

# **APPENDIX E**

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## **Part 375 Soil Cleanup Objectives**



## (b) Restricted use soil cleanup objectives.

Table 375-6.8(b): Restricted Use Soil Cleanup Objectives

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
<b>Metals</b>							
Arsenic	7440-38-2	16 <sup>f</sup>	16 <sup>f</sup>	16 <sup>f</sup>	16 <sup>f</sup>	13 <sup>f</sup>	16 <sup>f</sup>
Barium	7440-39-3	350 <sup>f</sup>	400	400	10,000 <sup>d</sup>	433	820
Beryllium	7440-41-7	14	72	590	2,700	10	47
Cadmium	7440-43-9	2.5 <sup>f</sup>	4.3	9.3	60	4	7.5
Chromium, hexavalent <sup>h</sup>	18540-29-9	22	110	400	800	1 <sup>e</sup>	19
Chromium, trivalent <sup>h</sup>	16065-83-1	36	180	1,500	6,800	41	NS
Copper	7440-50-8	270	270	270	10,000 <sup>d</sup>	50	1,720
Total Cyanide <sup>h</sup>		27	27	27	10,000 <sup>d</sup>	NS	40
Lead	7439-92-1	400	400	1,000	3,900	63 <sup>f</sup>	450
Manganese	7439-96-5	2,000 <sup>f</sup>	2,000 <sup>f</sup>	10,000 <sup>d</sup>	10,000 <sup>d</sup>	1600 <sup>f</sup>	2,000 <sup>f</sup>
Total Mercury		0.81 <sup>j</sup>	0.81 <sup>j</sup>	2.8 <sup>j</sup>	5.7 <sup>j</sup>	0.18 <sup>f</sup>	0.73
Nickel	7440-02-0	140	310	310	10,000 <sup>d</sup>	30	130
Selenium	7782-49-2	36	180	1,500	6,800	3.9 <sup>f</sup>	4 <sup>f</sup>
Silver	7440-22-4	36	180	1,500	6,800	2	8.3
Zinc	7440-66-6	2200	10,000 <sup>d</sup>	10,000 <sup>d</sup>	10,000 <sup>d</sup>	109 <sup>f</sup>	2,480
<b>PCBs/Pesticides</b>							
2,4,5-TP Acid (Silvex)	93-72-1	58	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	3.8
4,4'-DDE	72-55-9	1.8	8.9	62	120	0.0033 <sup>e</sup>	17
4,4'-DDT	50-29-3	1.7	7.9	47	94	0.0033 <sup>e</sup>	136
4,4'-DDD	72-54-8	2.6	13	92	180	0.0033 <sup>e</sup>	14
Aldrin	309-00-2	0.019	0.097	0.68	1.4	0.14	0.19
alpha-BHC	319-84-6	0.097	0.48	3.4	6.8	0.04 <sup>8</sup>	0.02
beta-BHC	319-85-7	0.072	0.36	3	14	0.6	0.09
Chlordane (alpha)	5103-71-9	0.91	4.2	24	47	1.3	2.9

**Table 375-6.8(b): Restricted Use Soil Cleanup Objectives**

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
o-Cresol	95-48-7	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.33 <sup>e</sup>
p-Cresol	106-44-5	34	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.33 <sup>e</sup>
Pentachlorophenol	87-86-5	2.4	6.7	6.7	55	0.8 <sup>e</sup>	0.8 <sup>e</sup>
Phenanthrene	85-01-8	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	1,000 <sup>c</sup>
Phenol	108-95-2	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	30	0.33 <sup>e</sup>
Pyrene	129-00-0	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	1,000 <sup>c</sup>
<b>Volatiles</b>							
1,1,1-Trichloroethane	71-55-6	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.68
1,1-Dichloroethane	75-34-3	19	26	240	480	NS	0.27
1,1-Dichloroethene	75-35-4	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.33
1,2-Dichlorobenzene	95-50-1	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	1.1
1,2-Dichloroethane	107-06-2	2.3	3.1	30	60	10	0.02 <sup>f</sup>
cis-1,2-Dichloroethene	156-59-2	59	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.25
trans-1,2-Dichloroethene	156-60-5	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.19
1,3-Dichlorobenzene	541-73-1	17	49	280	560	NS	2.4
1,4-Dichlorobenzene	106-46-7	9.8	13	130	250	20	1.8
1,4-Dioxane	123-91-1	9.8	13	130	250	0.1 <sup>e</sup>	0.1 <sup>e</sup>
Acetone	67-64-1	100 <sup>a</sup>	100 <sup>b</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	2.2	0.05
Benzene	71-43-2	2.9	4.8	44	89	70	0.06
Butylbenzene	104-51-8	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	12
Carbon tetrachloride	56-23-5	1.4	2.4	22	44	NS	0.76
Chlorobenzene	108-90-7	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	40	1.1
Chloroform	67-66-3	10	49	350	700	12	0.37
Ethylbenzene	100-41-4	30	41	390	780	NS	1
Hexachlorobenzene	118-74-1	0.33 <sup>e</sup>	1.2	6	12	NS	3.2
Methyl ethyl ketone	78-93-3	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	100 <sup>a</sup>	0.12