



**2015 Periodic Review Report
Groundwater Monitoring and Sampling Results
153 Fillmore Avenue Site
City of Tonawanda**

December 2015

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

**153 FILLMORE AVENUE SITE
CITY OF TONAWANDA**

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TABLE OF CONTENTS

	<u>Page</u>
SECTION 1 - SITE BACKGROUND.....	1
1.1 Site Location.....	1
1.2 Site History	1
SECTION 2 - GROUNDWATER MONITORING ACTIVITIES	4
SECTION 3 - GROUNDWATER MONITORING RESULTS	5
3.1 Site Hydrogeology	5
3.2 Groundwater Analytical Results	5
3.2.1 Volatile Organic Analytical Test Results	5
3.2.2 Semi-Volatile Organic Analytical Test Results	8
3.2.3 Inorganic Metals Analytical Test Results	9
3.3 Quality Assurance/Quality Control Analytical Results	11
SECTION 4 - SOILS MANAGEMENT PLAN.....	12
4.1 Objective	12
4.2 Nature and Extent of Contamination	12
4.3 Contemplated Use.....	12
4.4 Purpose and Description of the Cover System	13
4.5 Cover System Maintenance and Repair	13
4.6 Management of Subsurface Soil and Fill	14
4.7 Contingency Plan	14
4.8 Disposal of Subsurface Soil and Fill.....	15
4.9 Subgrade Material	16
4.10 2015 Site Usage.....	16
SECTION 5 - CONCLUSIONS	17

LIST OF FIGURES

Figure No.

- 1 Site Location Map
- 2 Monitoring Well Locations
- 3 Groundwater Contour Elevations Map
- 4 Groundwater Total VOC Concentration Map - July 23, 2015



LIST OF TABLES (continued)

Table No.

- 1 2015 Field Groundwater Parameters
- 2 Volatiles Organic Analytical Test Results
- 3 Semi-Volatile Organic Analytical Test Results
- 4 Inorganic Metals Analytical Test Results
- 5 Groundwater Monitoring Well Data

LIST OF APPENDICES

Appendix

- A Groundwater Field Sampling Records
- B Laboratory Analytical Results
- C Historical Groundwater Total VOC Concentration Figures
- D Data Usability Summary Report
- E Part 375 Soil Cleanup Objectives



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 aboveground storage tanks (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 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.

The New York State Department of Environmental Conservation (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 2015 monitoring program at the 153 Fillmore Avenue Site in the City of Tonawanda consisted of one annual sampling event completed on July 23, 2015. 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.

Historically, the water level indicator cannot pass total depth of monitoring well MW-7 due to obstruction and unable to record water level. Sampling equipment was able to pass for successful purging and sampling. 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 2015 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. Constitutes 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 23, 2015. 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 2015 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 2015, 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 2015 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 to 2014 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, MW-7, and MW-8), cis-1,2-dichloroethene (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-1 which represented concentrations below the groundwater quality standard.
- Detected concentrations of vinyl chloride increased in groundwater sampled from monitoring wells MW-2, MW-7 and MW-8 which represented concentrations exceeding the groundwater quality standard.
- Detected concentrations of vinyl chloride increased in groundwater sampled from monitoring well MW-6 which represented concentrations below the groundwater quality standard. Concentrations of vinyl chloride were not detected in groundwater sampled from monitoring wells MW-6 and MW-7 in 2014.

Trans-1,2-dichloroethene:

- Detected concentrations of trans-1,2-dichloroethene decreased in groundwater sampled from monitoring well MW-8 which represented concentrations below the groundwater quality standard.



Cis-1,2-dichloroethene:

- Detected concentrations of cis-1,2-dichloroethene decreased in groundwater sampled from monitoring wells MW-1 and MW-8 which represented concentrations below the groundwater quality standard.
- Detected concentrations of cis-1,2-dichloroethene increased in groundwater sampled from monitoring well MW-2 which represented concentrations below the groundwater quality standard.
- Detected concentrations of cis-1,2-dichloroethene decreased to non-detectable results in groundwater sampled from monitoring well MW-7.

Benzene:

- Detected concentrations of benzene increased in groundwater sampled from monitoring wells MW-2 and MW-8 which represented concentrations exceeding the groundwater quality standard.
- Detected concentrations of benzene decreased to non-detectable results in groundwater sampled from monitoring well MW-7.

Trichloroethene:

- Detected concentrations of trichloroethene decreased to non-detectable results in groundwater sampled from monitoring well MW-7 which represented concentrations below the groundwater quality standard.

Chlorobenzene:

- Detected concentrations of chlorobenzene decreased to non-detectable results in groundwater sampled from monitoring well MW-2.

Ethylbenzene:

- Detected concentrations of ethylbenzene decreased to non-detectable results in groundwater sampled from monitoring well MW-7.

Xylene:

- Detected concentrations of xylene decreased to non-detectable results in groundwater sampled from monitoring well MW-7.

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 of groundwater flow. The following observations have been made in regard to VOC plume migration and movement as reported in the specific year.

2001 Reporting - 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 Reporting - The total VOC concentration plume from the 2007 sampling event indicates decreasing total VOC concentration centered on monitoring well MW-7.

2008 Reporting - 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 Reporting - The total VOC concentration plume expanded westward with the addition of sampling and test results from monitoring wells MW-1 and MW-2.



2010 Reporting - 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 Reporting - 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 Reporting - 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 Reporting - 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 Reporting - 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

2015 Reporting - The total VOC plume increased in size and decreased in total VOC concentrations. Groundwater sampled from monitoring wells MW-1 and MW-2 represent the furthest most westward edge of the VOC plume. From 2009 to 2015, there is a trending decrease in total VOC concentrations from groundwater sampled from monitoring wells MW-1 and MW-2. Monitoring wells MW-1 and MW-2 VOC concentrations have been totaled as presented below:

- 2009 - 98.2 ug/l
- 2010 - 134.0 ug/l
- 2011 - 82.0 ug/l
- 2012 - 99.9 ug/l
- 2013 - 25.8 ug/l
- 2014 - 24.9 ug/l
- 2015 - 20.7 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.
- **2015** - Total VOC concentrations in monitoring wells MW-1, MW-2, MW-7 and MW-8 decreased from total VOC concentrations detected in 2014 73.5 ug/l to 67.2 ug/l as reported in 2015.

3.2.2 Semi-Volatile Organic Analytical Test Results

The semi-volatile organic analytical test results for the sampling event of 2015 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 2014 test results. The semi-volatile organic analytical test results are presented in Table 4.

Exceeding Groundwater Standards: The semi-volatile organic analytical test results detected concentrations of benzo(a)anthracene in groundwater sampled from monitoring well MW-7 exceeding groundwater quality standards as presented in Table 4.

Phenol:

- Detected concentrations of phenol increased in groundwater sampled from monitoring well MW-2 which represented concentrations below the groundwater quality standard.

Naphthalene:

- Detected concentrations of naphthalene increased in groundwater sampled from monitoring well MW-2 which represented concentrations below the groundwater quality standard.

Dimethyl phthalate:

- Detected concentrations of dimethyl phthalate decreased to non-detectable results in groundwater sampled from monitoring wells MW-1, MW-2, MW-5, MW-6, MW-7, and MW-8.

Acenaphthylene:

- Detected concentrations of acenaphthylene decreased to non-detectable results in groundwater sampled from monitoring well MW-5.
- Detected concentrations of acenaphthylene decreased in groundwater sampled from monitoring well MW-6 which represented concentrations below the groundwater quality standard.



- Detected concentrations of acenaphthylene increased in groundwater sampled from monitoring well MW-7 which represented concentrations below the groundwater quality standard.

Acenaphthene:

- Detected concentrations of acenaphthene decreased in groundwater sampled from monitoring wells MW-2, MW-6, and MW-8 which represented concentrations below the groundwater quality standard.
- Detected concentrations of acenaphthene increased in groundwater sampled from monitoring wells MW-5 and MW-7 which represented concentrations below the groundwater quality standard.

Diethyl phthalate:

- Detected concentrations of diethyl phthalate decreased in groundwater sampled from monitoring well MW-7 which represented concentrations below the groundwater quality standard.

Fluorene:

- Detected concentrations of fluorene decreased in groundwater sampled from monitoring well MW-5 which represented concentrations below the groundwater quality standard.

Anthracene:

- Detected concentrations of anthracene decreased to non-detectable results in groundwater sampled from monitoring well MW-7.

Carbazole:

- Detected concentrations of carbazole increased in groundwater sampled from monitoring well MW-7 which represented concentrations below the groundwater quality standard.

Di-n-butyl phthalate:

- Detected concentrations of di-n-butyl phthalate increased in groundwater sampled from monitoring wells MW-1, MW-5, MW-6, and MW-8 which represented concentrations below the groundwater quality standard.
- Detected concentrations of di-n-butyl phthalate decreased in groundwater sampled from monitoring wells MW-2 and MW-7 which represented concentrations below the groundwater quality standard.

Benzo(a)anthracene:

- Detected concentrations of benzo(a)anthracene increased in groundwater sampled from monitoring well MW-8 which represented concentrations exceeding the groundwater quality standard.

Bis(2-ethylhexyl) phthalate:

- Detected concentrations of bis(2-ethylhexyl) phthalate decreased to non-detectable results in groundwater sampled from monitoring wells MW-1, MW-2, MW-5, MW-6, MW-7, and MW-8.

Benzo(g,h,i) perylene:

- Detected concentrations of benzo(g,h,i) perylene increased in groundwater sampled from monitoring well MW-7 which represented concentrations exceeding the groundwater quality standard.



(3+4)-Methylphenol

- Detected concentrations of (3+4)-methylphenol increased in groundwater sampled from monitoring well MW-7 which represented concentrations exceeding the groundwater quality standard.

3.2.3 Inorganic Metals Analytical Test Results

Detected concentrations of inorganic metals in groundwater sampled in 2015 that exceeded groundwater quality standards and increased in concentrations when compared with 2014 analytical test results include the following: arsenic (MW-1 and MW-2), cadmium (MW-7); iron (MW-2, MW-5, MW-6, MW-8); lead (MW-1, MW-2, MW-5, MW-7); manganese (MW-6, MW-7, MW-8); thallium (MW-2); and zinc MW-7 exceeding groundwater quality standards as presented in Table 5.

Aluminum:

- Detected concentrations of aluminum decreased in groundwater sampled from monitoring wells MW-1 and MW-2 which represented concentrations exceeding the groundwater quality standard.
- Detected concentrations of aluminum increased in groundwater sampled from monitoring wells MW-5, MW-6, and MW-7 which represented concentrations below the groundwater quality standard.

Antimony:

- Detected concentrations of antimony increased in groundwater sampled from monitoring wells MW-5, MW-6, MW-5, and MW-8 which represented concentrations below the groundwater quality standard.

Arsenic:

- Detected concentrations of arsenic increased in groundwater sampled from monitoring wells MW-5, MW-6, and MW-8 which represented concentrations below the groundwater quality standard.

Barium:

- Detected concentrations of barium increased in groundwater sampled from monitoring wells MW-1 and MW-8 which represented concentrations below the groundwater quality standard.
- Detected concentrations of barium decreased in groundwater sampled from monitoring wells MW-2, MW-5, MW-6, and MW-8 which represented concentrations below the groundwater quality standard.

Beryllium:

- Detected concentrations of beryllium decreased in groundwater sampled from monitoring wells MW-1 and MW-2 to non-detectable results.
- Beryllium concentrations in groundwater sampled from all other wells were non-detectable results.

Cadmium:

- Detected concentrations of cadmium decreased in groundwater sampled from monitoring well MW-1 which represented concentrations exceeding the groundwater quality standard.
- Detected concentrations of cadmium increased in groundwater sampled from monitoring well MW-7 which represented concentrations exceeding the groundwater quality standard.
- Detected concentrations of cadmium increased in groundwater sampled from monitoring well MW-5 which represented concentrations below the groundwater quality standard.



- Cadmium concentrations in groundwater sampled from all other wells were non-detectable results.

Chromium:

- Detected concentrations of chromium decreased in groundwater sampled from monitoring well MW-2 which represented exceeded the groundwater quality standard.
- Detected concentrations of chromium decreased in groundwater sampled from monitoring wells MW-1 and MW-7 which represented concentrations below the groundwater quality standard.
- Chromium concentrations in groundwater sampled from all other wells were non-detectable results.

Copper:

- Detected concentrations of copper increased in groundwater sampled from monitoring wells MW-5 and MW-7 and reported below the groundwater quality standard.
- Detected concentrations of copper decreased in groundwater sampled from monitoring wells MW-1 and MW-2 and reported below the groundwater quality standard.
- Copper concentrations in groundwater sampled from all other wells were non-detectable results.

Iron:

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

Lead:

- Detected concentrations of lead increased in groundwater sampled from monitoring wells MW-1, MW-2, MW-5 and MW-7 which represented exceeded the groundwater quality standard.
- Detected concentrations of lead increased in groundwater sampled from monitoring wells MW-6 and MW-8 which represented concentrations below the groundwater quality standard.

Magnesium:

- Detected concentrations of magnesium decreased in groundwater sampled from monitoring wells MW-1, MW-5 and MW-7 which represented exceeded the groundwater quality standard.
- Detected concentrations of magnesium increased in groundwater sampled from monitoring wells MW-6 and MW-8 which represented concentrations below the groundwater quality standard.
- Detected concentrations of magnesium remained the same in groundwater sampled from monitoring well MW-2 which represented concentrations below the groundwater quality standard.



Manganese:

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

Mercury:

- Detected concentrations of mercury increased in groundwater sampled from monitoring wells MW-5, MW-6, and MW-7 which represented concentrations below the groundwater quality standard.
- Detected concentrations of mercury decreased in groundwater sampled from monitoring wells MW-1 and MW-2 which represented concentrations below the groundwater quality standard.
- Mercury concentrations in groundwater sampled from monitoring well MW-8 was non-detectable results.

Nickel:

- Detected concentrations of nickel increased in groundwater sampled from monitoring wells MW-5 and MW-7 which represented concentrations below the groundwater quality standard.
- Detected concentrations of nickel decreased in groundwater sampled from monitoring wells MW-1 and MW-2 which represented concentrations below the groundwater quality standard.
- Nickel concentrations in groundwater sampled from monitoring wells MW-6 and MW-8 were non-detectable results.

Selenium:

- Detected concentrations of selenium decreased in groundwater sampled from monitoring wells MW-2, MW-5, MW-6, MW-7, and MW-8 to non-detectable results.
- Detected concentrations of selenium remained in groundwater sampled from monitoring well MW-1 at non-detectable results.

Silver:

- Detected concentrations of silver decreased in groundwater sampled from monitoring wells MW-1 and MW-2 which represented concentrations below the groundwater quality standard.
- Detected concentrations of silver remained in groundwater sampled from monitoring wells MW-5, MW-6, MW-7, and MW-8 at non-detectable results.

Thallium:

- Detected concentrations of thallium increased in groundwater sampled from monitoring wells MW-1 and MW-2 which represented exceeded the groundwater quality standard.
- Detected concentrations of thallium increased in groundwater sampled from monitoring well MW-7 which represented concentrations below the groundwater quality standard.
- Detected concentrations of thallium remained in groundwater sampled from monitoring wells MW-5, MW-6, and MW-8 at non-detectable results.



Zinc:

- Detected concentrations of zinc increased in groundwater sampled from monitoring well MW-7 which represented exceeded the groundwater quality standard.
- Detected concentrations of zinc increased in groundwater sampled from monitoring wells MW-5, MW-6, and MW-8 which represented concentrations below the groundwater quality standard.
- Detected concentrations of zinc decreased in groundwater sampled from monitoring wells MW-1 and MW-2 which represented concentrations below the groundwater quality standard.

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 30, 2015 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 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 2015 Site Usage

No excavation took place on-site in 2015.

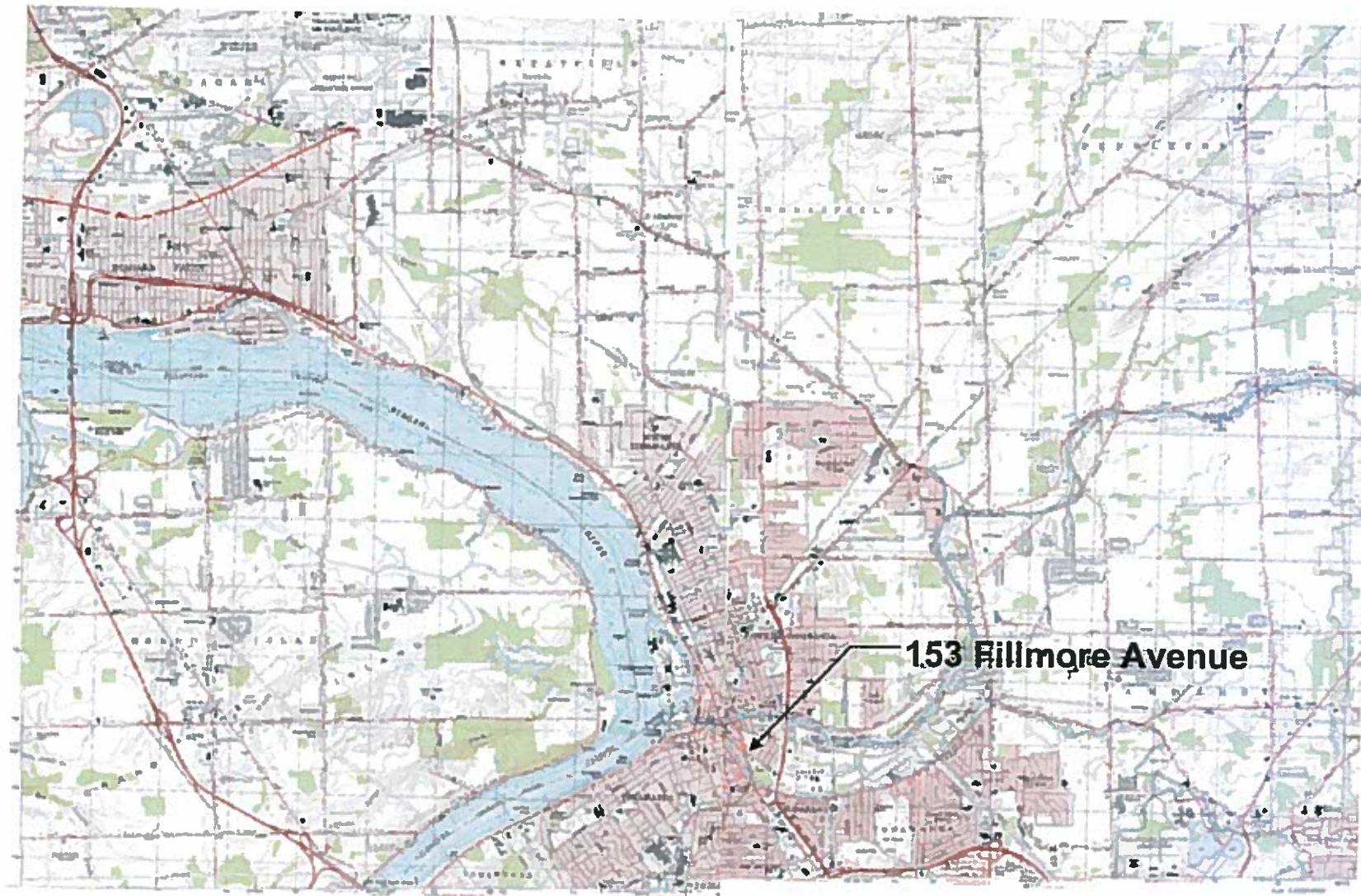


SECTION 5 - CONCLUSIONS

1. The volatile organic analytical 2015 test results detected concentrations of vinyl chloride (MW-2, MW-7, and MW-8), cis-1,2-dichloroethene (MW-8), benzene (MW-2 and MW-8) that exceeded groundwater quality standards.
2. The semi-volatile organic analytical 2015 test results detected concentrations of benzo(a)anthracene in groundwater sampled from monitoring well MW-7 that exceeded groundwater quality standards.
3. Detected concentrations of inorganic metals in groundwater sampled in 2015 that exceeded groundwater quality standards concentrations include the following: aluminum (MW-1 and MW-2), arsenic (MW-1 and MW-2), cadmium (MW-1 and MW-7); chromium (MW-2), iron (MW-1, MW-2, MW-5, MW-6, MW-7, and MW-8); lead (MW-1, MW-2, MW-5, MW-7); magnesium (MW-1, MW-2, MW-5, and MW-8); manganese (MW-1, MW-2, MW-6, MW-7, and MW-8), thallium (MW-1 and MW-2); and zinc MW-7) that exceeded groundwater quality standards.
4. Based on 2015 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-1 and MW-7. Total VOC concentrations increased in groundwater from monitoring wells MW-2, MW-6, MW-7, and MW-8. Monitoring wells MW-5 remained at non-detectable results.
5. Total VOC concentrations in monitoring wells MW-1, MW-2, MW-7 and MW-8 decreased from total VOC concentrations detected in 2014 73.5 ug/l to 67.2 ug/l as reported in 2015.
6. Trend analysis of total VOC plume increased in size and decreased in total VOC concentrations. Groundwater sampled from monitoring wells MW-1 and MW-2 represent the furthest most westward edge of the VOC plume. From 2009 to 2015, there is a trending decrease in total VOC concentrations from groundwater sampled from monitoring wells MW-1 and MW-2.
7. Trend analysis of semi-volatile parameters indicated increasing and decreasing semi-volatile organic concentrations when comparing data with 2014 test results, which remained below groundwater quality standards.

FIGURES





Scale 1:25,000

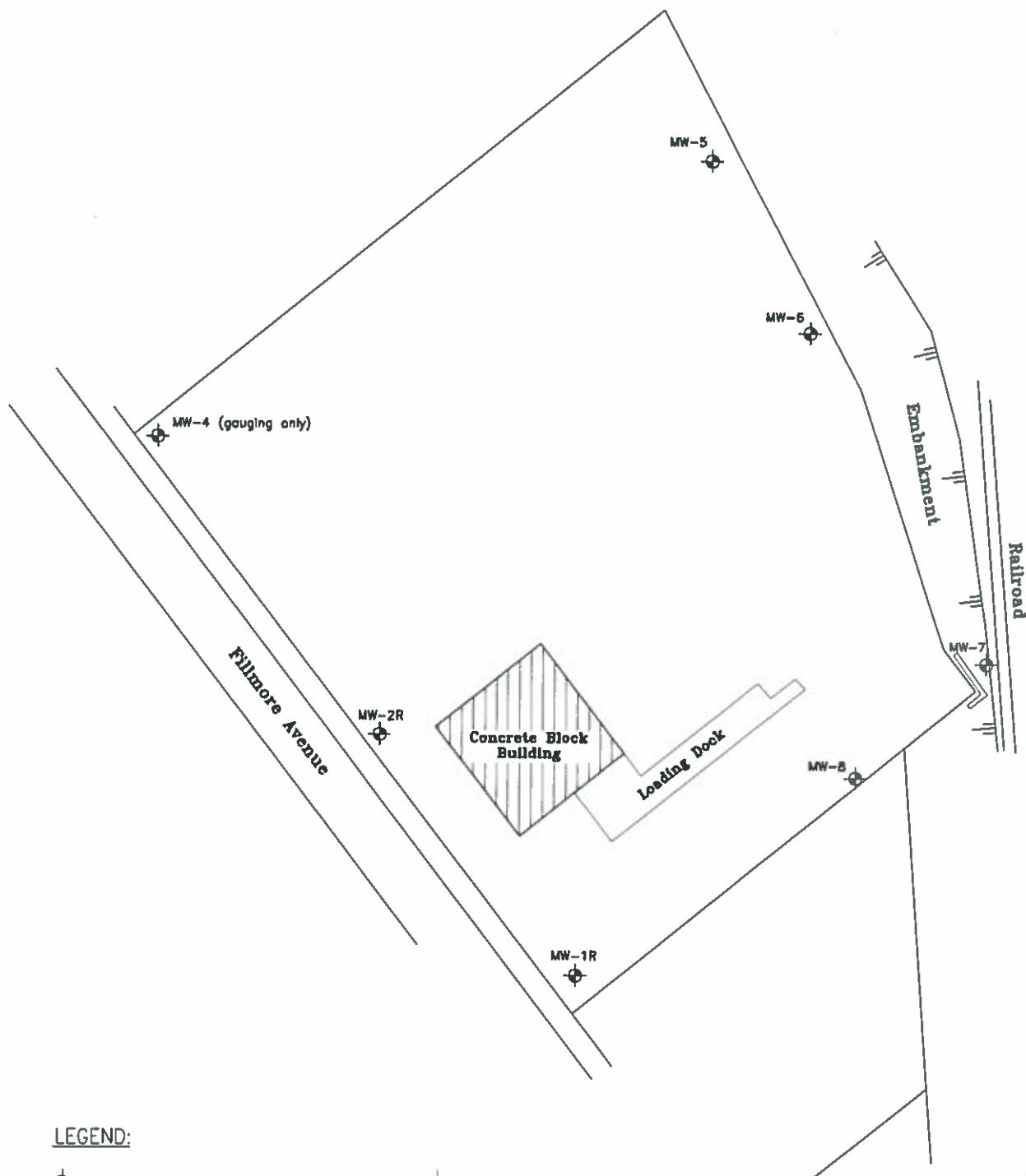


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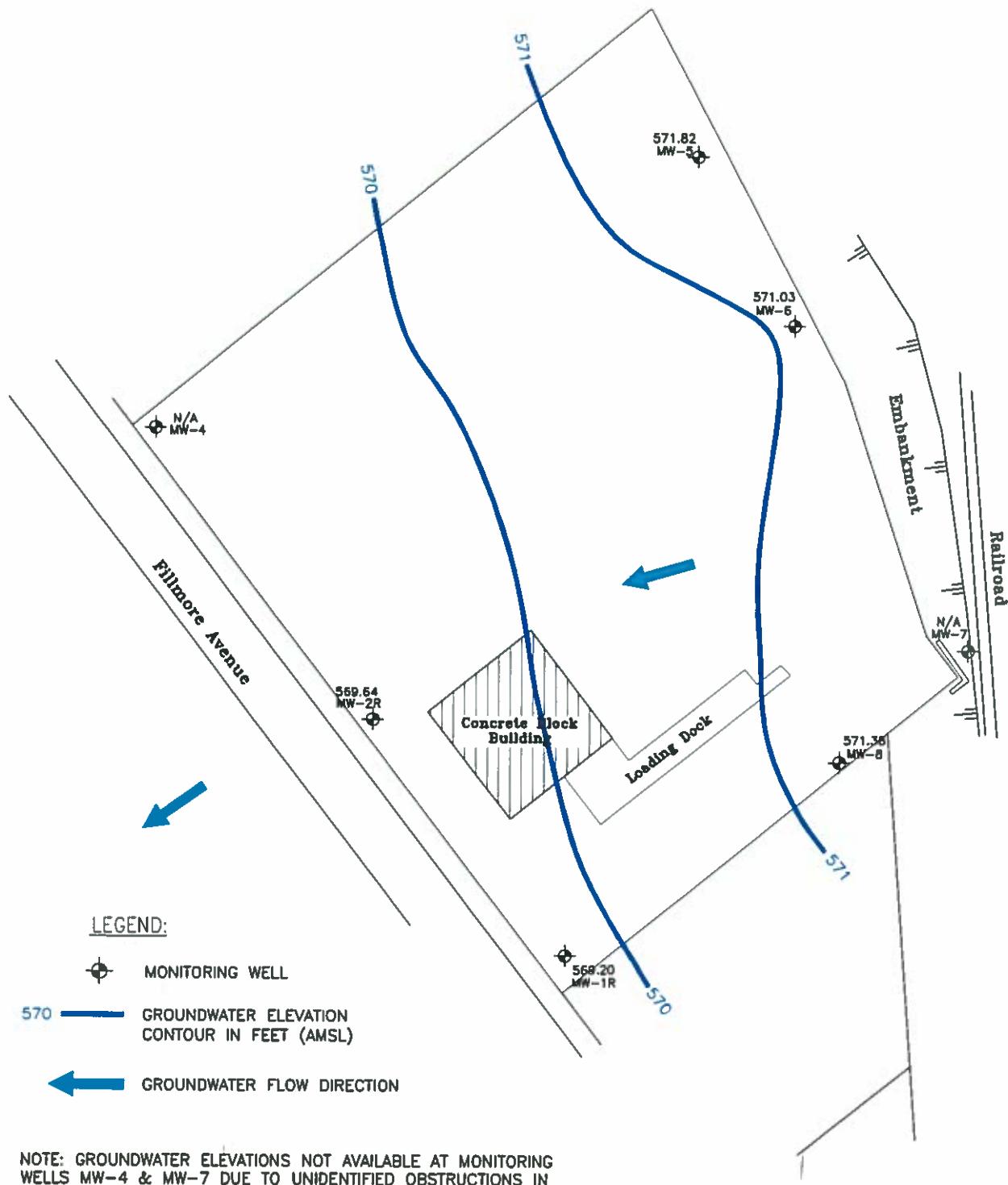
153 FILLMORE AVENUE
TONAWANDA, NEW YORK
GROUNDWATER MONITORING REPORT

FIGURE 1
SITE LOCATION MAP



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

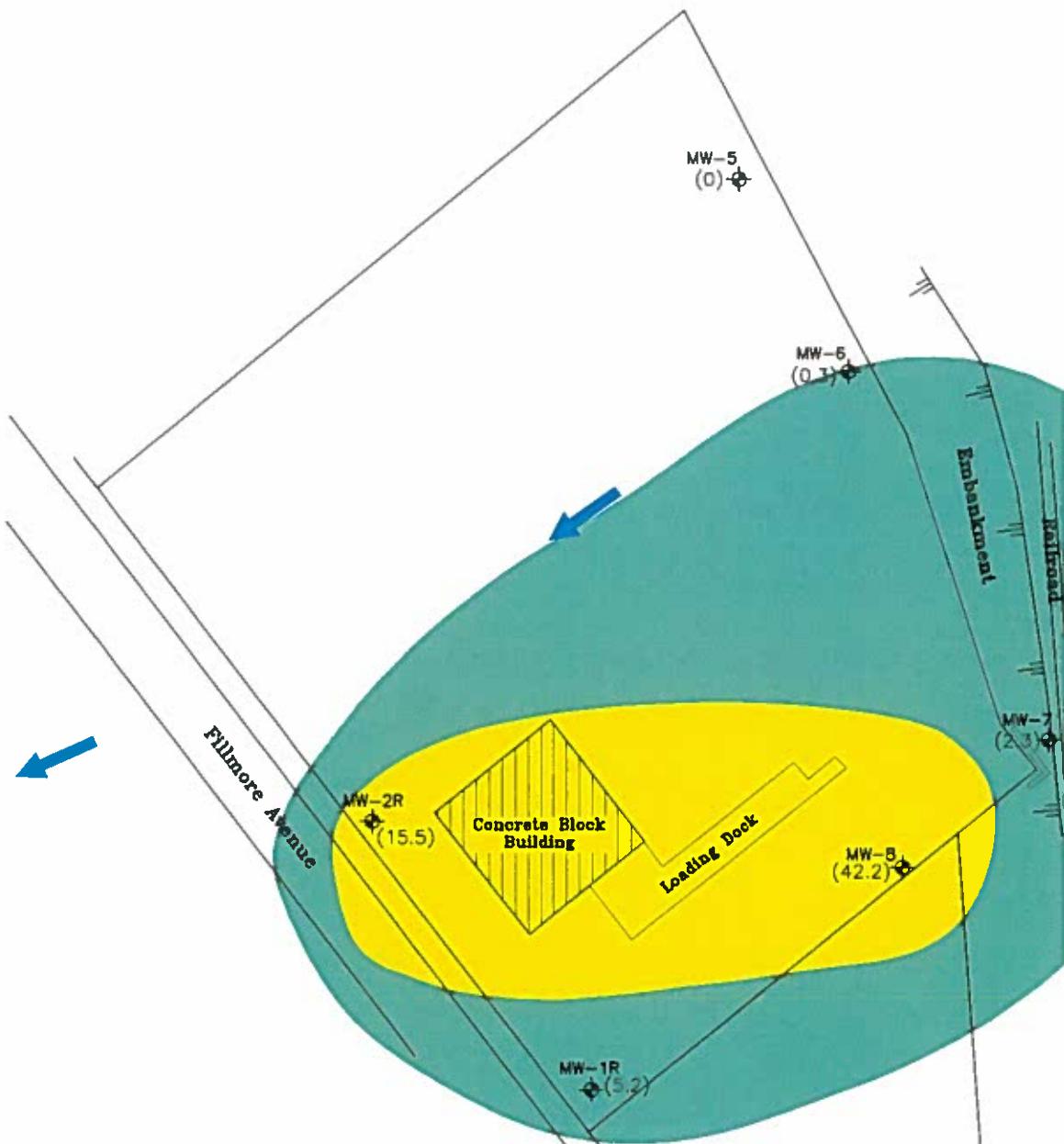
Job Number 86-12199
Revision A
Date 12 15
Figure 02



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

Job Number 86-12199
Revision A
Date 12 15

Figure 03



TABLES



TABLE 1
153 Fillmore Avenue Site
City of Tonawanda
2015 Field Groundwater Parameters

Parameter	Monitoring Well Location					
	MW-1	MW-2	MW-5	MW-6	MW-7	MW-8
Temperature (°C)	19.63	15.11	15.74	16.54	15.45	14.40
pH	7.14	7.18	6.84	7.04	7.07	6.72
Conductivity (mS/cm)	1.24	1.46	1.32	0.959	1.14	1.21
Dissolved Oxygen (mg/L)	6.11	8.75	7.35	5.52	7.67	5.23
Turbidity (NTUs) ⁽¹⁾	NA	NA	387.0	186	110	11
ORP (mV)	-111	-82	-221	-87	-71	-81

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

TABLE 2A
Monitoring Well MW-1
Groundwater Monitoring Well Data
153 Fillmore Avenue Site

TABLE 2B
Monitoring Well MW-2
Groundwater Monitoring Well Data
153 Fillmore Avenue Site

TABLE 2C
Monitoring Well MW-5
Groundwater Monitoring Well Data
153 Fillmore Avenue Site

TABLE 2D
Monitoring Well MW-6
Groundwater Monitoring Well Data
153 Fillmore Avenue Site

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	07/23/15
Well Depth Top PVC	feet	23.5	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	562.76
Depth to Static Water	feet	4.86	16.50	14.70	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Height of Water	feet	18.64	7.00	8.80	(1)	(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	586.26
Static Water Level Elevation	feet	581.4	569.76	571.56	(1)	(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	1.0
Water Volume	gallon	1.68	0.63	0.79	(1)	(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	3.00
Purging Method	-	-	Peristaltic Pump								

Note: I. 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 2F
Monitoring Well MW-8
Groundwater Monitoring Well Data
153 Fillmore Avenue Site

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 ¹	Units	08/07/01	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14	07/23/15
			08/07/01	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14	07/23/15
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	ND	ND	3 J	3 J	16	1.3	1.3	1.1
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Acetone	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	2.3 J	ND	0.46J	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	47	5.5	13	23	55	13	13	4.1
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Benzene	1.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Toluene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Total VOCs		µg/L	47.0	5.5	16.0	26.0	73.3	14.3	14.8	5.2
Total VOCs		mg/L	0.047	0.006	0.016	0.026	0.073	0.014	0.015	0.005

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 ¹	Units	08/07/01	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14	07/23/15
			08/07/01	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14	07/23/15
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	ND	82	64	28	21	7.8	6.5	9.8
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Acetone	50.0	µg/L	ND	ND	ND	11	ND	ND	ND	ND
1,1-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	4 J	ND	ND	ND	ND	ND	ND
1,1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	ND	ND	54	12	2.7 J	1.4	1.3	1.5
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Benzene	1.0	µg/L	ND	6.7	ND	5 J	2.9 J	2.3	1.9	4.2
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Toluene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND	0.36 J	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
m,p-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Styrene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Total VOCs		µg/L	0	92.7	118.0	56.0	26.6	11.5	10.1	15.5
Total VOCs		mg/L	0.000	0.093	0.118	0.056	0.027	0.012	0.010	0.016

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 ¹	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	07/23/15
Chloromethane	NE	µg/L	-	ND								
Vinyl chloride	2.0	µg/L	ND									
Bromomethane	5.0	µg/L	-	ND								
Chloroethane	5.0	µg/L	-	ND								
Acetone	50.0	µg/L	30	ND								
1,1-Dichloroethene	5.0	µg/L	ND									
Carbon disulfide	60.0	µg/L	-	ND								
Methylene chloride	5.0	µg/L	-	ND								
trans-1,2-Dichloroethene	5.0	µg/L	ND									
1,1-Dichloroethane	5.0	µg/L	ND									
2-Butanone	50.0	µg/L	-	ND								
cis-1,2-Dichloroethene	5.0	µg/L	ND									
Chloroform	7.0	µg/L	-	ND								
1,1,1-Trichloroethane	5.0	µg/L	-	ND								
Carbon tetrachloride	5.0	µg/L	-	ND								
Benzene	1.0	µg/L	2	ND								
1,2-Dichloroethane	0.6	µg/L	-	ND								
Trichloroethene	5.0	µg/L	ND									
1,2-Dichloropropane	1.0	µg/L	-	ND								
Bromodichloromethane	50.0	µg/L	-	ND								
4-Methyl-2-pentanone	NE	µg/L	-	ND								
cis-1,3-Dichloropropene	0.4	µg/L	-	ND								
Toluene	5.0	µg/L	ND									
trans-1,3-Dichloropropene	0.4	µg/L	-	ND								
1,1,2-Trichloroethane	1.0	µg/L	-	ND								
2-Hexanone	50.0	µg/L	-	ND								
Tetrachloroethene	5.0	µg/L	ND									
Dibromochloromethane	50.0	µg/L	-	ND								
Chlorobenzene	5.0	µg/L	-	ND								
Ethylbenzene	5.0	µg/L	ND									
m,p-Xylene	5.0	µg/L	ND									
o-Xylene	5.0	µg/L	ND									
Styrene	5.0	µg/L	ND									
Bromoform	50.0	µg/L	-	ND								
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND								
Total VOCs		µg/L	32.0	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	0.000

I. 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 ¹	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	07/23/15
			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	07/23/15
Chloromethane	NE	µg/L	-	ND								
Vinyl chloride	2.0	µg/L	ND	ND	99	42	5	ND	ND	ND	ND	0.3
Bromomethane	5.0	µg/L	-	ND								
Chloroethane	5.0	µg/L	-	ND								
Acetone	50.0	µg/L	ND									
1,1-Dichloroethene	5.0	µg/L	ND									
Carbon disulfide	60.0	µg/L	-	ND								
Methylene chloride	5.0	µg/L	-	ND								
trans-1,2-Dichloroethene	5.0	µg/L	ND	ND	ND	3 J	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND									
2-Butanone	50.0	µg/L	-	ND								
cis-1,2-Dichloroethene	5.0	µg/L	ND	ND	240	51	2 J	ND	ND	ND	ND	ND
Chloroform	7.0	µg/L	-	ND								
1,1,1-Trichloroethane	5.0	µg/L	-	ND								
Carbon tetrachloride	5.0	µg/L	-	ND								
Benzene	1.0	µg/L	ND									
1,2-Dichloroethane	0.6	µg/L	-	ND								
Trichloroethene	5.0	µg/L	ND	ND	ND	2 J	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND								
Bromodichloromethane	50.0	µg/L	-	ND								
4-Methyl-2-pentanone	NE	µg/L	-	ND								
cis-1,3-Dichloropropene	0.4	µg/L	-	ND								
Toluene	5.0	µg/L	ND									
trans-1,3-Dichloropropene	0.4	µg/L	-	ND								
1,1,2-Trichloroethane	1.0	µg/L	-	ND								
2-Hexanone	50.0	µg/L	-	ND								
Tetrachloroethene	5.0	µg/L	ND									
Dibromochloromethane	50.0	µg/L	-	ND								
Chlorobenzene	5.0	µg/L	-	ND								
Ethylbenzene	5.0	µg/L	ND									
m,p-Xylene	5.0	µg/L	5	ND								
o-Xylene	5.0	µg/L	ND									
Styrene	5.0	µg/L	ND									
Bromoform	50.0	µg/L	-	ND								
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND								
Total VOCs		µg/L	5.0	0	339.0	98.0	7.1	0	0	0	0	0.3
Total VOCs		mg/L	0.005	0.000	0.339	0.098	0.007	0.000	0.000	0.000	0.000	0.000

I. 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 ¹	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	07/23/15
			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	07/23/15
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Vinyl chloride	2.0	µg/L	10	40 J	ND	2 J	ND	ND	17	*NA	ND	2.3
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Acetone	50.0	µg/L	ND	ND	ND	ND	ND	27	29	*NA	ND	ND
1,1-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	10 J	ND	ND	ND	ND	ND	*NA	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	*NA	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	150	270	ND	14	45	9.4	29	*NA	2.0	ND
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Benzene	1.0	µg/L	36	ND	ND	1 J	ND	ND	ND	*NA	0.72J	ND
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Trichloroethene	5.0	µg/L	19	10 J	ND	5.2	ND	3 J	3.9 J	*NA	1.4	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Toluene	5.0	µg/L	660	ND	ND	ND	ND	ND	ND	*NA	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Tetrachloroethene	5.0	µg/L	ND	10 J	ND	ND	ND	ND	2.5 J	*NA	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Ethylbenzene	5.0	µg/L	690	ND	ND	2 J	ND	ND	ND	*NA	0.9J	ND
m,p-Xylene	5.0	µg/L	660	ND	ND	ND	ND	ND	ND	*NA	ND	ND
o-Xylene	5.0	µg/L	440	ND	ND	ND	ND	ND	ND	*NA	1.4J	ND
Styrene	5.0	µg/L	16	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Total VOCs		µg/L	2,681.0	340.0	0	24.2	45.0	39.4	81.4	0.0	6.4	2.3
Total VOCs		mg/L	2.681	0.340	0.000	0.024	0.045	0.039	0.081	0.000	0.006	0.002

I. 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 ¹	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	07/23/15
			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	07/23/15
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	54	190	160	190	240	120	110	ND	30	35
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	7	15	20 J	20 J	10 J	11	4.9	ND	1.5	1.0
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	31	160	230	370	260	52	22	ND	8.6	5.3
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	4	ND	ND	ND	ND	3 J	2.4 J	ND	2.1	2.6
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	2 J	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	6	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	43.9
Total VOCs		mg/L	0.102	0.367	0.410	0.580	0.510	0.186	0.144	0.000	0.042	0.044

I. 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 ¹	Units	08/08/01	07/23/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14	07/23/15
Phenol	1.0	µg/L	-	ND						
bis(2-chloroethyl) ether	1.0	µg/L	-	ND						
2-Chlorophenol	NE	µg/L	-	ND						
1,3-Dichlorobenzene	3.0	µg/L	-	ND						
1,4-Dichlorobenzene	3.0	µg/L	-	ND						
2-Methylphenol	NE	µg/L	-	ND						
N-Nitrosodi-n-propylamine	NE	µg/L	-	ND						
Hexachloroethane	5.0	µg/L	-	ND						
Nitrobenzene	0.4	µg/L	-	ND						
Isophorone	50.0	µg/L	-	ND						
2-Nitrophenol	NE	µg/L	-	ND						
2,4-Dimethylphenol	50.0	µg/L	-	ND						
bis(2-chloroethoxy) methane	5.0	µg/L	-	ND						
2,4-Dichlorophenol	1.0	µg/L	-	ND						
1,2,4-Trichlorobenzene	NE	µg/L	-	ND						
Naphthalene	10.0	µg/L	ND							
4-Chloroaniline	5.0	µg/L	-	ND						
Hexachlorobutadiene	0.5	µg/L	-	ND						
4-Chloro-3-methylphenol	NE	µg/L	-	ND						
2-Methylnaphthalene	NE	µg/L	ND							
Hexachlorocyclopentadiene	5.0	µg/L	-	ND						
2,4,6-Trichlorophenol	NE	µg/L	-	ND						
2,4,5-Trichlorophenol	NE	µg/L	-	ND						
2-Chloronaphthalene	10.0	µg/L	-	ND						
2-Nitroaniline	5.0	µg/L	-	ND						
Dimethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	0.93J	ND
Acenaphthylene	NE	µg/L	-	ND						
2,6-Dinitrotoluene	5.0	µg/L	-	ND						
3-Nitroaniline	5.0	µg/L	-	ND						
Acenaphthene	20.0	µg/L	ND	ND	ND	ND	ND	1.2	ND	ND
2,4-Dinitrophenol	10.0	µg/L	-	ND						
4-Nitrophenol	NE	µg/L	-	ND						
Dibenzofuran	50.0	µg/L	ND							
2,4-Dinitrotoluene	5.0	µg/L	-	ND						
Diethyl phthalate	50.0	µg/L	-	ND						
4-Chlorophenyl phenyl ether	NE	µg/L	-	ND						
Fluorene	50.0	µg/L	ND							
4-Nitroaniline	5.0	µg/L	-	ND						
4,6-Dinitro-2-methylphenol	NE	µg/L	-	ND						
N-Nitrosodiphenylamine	50.0	µg/L	-	ND						
4-Bromophenyl phenyl ether	NE	µg/L	-	ND						
Hexachlorobenzene	0.04	µg/L	-	ND						
Pentachlorophenol	1.0	µg/L	-	ND						
Phenanthrene	50.0	µg/L	ND							
Anthracene	50.0	µg/L	ND							
Carbazole	NE	µg/L	-	ND						
Di-n-butyl phthalate	50.0	µg/L	-	2 J	ND	ND	ND	ND	ND	0.48J
Fluoranthene	50.0	µg/L	ND							
Pyrene	50.0	µg/L	ND							
Butyl benzyl phthalate	50.0	µg/L	-	ND						
3,3'-Dichlorobenzidine	5.0	µg/L	-	ND						
Benz(a)anthracene	0.002	µg/L	ND							
Chrysene	0.002	µg/L	ND							
bis(2-ethylhexyl) phthalate	5.0	µg/L	ND	8 J	1 J	62 B	23 J	4.8	1.7J	ND
Di-n-octyl phthalate	50.0	µg/L	-	ND						
Benz(b)fluoranthene	0.002	µg/L	-	ND						
Benz(k)fluoranthene	0.002	µg/L	-	ND						
Benz(a)pyrene	NE	µg/L	-	ND						
Indeno[1,2,3-cd]pyrene	0.002	µg/L	-	ND						
Dibenz(a,h)anthracene)	NE	µg/L	-	ND						
Benz(g,h,i) perlyene	NE	µg/L	-	ND						
(3+4)-Methylphenol	NE	µg/L	-	ND						
bis(2-chloroisopropyl) ether	NE	µg/L	-	ND						

I. 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 ¹	Units	08/08/01	07/23/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14	07/23/15
Phenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	0.34J
bis(2-chloroethyl) ether	1.0	µg/L	-	ND						
2-Chlorophenol	NE	µg/L	-	ND						
1,3-Dichlorobenzene	3.0	µg/L	-	ND						
1,4-Dichlorobenzene	3.0	µg/L	-	ND						
2-Methylphenol	NE	µg/L	-	ND						
N-Nitrosodi-n-propylamine	NE	µg/L	-	ND						
Hexachloroethane	5.0	µg/L	-	ND						
Nitrobenzene	0.4	µg/L	-	ND						
Isophorone	50.0	µg/L	-	ND						
2-Nitrophenol	NE	µg/L	-	ND						
2,4-Dimethylphenol	50.0	µg/L	-	ND						
bis(2-chloroethoxy) methane	5.0	µg/L	-	ND						
2,4-Dichlorophenol	1.0	µg/L	-	ND						
1,2,4-Trichlorobenzene	NE	µg/L	-	ND						
Naphthalene	10.0	µg/L	ND							
4-Chloroaniline	5.0	µg/L	-	ND						
Hexachlorobutadiene	0.5	µg/L	-	ND						
4-Chloro-3-methylphenol	NE	µg/L	-	ND						
2-Methylnaphthalene	NE	µg/L	ND							
Hexachlorocyclopentadiene	5.0	µg/L	-	ND						
2,4,6-Trichlorophenol	NE	µg/L	-	ND						
2,4,5-Trichlorophenol	NE	µg/L	-	ND						
2-Chloro-phthalene	10.0	µg/L	-	ND						
2-Nitroaniline	5.0	µg/L	-	ND						
Dimethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	1.2J
Acenaphthylene	NE	µg/L	-	ND						
2,6-Dinitrotoluene	5.0	µg/L	-	ND						
3-Nitroaniline	5.0	µg/L	-	ND						
Acenaphthene	20.0	µg/L	ND	1 J	ND	ND	2.3 J	ND	1.0	0.78J
2,4-Dinitrophenol	10.0	µg/L	-	ND						
4-Nitrophenol	NE	µg/L	-	ND						
Dibenzofuran	50.0	µg/L	ND							
2,4-Dinitrotoluene	5.0	µg/L	-	ND						
Diethyl phthalate	50.0	µg/L	-	ND						
4-Chlorophenyl phenyl ether	NE	µg/L	-	ND						
Fluorene	50.0	µg/L	ND							
4-Nitroaniline	5.0	µg/L	-	ND						
4,6-Dinitro-2-methylphenol	NE	µg/L	-	ND						
N-Nitrosodiphenylamine	50.0	µg/L	-	ND						
4-Bromophenyl phenyl ether	NE	µg/L	-	ND						
Hexachlorobenzene	0.04	µg/L	-	ND						
Pentachlorophenol	1.0	µg/L	-	ND						
Phenanthrene	50.0	µg/L	ND							
Anthracene	50.0	µg/L	ND							
Carbazole	NE	µg/L	-	ND						
Di-n-butyl phthalate	50.0	µg/L	-	2 J	ND	ND	1.2 J	ND	0.4J	0.34J
Fluoranthene	50.0	µg/L	ND							
Pyrene	50.0	µg/L	ND	ND	ND	ND	1.1 J	ND	ND	ND
Butyl benzyl phthalate	50.0	µg/L	-	ND						
3,3'-Dichlorobenzidine	5.0	µg/L	-	ND						
Benz(a)anthracene	0.002	µg/L	ND							
Chrysene	0.002	µg/L	ND							
bis(2-ethylhexyl) phthalate	5.0	µg/L	ND	9 J	30 J	65 B	25	ND	1.9J	ND
Di-n-octyl phthalate	50.0	µg/L	-	ND						
Benzo(b)fluoranthene	0.002	µg/L	-	ND						
Benzo(k)fluoranthene	0.002	µg/L	-	ND						
Benzo(a)pyrene	NE	µg/L	-	ND						
Indeno(1,2,3-cd)pyrene	0.002	µg/L	-	ND						
Dibenz(a,h)anthracene	NE	µg/L	-	ND						
Benzo(g,h,i)perylene	NE	µg/L	-	ND						
(3+4)-Methylphenol	NE	µg/L	-	ND						
bis(2-chloroisopropyl) ether	NE	µg/L	-	ND						

I. 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 analytic 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 ¹		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	07/23/15
	Standard	Guidance Value											
Phenol	1.0	μg/L	-	ND									
bis(2-chloroethyl) ether	1.0	μg/L	-	ND									
2-Chlorophenol	NE	μg/L	-	ND									
1,3-Dichlorobenzene	3.0	μg/L	-	ND									
1,4-Dichlorobenzene	3.0	μg/L	-	ND									
2-Methylphenol	NE	μg/L	-	ND									
N-Nitrosodi-n-propylamine	NE	μg/L	-	ND									
Hexachloroethane	5.0	μg/L	-	ND									
Nitrobenzene	0.4	μg/L	-	ND									
Isophorone	50.0	μg/L	-	ND									
2-Nitrophenol	NE	μg/L	ND	ND	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	ND	ND
bis(2-chloroethoxy) methane	5.0	μg/L	-	ND									
2,4-Dichlorophenol	1.0	μg/L	-	ND									
1,2,4-Trichlorobenzene	NE	μg/L	-	ND									
Naphthalene	10.0	μg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	5.0	μg/L	-	ND									
Hexachlorobutadiene	0.5	μg/L	-	ND									
4-Chloro-3-methylphenol	NE	μg/L	-	ND									
2-Methylnaphthalene	NE	μg/L	800	ND									
Hexachlorocyclopentadiene	5.0	μg/L	-	ND									
2,4,6-Trichlorophenol	NE	μg/L	-	ND									
2,4,5-Trichlorophenol	NE	μg/L	-	ND									
2-Chloro-phthalene	10.0	μg/L	-	ND									
2-Nitroaniline	5.0	μg/L	-	ND									
Dimethyl phthalate	50.0	μg/L	-	ND	1.2 J	ND							
Acenaphthylene	NE	μg/L	-	ND	0.59 J	0.43							
2,6-Dinitrotoluene	5.0	μg/L	-	ND									
3-Nitroaniline	5.0	μg/L	-	ND									
Acenaphthene	20.0	μg/L	120	ND	3 J	ND	ND	2 J	3.4 J	1.0	3.0	2.4	
2,4-Dinitrophenol	10.0	μg/L	-	ND									
4-Nitrophenol	NE	μg/L	-	ND									
Dibenzofuran	50.0	μg/L	72	ND									
2,4-Dinitrotoluene	5.0	μg/L	-	ND									
Diethyl phthalate	50.0	μg/L	-	ND									
4-Chlorophenyl phenyl ether	NE	μg/L	-	ND									
Fluorene	50.0	μg/L	200	ND									
4-Nitroaniline	5.0	μg/L	-	ND									
4,6-Dinitro-2-methylphenol	NE	μg/L	-	ND									
N-Nitrosodiphenylamine	50.0	μg/L	-	ND									
4-Bromophenyl phenyl ether	NE	μg/L	-	ND									
Hexachlorobenzene	0.04	μg/L	-	ND									
Pentachlorophenol	1.0	μg/L	-	ND									
Phenanthrene	50.0	μg/L	530	ND									
Amtlucene	50.0	μg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	NE	μg/L	-	ND									
Di-n-butyl phthalate	50.0	μg/L	-	ND	ND	ND	3 J	ND	ND	ND	ND	0.48 J	0.60
Fluoranthene	50.0	μg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	50.0	μg/L	64	ND									
Butyl benzyl phthalate	50.0	μg/L	-	ND									
3,3'-Dichlorobenzidine	5.0	μg/L	-	ND									
Benz(a)anthracene	0.002	μg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	0.002	μg/L	ND	ND	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	ND	
Di-n-octyl phthalate	50.0	μg/L	-	5 J	ND								
Benz(b)fluoranthene	0.002	μg/L	-	ND									
Benz(k)fluoranthene	0.002	μg/L	-	ND									
Benz(a)pyrene	NE	μg/L	-	ND									
Indeno[1,2,3-cd]pyrene	0.002	μg/L	-	ND									
Dibenz(a,h)anthracene	NE	μg/L	-	ND									
Benz(g,h,i) perylene	NE	μg/L	-	ND									
(3+4)-Methylphenol	NE	μg/L	-	ND									
bis(2-chloroisopropyl) ether	NE	μg/L	-	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 ¹		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	07/23/15
	Standard	Units											
Phenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
bis(2-chloroethyl) ether	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
2-Chlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
1,3-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
2-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
N-Nitrosodi-n-propylamine	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Hexachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Nitrobenzene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Isophorone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
2-Nitrophenol	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
2,4-Dimethylphenol	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
bis(2-chlorooxy) methane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
2,4-Dichlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
1,2,4-Trichlorobenzene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Naphthalene	10.0	µg/L	3,000	ND	ND	ND	ND	ND	ND	*NA	ND	0.81	
4-Chloroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Hexachlorobutadiene	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
4-Chloro-3-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
2-Methylnaphthalene	NE	µg/L	1,100	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Hexachlorocyclopentadiene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
2,4,6-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
2,4,5-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
2-Chloro-phthalene	10.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
2-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Dimethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	1.1 J	ND	
Acenaphthylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	0.36	
2,6-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
3-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Acenaphthene	20.0	µg/L	590	ND	ND	ND	ND	ND	ND	9.6 J	*NA	ND	0.54
2,4-Dinuorophenol	10.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
4-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Dibenzofuran	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
2,4-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Diethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	0.47 J	ND	
4-Chlorophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Fluorene	50.0	µg/L	430	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
4-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
N-Nitrosodiphenylamine	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
4-Bromophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Hexachlorobenzene	0.04	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Pentachlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Phenanthrene	50.0	µg/L	1,100	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Anthracene	50.0	µg/L	350	ND	ND	ND	ND	ND	ND	*NA	0.45 J	ND	
Carbazole	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Di-n-butyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	0.74 J	0.62	
Fluoranthene	50.0	µg/L	270	ND	ND	ND	ND	ND	ND	9.4 J	*NA	ND	ND
Pyrene	50.0	µg/L	480	3 J	ND	ND	ND	ND	ND	28	*NA	ND	ND
Butyl benzyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
3,3'-Dichlorobenzidine	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Benz(a)anthracene	0.002	µg/L	150	1 J	ND	ND	ND	ND	ND	16	*NA	ND	0.26
Chrysene	0.002	µg/L	140	1 J	ND	ND	ND	ND	ND	17	*NA	ND	ND
bis(2-ethylhexyl) phthalate	5.0	µg/L	ND	ND	ND	82	2 J	7 J	8.6 J	*NA	1.6 J	ND	
Di-n-octyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Benzo(b)fluoranthene	0.002	µg/L	-	1 J	ND	ND	ND	ND	ND	16	*NA	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	16	*NA	ND	ND
Benzo(a)pyrene	NE	µg/L	-	2 J	ND	ND	ND	ND	ND	29	*NA	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Dibenz(a,h)anthracene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Benzo(g,h,i) perlylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	0.16	
(3+4)-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	
bis(2-chloroisopropyl) ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	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 ¹	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	07/23/15
Phenol	1.0	µg/L	-	ND								
bis(2-chloroethyl) ether	1.0	µg/L	-	ND								
2-Chlorophenol	NE	µg/L	-	ND								
1,3-Dichlorobenzene	3.0	µg/L	-	ND								
1,4-Dichlorobenzene	3.0	µg/L	-	ND								
2-Methylphenol	NE	µg/L	-	ND								
N-Nitrosodi-n-propylamine	NE	µg/L	-	ND								
Hexachloroethane	5.0	µg/L	-	ND								
Nitrobenzene	0.4	µg/L	-	ND								
Isophorone	50.0	µg/L	-	ND								
2-Nitrophenol	NE	µg/L	ND									
2,4-Dimethylphenol	50.0	µg/L	ND									
bis(2-chlorooxy) methane	5.0	µg/L	-	ND								
2,4-Dichlorophenol	1.0	µg/L	-	ND								
1,2,4-Trichlorobenzene	NE	µg/L	-	ND								
Naphthalene	10.0	µg/L	ND									
4-Chloroniline	5.0	µg/L	-	ND								
Hexachlorobutadiene	0.5	µg/L	-	ND								
4-Chloro-3-methylphenol	NE	µg/L	-	ND								
2-Methylnaphthalene	NE	µg/L	ND									
Hexachlorocyclopentadiene	5.0	µg/L	-	ND								
2,4,6-Trichlorophenol	NE	µg/L	-	ND								
2,4,5-Trichlorophenol	NE	µg/L	-	ND								
2-Chloro-phthalene	10.0	µg/L	-	ND								
2-Nitroaniline	5.0	µg/L	-	ND								
Dimethyl phthalate	50.0	µg/L	-	ND	I.3 J							
Acenaphthylene	NE	µg/L	-	ND								
2,6-Dinitrotoluene	5.0	µg/L	-	ND								
3-Nitroaniline	5.0	µg/L	-	ND								
Acenaphthene	20.0	µg/L	13	4 J	3 J	2 J	2 J	1 J	1.4 J	ND	2.2	1.4
2,4-Dinitrophenol	10.0	µg/L	-	ND								
4-Nitrophenol	NE	µg/L	-	ND								
Dibenzofuran	50.0	µg/L	ND									
2,4-Dinitrotoluene	5.0	µg/L	-	ND								
Diethyl phthalate	50.0	µg/L	-	ND								
4-Chlorophenyl phenyl ether	NE	µg/L	-	ND								
Fluorene	50.0	µg/L	ND									
4-Nitroaniline	5.0	µg/L	-	ND								
4,6-Dinitro-2-methylphenol	NE	µg/L	-	ND								
N-Nitrosodiphenylamine	50.0	µg/L	-	ND								
4-Bromophenyl phenyl ether	NE	µg/L	-	ND								
Hexachlorobenzene	0.04	µg/L	-	ND								
Pentachlorophenol	1.0	µg/L	-	ND								
Phenanthrene	50.0	µg/L	6	ND								
Anthracene	50.0	µg/L	ND									
Carbazole	NE	µg/L	-	ND								
Di-n-butyl phthalate	50.0	µg/L	-	ND	ND	4 J	2 J	ND	ND	ND	0.57 J	0.64
Fluoranthene	50.0	µg/L	8	ND								
Pyrene	50.0	µg/L	9	ND								
Butyl benzyl phthalate	50.0	µg/L	-	ND								
3,3'-Dichlorobenzidine	5.0	µg/L	-	ND								
Benz(a)anthracene	0.002	µg/L	ND									
Chrysene	0.002	µg/L	ND									
bis(2-ethylhexyl) phthalate	5.0	µg/L	85	ND	ND	8 J	3 J	4 J	ND	ND	2.3 J	ND
Di-n-octyl phthalate	50.0	µg/L	-	ND								
Benzo(b)fluoranthene	0.002	µg/L	-	ND								
Benzo(k)fluoranthene	0.002	µg/L	-	ND								
Benzo(a)pyrene	NE	µg/L	-	ND								
Indeno[1,2,3-cd]pyrene	0.002	µg/L	-	ND								
Dibenzo(a,h)anthracene	NE	µg/L	-	ND								
Benzo(g,h,i)perylene	NE	µg/L	-	ND								
(3+4)-Methylphenol	NE	µg/L	-	ND								
bis(2-chloroisopropyl) ether	NE	µg/L	-	ND								

I. 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 ¹	Units	08/08/01	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14	07/23/15
Aluminum	2,000	µg/L	-	4,760	48,000	37,300	215,000	170,000	62,000	22,000
Antimony	6	µg/L	-	ND	ND	ND	ND	3.1	1.4	3.0
Arsenic	50	µg/L	11	ND	23	36	184	150	22	320
Barium	2,000	µg/L	301	265	590	545	1,920	1,400	840	540
Beryllium	3	µg/L	-	ND	ND	ND	7.62	7.50	5.40	ND
Cadmium	10	µg/L	ND	ND	10.4	ND	151	ND	28	10
Calcium	NE	µg/L	-	188,000	635,000	400,000	1,130,000	830,000	540,000	240,000
Chromium	50	µg/L	ND	ND	67.7	58.2	287	310	100	35
Cobalt	NE	µg/L	-	ND	49	35.5	160	200	77	28
Copper	1,000	µg/L	-	16.6	77.7	89.5	437	570	220	88
Iron	600	µg/L	-	22,200	112,000	81,800	311,000	420,000	210,000	170,000
Lead	50	µg/L	7	3.78	80	62	518	200	38	54
Magnesium	35,000	µg/L	-	35,800	127,000	61,400	226,000	210,000	130,000	44,000
Manganese	600	µg/L	-	2,250	7,410	5,100	9,570	16,000	9,300	4,200
Mercury	0.7	µg/L	ND	ND	0.22	ND	0.52	0.54	0.23	0.058 J
Nickel	200	µg/L	-	ND	121	78.2	436	410	150	65
Potassium	NE	µg/L	-	4,650	12,600	12,400	51,100	26,000	16,000	7,400
Selenium	10	µg/L	-	ND	3.9	ND	ND	ND	ND	ND
Silver	50	µg/L	-	ND	ND	ND	ND	ND	7.2 J	ND
Sodium	NE	µg/L	-	79,500	71,300	81,000	54,000	45,000	77,000	78,000
Thallium	0.5	µg/L	-	ND	ND	ND	ND	2.6	ND	0.78 J
Vanadium	NE	µg/L	-	ND	102	87	343	360	130	55
Zinc	5,000	µg/L	-	28.1	402	307	1,310	1,500	920	350

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 ¹	Units	08/08/01	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14	07/23/15
Aluminum	2,000	µg/L	-	3,250	98,500	35,400	265,000	34,000	34,000	31,000
Antimony	6	µg/L	-	ND	ND	ND	ND	1.5	0.84 J	2.3 J
Arsenic	50	µg/L	5	ND	17	32	297	44	16	100
Barium	2,000	µg/L	73	261	2,330	724	3,890	1,000	880	730
Beryllium	3	µg/L	-	ND	5	ND	8.35	ND	1.4 J	ND
Cadmium	10	µg/L	ND	ND	20	5.32	233	10	ND	ND
Calcium	NE	µg/L	-	213,000	1,240,000	417,000	2,550,000	460,000	370,000	51,000
Chromium	50	µg/L	ND	ND	146	56.2	336	52	62	51
Cobalt	NE	µg/L	-	ND	90	30.6	190	32	32	31
Copper	1,000	µg/L	-	29.1	611	199	1,510	360	220	160
Iron	600	µg/L	-	11,300	165,000	71,700	393,000	83,000	110,000	130,000
Lead	50	µg/L	2	13.1	410	140	1,150	180	40	110
Magnesium	35,000	µg/L	-	53,400	315,000	119,000	706,000	200,000	160,000	160,000
Manganese	600	µg/L	-	490	5,250	2,110	8,930	2,100	1,600	1,400
Mercury	0.7	µg/L	ND	ND	2.8	0.542	2.04	0.67	0.21	0.12 J
Nickel	200	µg/L	-	ND	222	71.6	534	89	87	84
Potassium	NE	µg/L	-	3,580	20,900	11,000	554,000	8,500	8,100	7,200
Selenium	10	µg/L	-	ND	5.6	ND	ND	32	11 J	ND
Silver	50	µg/L	-	ND	ND	ND	ND	ND	6.1 J	ND
Sodium	NE	µg/L	-	56,900	60,500	58,700	514,000	30,000	44,000	55,000
Thallium	0.5	µg/L	-	ND	ND	ND	ND	1.1	ND	0.86 J
Vanadium	NE	µg/L	-	ND	153	76	356	73	64	72
Zinc	5,000	µg/L	-	79.8	2,060	606	4,100	1,200	760	630

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 ¹	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	07/23/15
Aluminum	2,000	µg/L	-	1,440	5,740	6,990	2,640	1,480	161	140	120	920
Antimony	6	µg/L	-	ND	ND	ND	ND	ND	ND	2.3	0.98 J	2.3
Arsenic	50	µg/L	11	ND	ND	ND	ND	ND	ND	1.6	0.86 J	1.3
Barium	2,000	µg/L	2,390	160	666	522	176	239	172	110	110	180
Beryllium	3	µg/L	-	ND								
Cadmium	10	µg/L	22	ND	7	ND	ND	ND	ND	ND	0.72 J	3.7
Calcium	NE	µg/L	-	164,000	163,000	193,000	173,000	159,000	140,000	130,000	190,000	190,000
Chromium	50	µg/L	ND	ND	13.9	22.1	ND	ND	ND	ND	ND	ND
Cobalt	NE	µg/L	-	ND								
Copper	1,000	µg/L	-	20.8	45.9	79.1	12.9	22	ND	ND	6.8 J	18
Iron	600	µg/L	-	2,880	12,400	17,200	7,090	4,970	3,450	860	2,100	3,000
Lead	50	µg/L	580	64.5	231	527	170	91	ND	4.8	13	82
Magnesium	35,000	µg/L	-	31,700	38,500	59,600	39,800	34,600	31,400	24,000	35,000	35,000
Manganese	600	µg/L	-	530	509	591	569	437	225	190	480	260
Mercury	0.7	µg/L	ND	ND	ND	ND	ND	ND	0.689	ND	ND	0.08
Nickel	200	µg/L	-	ND	13							
Potassium	NE	µg/L	-	ND	4,270	2,030	ND	ND	ND	1,200	680 J	1,300
Selenium	10	µg/L	-	8.1	ND	ND	ND	ND	47.7	ND	22.0	ND
Silver	50	µg/L	-	ND								
Sodium	NE	µg/L	-	24,200	18,400	17,200	20,100	19,000	11,000	19,000	25,000	32,000
Thallium	0.5	µg/L	-	ND								
Vanadium	NE	µg/L	-	ND								
Zinc	5,000	µg/L	-	1,690	2,310	1,670	2,740	984	165	550	340	920

I. 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 ¹	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	07/23/15
Aluminum	2,000	µg/L	-	148	1,630	843	941	202	ND	120	180	980
Antimony	6	µg/L	-	ND	0.84 J	0.58						
Arsenic	50	µg/L	ND	1.0	1.1	1.7						
Barium	2,000	µg/L	1,660	234	242	230	213	191	207	180	180	190
Beryllium	3	µg/L	-	ND								
Cadmium	10	µg/L	ND									
Calcium	NE	µg/L	-	156,000	132,000	146,000	137,000	130,000	149,000	140,000	140,000	170,000
Chromium	50	µg/L	22	ND	ND	ND	ND	ND	ND	11	ND	ND
Cobalt	NE	µg/L	-	ND								
Copper	1,000	µg/L	-	ND								
Iron	600	µg/L	-	7,270	10,700	8,050	9,530	7,090	6,220	9,800	8,000	9,600
Lead	50	µg/L	84	ND	5.91	3.82	9.5	ND	ND	1.7	3.8	9.7
Magnesium	35,000	µg/L	-	27,900	24,300	27,900	24,600	24,800	29,100	27,000	29,000	30,000
Manganese	600	µg/L	-	1,200	2,720	1,690	1,860	1,480	1,080	2,500	1,700	1,800
Mercury	0.7	µg/L	0.2	ND	0.06							
Nickel	200	µg/L	-	ND								
Potassium	NE	µg/L	-	2,190	3,190	3,260	ND	ND	ND	3,100	2,900	3,500
Selenium	10	µg/L	-	13.5	ND	ND	ND	ND	ND	ND	23.0	ND
Silver	50	µg/L	-	ND								
Sodium	NE	µg/L	-	21,600	21,600	20,600	16,900	16,000	14,700	14,000	12,000	4,200
Thallium	0.5	µg/L	-	ND								
Vanadium	NE	µg/L	-	ND								
Zinc	5,000	µg/L	-	63.2	47.6	29.4	39.7	51.6	18.7	ND	40 J	120

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 5E
Monitoring Well MW-7
Inorganic Metals Analytical Test Results
153 Fillmore Avenue Site

Metals Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	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	07/23/15
Aluminum	2,000	µg/L	-	3,390	22,700	4,050	2,120	5,360	4,970	*NA	1,300	1,700
Antimony	6	µg/L	-	ND	ND	ND	ND	ND	35.5	*NA	3.2	4.2
Arsenic	50	µg/L	6.0	ND	ND	ND	5.7	ND	115	*NA	3.3	2.1
Barium	2,000	µg/L	163	76.2	173	96	64	84.4	102	*NA	72.0	56.0
Beryllium	3	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Cadmium	10	µg/L	ND	11.7	40.2	ND	ND	15.7	50.3	*NA	2.2 J	12.0
Calcium	NE	µg/L	-	145,000	299,000	166,000	135,000	185,000	149,000	*NA	160,000	180,000
Chromium	50	µg/L	ND	7.3	36.6	ND	ND	10.8	10.9	*NA	1.9 J	ND
Cobalt	NE	µg/L	-	ND	30.0	ND	ND	ND	ND	*NA	8.6 J	16.0
Copper	1,000	µg/L	-	106	293	162	63	134	250	*NA	40	67
Iron	600	µg/L	-	11,200	38,000	15,200	9,950	17,000	13,500	*NA	10,000	6,200
Lead	50	µg/L	36	96.6	451	231	120	180	329	*NA	82	100
Magnesium	35,000	µg/L	-	38,100	60,500	30,600	29,500	43,500	30,700	*NA	27,000	24,000
Manganese	600	µg/L	-	942	2,210	1,380	508	1,440	849	*NA	1,200	1,300
Mercury	0.7	µg/L	ND	ND	0.21	ND	ND	ND	0.54	*NA	ND	0.08
Nickel	200	µg/L	-	ND	112.0	36.8	ND	36.2	32.7	*NA	21.0	37.0
Potassium	NE	µg/L	-	12,500	15,000	13,900	9,940	11,100	11,100	*NA	7,100	7,100
Selenium	10	µg/L	-	17.1	ND	ND	ND	ND	119	*NA	14 J	ND
Silver	50	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Sodium	NE	µg/L	-	72,900	34,500	88,600	72,100	65,100	58,600	*NA	39,000	31,000
Thallium	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	0.2
Vanadium	NE	µg/L	-	ND	46.0	ND	ND	ND	ND	*NA	3 J	ND
Zinc	5,000	µg/L	-	2,540	21,000	7,010	2,470	6,270	7,080	*NA	3,500	9,200

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 ¹	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	07/23/15
Aluminum	2,000	µg/L	-	ND	1,420	722	199	ND	ND	130	46 J	ND
Antimony	6	µg/L	-	ND	ND	ND	ND	ND	ND	6.0	0.61 J	0.67
Arsenic	50	µg/L	14.0	ND	ND	ND	ND	ND	ND	22.0	1.7	2.0
Barium	2,000	µg/L	880	172	175	125	133	107	110	180	120	140
Beryllium	3	µg/L	-	ND								
Cadmium	10	µg/L	ND									
Calcium	NE	µg/L	-	157,000	149,000	141,000	144,000	141,000	147,000	140,000	160,000	230,000
Chromium	50	µg/L	15	ND								
Cobalt	NE	µg/L	-	ND								
Copper	1,000	µg/L	-	10.4	15.0	ND	ND	ND	ND	23.0	ND	ND
Iron	600	µg/L	-	3,230	4,640	3,120	2,870	3,090	3,650	8,600	4,100	5,300
Lead	50	µg/L	270	ND	15.4	5.4	11.0	ND	16.6	98.0	5.4	9.2
Magnesium	35,000	µg/L	-	28,700	27,100	28,100	25,300	26,200	28,300	19,000	34,000	43,000
Manganese	600	µg/L	-	802	891	618	665	817	819	1,500	820	1,400
Mercury	0.7	µg/L	ND									
Nickel	200	µg/L	-	ND								
Potassium	NE	µg/L	-	1,780	4,060	3,080	ND	ND	ND	6,800	2,700	4,400
Selenium	10	µg/L	-	9.5	ND	ND	ND	ND	24.1	ND	19 J	ND
Silver	50	µg/L	-	ND								
Sodium	NE	µg/L	-	30,100	24,000	22,600	22,600	22,700	19,800	15,000	19,000	52,000
Thallium	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	1.1	ND	ND
Vanadium	NE	µg/L	-	ND								
Zinc	5,000	µg/L	-	189.0	630.0	250.0	375.0	33.0	43.3	240.0	80.0	100.0

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



APPENDIX A

Groundwater Field Sampling Records



GHD CONSULTING SERVICES INC.
GROUNDWATER FIELD SAMPLING RECORD

SITE 153 Fillmore Avenue

DATE 07/23/15

Sampler: Brian Doyle

SAMPLE ID MW-01

Depth of well (from top of casing).....	<u>13.83 ft</u>	<u>EL 560.97</u>
Initial static water level (from top of casing)....	<u>5.6 ft</u>	<u>EL 569.20</u>
Top of PVC Casing Elevation	<u>574.80</u>	

Evacuation Method:

Well Volume Calculation

Peristaltic _____ Centrifugal _____

1 in. casing: _____ ft. of water x .09 = _____ gallons

Airlift _____ Pos. Displ. _____

2 in. casing: 8.2 ft. of water x .16 = 1.32 gallons

Bailer X >> No. of bails _____

3 in. casing: _____ ft. of water x .36 = _____ gallons

Volume of water removed 3.95 gals.

> 3 volumes:

<u>YES</u>	<u>no</u>
------------	-----------

dry:

<u>yes</u>	<u>NO</u>
------------	-----------

Field Tests:	Temp: <u>19.63 C</u>
	pH <u>7.14</u>
	Conductivity <u>1.24 mS/cm</u>
	DO <u>6.11 mg/L</u>
	Turbidity <u>NA NTUs</u>
	Oxidation Reduction Potential (ORP) <u>-111 mV</u>

Sampling:

Time: 12:30 PM

Sampling Method: Peristaltic Pump _____
 Disposable Bailer X _____
 Disposable Tubing _____

Observations:

Weather/Temperature: Partly Cloudy, 70 ° F

Physical Appearance and Odor of Sample: Brown, No odor.
Bentonite seal observed 6" below well cap.

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

GHD CONSULTING SERVICES INC.
GROUNDWATER FIELD SAMPLING RECORD

SITE 153 Fillmore Avenue DATE 07/23/15
 Sampler: Brian Doyle SAMPLE ID MW-02; MS/MSD

Depth of well (from top of casing).....	13.5 ft	EL 561.69
Initial static water level (from top of casing)....	5.55 ft	EL 569.64
Top of PVC Casing Elevation	<u>575.19</u>	

Evacuation Method:

Well Volume Calculation

Peristaltic	<u> </u>	Centrifugal	<u> </u>
Airlift	<u> </u>	Pos. Displ.	<u> </u>
Bailer	<u>X</u>	>>> No. of bails	<u> </u>

1 in. casing:	ft. of water x .09 =	gallons
2 in. casing:	8.0 ft. of water x .16 =	1.27 gallons
3 in. casing:	ft. of water x .36 =	gallons

Volume of water removed 3.82 gals.

> 3 volumes:	<input type="checkbox"/> YES	<input type="checkbox"/> no
dry:	<input type="checkbox"/> yes	<input type="checkbox"/> NO

Field Tests:	Temp:	<u>15.11 C</u>
pH		<u>7.18</u>
Conductivity		<u>1.46 mS/cm</u>
DO		<u>8.75 mg/L</u>
Turbidity		<u>NA NTUs</u>
Oxidation Reduction Potential (ORP)		<u>-82 mV</u>

Sampling:

Time: 12:00 PM

Sampling Method: Peristaltic Pump
 Disposable Bailer X
 Disposable Tubing

Observations:

Weather/Temperature: Partly Cloudy, 70 ° F

Physical Appearance and Odor of Sample: Initially orange stained, then brown, very murky and turbid

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

GHD CONSULTING SERVICES INC.
GROUNDWATER FIELD SAMPLING RECORD

SITE 153 Fillmore Avenue

DATE 07/23/15

Sampler: Brian Doyle

SAMPLE ID MW-05

Depth of well (from top of casing).....	<u>15.5 ft</u>	<u>EL 562.82</u>
Initial static water level (from top of casing)....	<u>6.5 ft</u>	<u>EL 571.82</u>
Top of PVC Casing Elevation	<u>578.32</u>	

Evacuation Method:

Well Volume Calculation

Peristaltic	<u>X</u>	Centrifugal	<u> </u>
Airlift	<u> </u>	Pos. Displ.	<u> </u>
Bailer	<u> </u>	>>> No. of bails	<u> </u>

1 in. casing:	<u> </u>	9.0 ft. of water x .09 =	<u> </u>	<u>0.81</u> gallons
2 in. casing:	<u> </u>	ft. of water x .16 =	<u> </u>	<u> </u> gallons
3 in. casing:	<u> </u>	ft. of water x .36 =	<u> </u>	<u> </u> gallons

Volume of water removed 1.00 gals.

> 3 volumes:	<u>yes</u>	<u>NO</u>
dry:	<u>YES</u>	<u>no</u>

Field Tests:	Temp:	<u>15.74 C</u>
	pH	<u>6.84</u>
	Conductivity	<u>1.32 mS/cm</u>
	DO	<u>7.35 mg/L</u>
	Turbidity	<u>387.0 NTUs</u>
	Oxidation Reduction Potential (ORP)	<u>-221 mV</u>

Sampling:

Time: 11:30 AM

Sampling Method: Peristaltic Pump X
 Disposable Bailer
 Disposable Tubing X

Observations:

Weather/Temperature: Partly Cloudy, 70 ° F

Physical Appearance and Odor of Sample: Initially gray, then clear; slight sulfur odor.

Comments: _____

GHD CONSULTING SERVICES INC.
GROUNDWATER FIELD SAMPLING RECORD

SITE	<u>153 Fillmore Avenue</u>	DATE	<u>07/23/15</u>
Sampler:	<u>Brian Doyle</u>	SAMPLE ID	<u>MW-06</u>

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>7.1 ft</u>	<u>EL 571.03</u>
Top of PVC Casing Elevation	<u>578.13</u>	

Evacuation Method:

Well Volume Calculation

Peristaltic	<u>X</u>	Centrifugal	<u> </u>	1 in. casing: <u>10.2 ft.</u> of water x .09 = <u>0.92</u> gallons
Airlift	<u> </u>	Pos. Displ.	<u> </u>	2 in. casing: <u> </u> ft. of water x .16 = <u> </u> gallons
Bailer	<u> </u>	>>> No. of bails	<u> </u>	3 in. casing: <u> </u> ft. of water x .36 = <u> </u> gallons

Volume of water removed 2.75 gals.

> 3 volumes:	<u>YES</u>	<u>no</u>
dry:	<u>yes</u>	<u>NO</u>

Field Tests:	Temp:	<u>16.54 C</u>
	pH	<u>7.04</u>
	Conductivity	<u>0.959 mS/cm</u>
	DO	<u>5.52 mg/L</u>
	Turbidity	<u>186 NTUs</u>
	Oxidation Reduction Potential (ORP)	<u>-87.0 mV</u>

Sampling:

Time: 11:00 AM

Sampling Method:	Peristaltic Pump	<u>X</u>
	Disposable Bailer	<u> </u>
	Disposable Tubing	<u>X</u>

Observations:

Weather/Temperature: Partly Cloudy, 70 ° F

Physical Appearance and Odor of Sample: Oil residue. No odor.

Comments: _____

GHD CONSULTING SERVICES INC.
GROUNDWATER FIELD SAMPLING RECORD

SITE	<u>153 Fillmore Avenue</u>	DATE	<u>07/23/15</u>
Sampler:	<u>Brian Doyle</u>	SAMPLE ID	<u>MW-07</u>

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	<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> </u>	ft. of water x .16 =	<u> </u>	gallons
Bailer	<u> </u>	>> No. of bails	<u> </u>	3 in. casing:	<u> </u>	ft. of water x .36 =	<u> </u>	gallons

Volume of water removed 3.00 gals.

> 3 volumes:	<u>yes</u>	<u>no</u>
dry:	<u>yes</u>	<u>no</u>

Field Tests:

Temp:	<u>15.45 C</u>
pH	<u>7.07</u>
Conductivity	<u>1.14 mS/cm</u>
DO	<u>7.67 mg/L</u>
Turbidity	<u>110 NTUs</u>
Oxidation Reduction Potential (ORP)	<u>-71.0 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: Clear, no odor

Comments: 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.

Well went dry after 3.0 gallons was removed, due to obstruction, water level indicator can not pass and unable to tell if water is in well.

GHD CONSULTING SERVICES INC.
GROUNDWATER FIELD SAMPLING RECORD

SITE 153 Fillmore Avenue

DATE 07/23/15

Sampler: Brian Doyle

SAMPLE ID MW-08; FD

Depth of well (from top of casing).....
 Initial static water level (from top of casing)....
 Top of PVC Casing Elevation

<u>17.5 ft</u>	<u>EL 560.93</u>
<u>7.1 ft</u>	<u>EL 571.38</u>
<u>578.43</u>	

Evacuation Method:

Well Volume Calculation

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

1 in. casing:	<u>10.5</u>	ft. of water x .09 =	<u>0.94</u>	gallons
2 in. casing:	<u> </u>	ft. of water x .16 =	<u> </u>	gallons
3 in. casing:	<u> </u>	ft. of water x .36 =	<u> </u>	gallons

Volume of water removed 2.82 gals.

> 3 volumes:

<u>YES</u>	<u>no</u>
------------	-----------

 dry:

<u>yes</u>	<u>NO</u>
------------	-----------

Field Tests:

Temp:	<u>14.4 C</u>
pH	<u>6.72</u>
Conductivity	<u>1.21 mS/cm</u>
DO	<u>5.23 mg/L</u>
Turbidity	<u>11 NTUs</u>
Oxidation Reduction Potential (ORP)	<u>-81 mV</u>

Sampling:

Time: 9:30 AM

Sampling Method: Peristaltic Pump X
 Disposable Bailer _____
 Disposable Tubing X

Observations:

Weather/Temperature: Partly Cloudy, 70 ° F

Physical Appearance and Odor of Sample: Fairly clear, some odor

Comments: _____

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 Rawlinson
GHD
285 Delaware Ave.
Suite 500
Buffalo, NY 14202

Report Summary

Friday October 30, 2015

Report Number: L778802

Samples Received: 07/24/15

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, 1461-02, AIHA - 100789, AL - 40660, CA - 01157CA, CT - PH-0197,
FL - E87487, GA - 923, IN - C-TN-01, KY - 90010, KYUST - 0016,
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SC - 84004, TN - 2006, VA - 460132, WV - 233, AZ - 0612,
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Est. 1970

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

REPORT OF ANALYSIS

October 30, 2015

Date Received : July 24, 2015
Description : Fillmore Ave.
Sample ID : MW-1
Collected By : Dave Rowlinson
Collection Date : 07/23/15 12:30

ESC Sample # : L778802-01

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qual	Method	Date	Dil.
Antimony	0.0030	0.00021	0.0020	mg/l		6020	07/31/15	1
Arsenic	0.32	0.00025	0.0020	mg/l		6020	07/31/15	1
Lead	0.054	0.00024	0.0020	mg/l		6020	07/31/15	1
Thallium	0.00076	0.00019	0.0020	mg/l	J	6020	07/31/15	1
Mercury	0.000058	0.000049	0.00020	mg/l	J	7470A	07/27/15	1
Aluminum	22.	0.035	0.20	mg/l		6010C	07/30/15	1
Barium	0.54	0.0017	0.0050	mg/l		6010C	07/29/15	1
Beryllium	U	0.00070	0.0020	mg/l		6010C	07/29/15	1
Cadmium	0.010	0.00070	0.0020	mg/l		6010C	07/29/15	1
Calcium	240	0.046	1.0	mg/l		6010C	07/29/15	1
Chromium	0.035	0.0014	0.010	mg/l		6010C	07/29/15	1
Cobalt	0.028	0.0023	0.010	mg/l		6010C	07/29/15	1
Copper	0.088	0.0053	0.010	mg/l		6010C	07/29/15	1
Iron	170	0.014	0.10	mg/l		6010C	07/29/15	1
Magnesium	44.	0.011	1.0	mg/l		6010C	07/29/15	1
Manganese	4.2	0.0012	0.010	mg/l		6010C	07/29/15	1
Nickel	0.065	0.0049	0.010	mg/l		6010C	07/29/15	1
Potassium	7.4	0.10	1.0	mg/l		6010C	07/29/15	1
Selenium	U	0.0074	0.010	mg/l		6010C	07/29/15	1
Silver	U	0.0028	0.0050	mg/l		6010C	07/29/15	1
Sodium	78.	0.099	1.0	mg/l		6010C	07/29/15	1
Vanadium	0.055	0.0024	0.020	mg/l		6010C	07/29/15	1
Zinc	0.35	0.0059	0.050	mg/l		6010C	07/29/15	1
Volatile Organics								
Acetone	U	0.010	0.050	mg/l		8260C	07/31/15	1
Benzene	U	0.00033	0.0010	mg/l		8260C	07/31/15	1
Bromochloromethane	U	0.00052	0.0010	mg/l		8260C	07/31/15	1
Bromodichloromethane	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
Bromoform	U	0.00047	0.0010	mg/l		8260C	07/31/15	1
Bromomethane	U	0.00087	0.0050	mg/l		8260C	07/31/15	1
Carbon disulfide	U	0.00028	0.0010	mg/l		8260C	07/31/15	1
Carbon tetrachloride	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
Chlorobenzene	U	0.00035	0.0010	mg/l		8260C	07/31/15	1
Chlorodibromomethane	U	0.00033	0.0010	mg/l		8260C	07/31/15	1
Chloroethane	U	0.00045	0.0050	mg/l		8260C	07/31/15	1
Chloroform	U	0.00032	0.0050	mg/l		8260C	07/31/15	1
Chloromethane	U	0.00028	0.0025	mg/l		8260C	07/31/15	1
Cyclohexane	U	0.00039	0.0010	mg/l		8260C	07/31/15	1
1,2-Dibromo-3-Chloropropane	U	0.0013	0.0050	mg/l		8260C	07/31/15	1
1,2-Dibromoethane	U	0.00038	0.0010	mg/l		8260C	07/31/15	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

October 30, 2015

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

Date Received : July 24, 2015
Description : Fillmore Ave.

Sample ID : MW-1

Collected By : Dave Rowlinson
Collection Date : 07/23/15 12:30

ESC Sample # : L778802-01

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qual	Method	Date	Dil.
1,2-Dichlorobenzene	U	0.00035	0.0010	mg/l		8260C	07/31/15	1
1,3-Dichlorobenzene	U	0.00022	0.0010	mg/l		8260C	07/31/15	1
1,4-Dichlorobenzene	U	0.00027	0.0010	mg/l		8260C	07/31/15	1
Dichlorodifluoromethane	U	0.00055	0.0050	mg/l		8260C	07/31/15	1
1,1-Dichloroethane	U	0.00026	0.0010	mg/l		8260C	07/31/15	1
1,2-Dichloroethane	U	0.00036	0.0010	mg/l		8260C	07/31/15	1
1,1-Dichloroethene	U	0.00040	0.0010	mg/l		8260C	07/31/15	1
cis-1,2-Dichloroethene	0.0041	0.00026	0.0010	mg/l		8260C	07/31/15	1
trans-1,2-Dichloroethene	U	0.00040	0.0010	mg/l		8260C	07/31/15	1
1,2-Dichloropropane	U	0.00031	0.0010	mg/l		8260C	07/31/15	1
cis-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260C	07/31/15	1
trans-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260C	07/31/15	1
Ethylbenzene	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
2-Hexanone	U	0.00038	0.010	mg/l		8260C	07/31/15	1
Isopropylbenzene	U	0.00033	0.0010	mg/l		8260C	07/31/15	1
2-Butanone (MEK)	U	0.0039	0.010	mg/l	J	8260C	07/31/15	1
Methyl Acetate	U	0.0043	0.020	mg/l		8260C	07/31/15	1
Methyl Cyclohexane	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
Methylene Chloride	U	0.0010	0.0050	mg/l		8260C	07/31/15	1
4-Methyl-2-pentanone (MIBK)	U	0.0021	0.010	mg/l		8260C	07/31/15	1
Methyl tert-butyl ether	U	0.00037	0.0010	mg/l		8260C	07/31/15	1
Styrene	U	0.00031	0.0010	mg/l		8260C	07/31/15	1
1,1,2,2-Tetrachloroethane	U	0.00013	0.0010	mg/l		8260C	07/31/15	1
Tetrachloroethene	U	0.00037	0.0010	mg/l		8260C	07/31/15	1
Toluene	U	0.00078	0.0050	mg/l		8260C	07/31/15	1
1,2,3-Trichlorobenzene	U	0.00023	0.0010	mg/l		8260C	07/31/15	1
1,2,4-Trichlorobenzene	U	0.00036	0.0010	mg/l		8260C	07/31/15	1
1,1,1-Trichloroethane	U	0.00032	0.0010	mg/l		8260C	07/31/15	1
1,1,2-Trichloroethane	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
Trichloroethene	U	0.00040	0.0010	mg/l		8260C	07/31/15	1
Trichlorofluoromethane	U	0.0012	0.0050	mg/l		8260C	07/31/15	1
1,1,2-Trichlorotrifluoroethane	U	0.00030	0.0010	mg/l		8260C	07/31/15	1
Vinyl chloride	0.0011	0.00026	0.0010	mg/l		8260C	07/31/15	1
Xylenes, Total	U	0.0011	0.0030	mg/l		8260C	07/31/15	1
Surrogate Recovery								
Toluene-d8	106.			% Rec.		8260C	07/31/15	1
Dibromofluoromethane	112.			% Rec.		8260C	07/31/15	1
a,a,a-Trifluorotoluene	103.			% Rec.		8260C	07/31/15	1
4-Bromofluorobenzene	95.3			% Rec.		8260C	07/31/15	1
TCL Base/Neutral Extractables								
Acenaphthene	U	0.00032	0.0010	mg/l		8270 D	07/29/15	1
Acenaphthylene	U	0.00031	0.0010	mg/l		8270 D	07/29/15	1

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REPORT OF ANALYSIS

October 30, 2015

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

Date Received : July 24, 2015
Description : Fillmore Ave.
Sample ID : MW-1
Collected By : Dave Rowlinson
Collection Date : 07/23/15 12:30

ESC Sample # : L778802-01

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qual	Method	Date	Dil.
Acetophenone	U	0.0027	0.010	mg/l		8270 D	07/29/15	1
Anthracene	U	0.00029	0.0010	mg/l		8270 D	07/29/15	1
Atrazine	U	0.00026	0.010	mg/l		8270 D	07/29/15	1
Benzaldehyde	U	0.0014	0.010	mg/l		8270 D	07/29/15	1
Benzo(a)anthracene	U	0.000098	0.0010	mg/l		8270 D	07/29/15	1
Benzo(b)fluoranthene	U	0.000090	0.0010	mg/l		8270 D	07/29/15	1
Benzo(k)fluoranthene	U	0.00036	0.0010	mg/l		8270 D	07/29/15	1
Benzo(g,h,i)perylene	U	0.00016	0.0010	mg/l		8270 D	07/29/15	1
Benzo(a)pyrene	U	0.00034	0.0010	mg/l		8270 D	07/29/15	1
Biphenyl	U	0.00032	0.010	mg/l		8270 D	07/29/15	1
Bis(2-chlorethoxy)methane	U	0.00033	0.010	mg/l		8270 D	07/29/15	1
Bis(2-chloroethyl)ether	U	0.0016	0.010	mg/l		8270 D	07/29/15	1
Bis(2-chloroisopropyl)ether	U	0.00044	0.010	mg/l		8270 D	07/29/15	1
4-Bromophenyl-phenylether	U	0.00034	0.010	mg/l		8270 D	07/29/15	1
Caprolactam	U	0.0026	0.010	mg/l		8270 D	07/29/15	1
Carbazole	U	0.00026	0.010	mg/l		8270 D	07/29/15	1
4-Chloroaniline	U	0.00038	0.010	mg/l		8270 D	07/29/15	1
2-Chloronaphthalene	U	0.00033	0.0010	mg/l		8270 D	07/29/15	1
4-Chlorophenyl-phenylether	U	0.00030	0.010	mg/l		8270 D	07/29/15	1
Chrysene	U	0.00033	0.0010	mg/l		8270 D	07/29/15	1
Dibenz(a,h)anthracene	U	0.00028	0.0010	mg/l		8270 D	07/29/15	1
Dibenzofuran	U	0.00034	0.010	mg/l		8270 D	07/29/15	1
3,3-Dichlorobenzidine	U	0.0020	0.010	mg/l		8270 D	07/29/15	1
2,4-Dinitrotoluene	U	0.0016	0.010	mg/l		8270 D	07/29/15	1
2,6-Dinitrotoluene	U	0.00028	0.010	mg/l		8270 D	07/29/15	1
Fluoranthene	U	0.00031	0.0010	mg/l		8270 D	07/29/15	1
Fluorene	U	0.00032	0.0010	mg/l		8270 D	07/29/15	1
Hexachlorobenzene	U	0.00034	0.0010	mg/l		8270 D	07/29/15	1
Hexachloro-1,3-butadiene	U	0.00033	0.010	mg/l		8270 D	07/29/15	1
Hexachlorocyclopentadiene	U	0.0023	0.010	mg/l		8270 D	07/29/15	1
Hexachloroethane	U	0.00036	0.010	mg/l		8270 D	07/29/15	1
Indeno(1,2,3-cd)pyrene	U	0.00028	0.0010	mg/l		8270 D	07/29/15	1
Isophorone	U	0.00027	0.010	mg/l		8270 D	07/29/15	1
2-Methylnaphthalene	U	0.00031	0.0010	mg/l		8270 D	07/29/15	1
Naphthalene	U	0.00037	0.0010	mg/l		8270 D	07/29/15	1
2-Nitroaniline	U	0.00019	0.010	mg/l		8270 D	07/29/15	1
3-Nitroaniline	U	0.00031	0.010	mg/l		8270 D	07/29/15	1
4-Nitroaniline	U	0.00035	0.010	mg/l		8270 D	07/29/15	1
Nitrobenzene	U	0.00037	0.010	mg/l		8270 D	07/29/15	1
n-Nitrosodiphenylamine	U	0.00030	0.010	mg/l		8270 D	07/29/15	1
n-Nitrosodi-n-propylamine	U	0.00040	0.010	mg/l		8270 D	07/29/15	1
Phenanthrene	U	0.00037	0.0010	mg/l		8270 D	07/29/15	1
Benzylbutyl phthalate	U	0.00028	0.0030	mg/l		8270 D	07/29/15	1

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REPORT OF ANALYSIS

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

October 30, 2015

Date Received : July 24, 2015
Description : Fillmore Ave.
Sample ID : MW-1
Collected By : Dave Rowlinson
Collection Date : 07/23/15 12:30

ESC Sample # : L778802-01

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qual	Method	Date	Dil.
Bis(2-ethylhexyl)phthalate	U	0.00071	0.0030	mg/l		8270 D	07/29/15	1
Di-n-butyl phthalate	0.00048	0.00027	0.0030	mg/l	J	8270 D	07/29/15	1
Diethyl phthalate	U	0.00028	0.0030	mg/l		8270 D	07/29/15	1
Dimethyl phthalate	U	0.00028	0.0030	mg/l		8270 D	07/29/15	1
Di-n-octyl phthalate	U	0.00028	0.0010	mg/l		8270 D	07/29/15	1
Pyrene	U	0.00033	0.0010	mg/l		8270 D	07/29/15	1
1,2,4,5-Tetrachlorobenzene	U	0.0024	0.010	mg/l		8270 D	07/29/15	1
TCL Acid Extractables								
4-Chloro-3-methyphenol	U	0.00026	0.010	mg/l		8270 D	07/29/15	1
2-Chlorophenol	U	0.00028	0.010	mg/l		8270 D	07/29/15	1
2-Methylphenol	U	0.00031	0.010	mg/l		8270 D	07/29/15	1
3&4-Methyl Phenol	U	0.00027	0.010	mg/l		8270 D	07/29/15	1
2,4-Dichlorophenol	U	0.00028	0.010	mg/l		8270 D	07/29/15	1
2,4-Dimethylphenol	U	0.00062	0.010	mg/l		8270 D	07/29/15	1
4,6-Dinitro-2-methylphenol	U	0.0026	0.010	mg/l		8270 D	07/29/15	1
2,4-Dinitrophenol	U	0.0032	0.010	mg/l		8270 D	07/29/15	1
2-Nitrophenol	U	0.00032	0.010	mg/l		8270 D	07/29/15	1
4-Nitrophenol	U	0.0020	0.010	mg/l		8270 D	07/29/15	1
Pentachlorophenol	U	0.00031	0.010	mg/l		8270 D	07/29/15	1
Phenol	U	0.00033	0.010	mg/l		8270 D	07/29/15	1
2,4,5-Trichlorophenol	U	0.00024	0.010	mg/l		8270 D	07/29/15	1
2,4,6-Trichlorophenol	U	0.00030	0.010	mg/l		8270 D	07/29/15	1
Surrogate Recovery								
2-Fluorophenol	53.3			% Rec.		8270 D	07/29/15	1
Phenol-d5	43.7			% Rec.		8270 D	07/29/15	1
Nitrobenzene-d5	62.6			% Rec.		8270 D	07/29/15	1
2-Fluorobiphenyl	68.0			% Rec.		8270 D	07/29/15	1
2,4,6-Tribromophenol	75.1			% Rec.		8270 D	07/29/15	1
p-Terphenyl-d14	60.2			% Rec.		8270 D	07/29/15	1

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REPORT OF ANALYSIS

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

October 30, 2015

Date Received : July 24, 2015
Description : Fillmore Ave.
Sample ID : MW-2
Collected By : Dave Rowlinson
Collection Date : 07/23/15 12:00

ESC Sample # : L778802-02

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qual	Method	Date	Dil.
Antimony	0.0023	0.00021	0.0020	mg/l	J6	6020	07/31/15	1
Arsenic	0.10	0.00025	0.0020	mg/l		6020	07/31/15	1
Lead	0.11	0.00024	0.0020	mg/l		6020	07/31/15	1
Thallium	0.00086	0.00019	0.0020	mg/l	J	6020	07/31/15	1
Mercury	0.00012	0.000049	0.00020	mg/l	J	7470A	07/27/15	1
Aluminum	31.	0.035	0.20	mg/l	V	6010C	07/30/15	1
Barium	0.73	0.0017	0.0050	mg/l		6010C	07/29/15	1
Beryllium	U	0.00070	0.0020	mg/l		6010C	07/29/15	1
Cadmium	U	0.00070	0.0020	mg/l		6010C	07/29/15	1
Calcium	400	0.046	1.0	mg/l	V	6010C	07/29/15	1
Chromium	0.051	0.0014	0.010	mg/l		6010C	07/29/15	1
Cobalt	0.031	0.0023	0.010	mg/l		6010C	07/29/15	1
Copper	0.16	0.0053	0.010	mg/l		6010C	07/29/15	1
Iron	130	0.014	0.10	mg/l	V	6010C	07/29/15	1
Magnesium	160	0.011	1.0	mg/l	V	6010C	07/29/15	1
Manganese	1.4	0.0012	0.010	mg/l		6010C	07/29/15	1
Nickel	0.084	0.0049	0.010	mg/l		6010C	07/29/15	1
Potassium	7.2	0.10	1.0	mg/l		6010C	07/29/15	1
Selenium	U	0.0074	0.010	mg/l		6010C	07/29/15	1
Silver	U	0.0028	0.0050	mg/l		6010C	07/29/15	1
Sodium	55.	0.099	1.0	mg/l	V	6010C	07/29/15	1
Vanadium	0.072	0.0024	0.020	mg/l		6010C	07/29/15	1
Zinc	0.63	0.0059	0.050	mg/l		6010C	07/29/15	1
Volatile Organics								
Acetone	U	0.010	0.050	mg/l		8260C	07/31/15	1
Benzene	0.0042	0.00033	0.0010	mg/l		8260C	07/31/15	1
Bromochloromethane	U	0.00052	0.0010	mg/l		8260C	07/31/15	1
Bromodichloromethane	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
Bromoform	U	0.00047	0.0010	mg/l		8260C	07/31/15	1
Bromomethane	U	0.00087	0.0050	mg/l		8260C	07/31/15	1
Carbon disulfide	U	0.00028	0.0010	mg/l		8260C	07/31/15	1
Carbon tetrachloride	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
Chlorobenzene	U	0.00035	0.0010	mg/l		8260C	07/31/15	1
Chlorodibromomethane	U	0.00033	0.0010	mg/l		8260C	07/31/15	1
Chloroethane	U	0.00045	0.0050	mg/l		8260C	07/31/15	1
Chloroform	U	0.00032	0.0050	mg/l		8260C	07/31/15	1
Chloromethane	U	0.00028	0.0025	mg/l		8260C	07/31/15	1
Cyclohexane	0.0012	0.00039	0.0010	mg/l		8260C	07/31/15	1
1,2-Dibromo-3-Chloropropane	U	0.0013	0.0050	mg/l		8260C	07/31/15	1
1,2-Dibromoethane	U	0.00038	0.0010	mg/l		8260C	07/31/15	1

U = ND (Not Detected)

MDL = Minimum Detection Limit = LOD = TRRP SDL

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Tax I.D. 62-0814289

Est. 1970

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

REPORT OF ANALYSIS

October 30, 2015

Date Received : July 24, 2015
Description : Fillmore Ave.
Sample ID : MW-2
Collected By : Dave Rowlinson
Collection Date : 07/23/15 12:00

ESC Sample # : L778802-02

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qual	Method	Date	Dil.
1,2-Dichlorobenzene	U	0.00035	0.0010	mg/l		8260C	07/31/15	1
1,3-Dichlorobenzene	U	0.00022	0.0010	mg/l		8260C	07/31/15	1
1,4-Dichlorobenzene	U	0.00027	0.0010	mg/l		8260C	07/31/15	1
Dichlorodifluoromethane	U	0.00055	0.0050	mg/l		8260C	07/31/15	1
1,1-Dichloroethane	U	0.00026	0.0010	mg/l		8260C	07/31/15	1
1,2-Dichloroethane	U	0.00036	0.0010	mg/l		8260C	07/31/15	1
1,1-Dichloroethene	U	0.00040	0.0010	mg/l		8260C	07/31/15	1
cis-1,2-Dichloroethene	0.0015	0.00026	0.0010	mg/l		8260C	07/31/15	1
trans-1,2-Dichloroethene	U	0.00040	0.0010	mg/l		8260C	07/31/15	1
1,2-Dichloropropane	U	0.00031	0.0010	mg/l		8260C	07/31/15	1
cis-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260C	07/31/15	1
trans-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260C	07/31/15	1
Ethylbenzene	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
2-Hexanone	U	0.0038	0.010	mg/l		8260C	07/31/15	1
Isopropylbenzene	U	0.00033	0.0010	mg/l		8260C	07/31/15	1
2-Butanone (MEK)	U	0.0039	0.010	mg/l	J	8260C	07/31/15	1
Methyl Acetate	U	0.0043	0.020	mg/l		8260C	07/31/15	1
Methyl Cyclohexane	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
Methylene Chloride	U	0.0010	0.0050	mg/l		8260C	07/31/15	1
4-Methyl-2-pentanone (MIBK)	U	0.0021	0.010	mg/l		8260C	07/31/15	1
Methyl tert-butyl ether	U	0.00037	0.0010	mg/l		8260C	07/31/15	1
Styrene	U	0.00031	0.0010	mg/l		8260C	07/31/15	1
1,1,2,2-Tetrachloroethane	U	0.00013	0.0010	mg/l		8260C	07/31/15	1
Tetrachloroethene	U	0.00037	0.0010	mg/l		8260C	07/31/15	1
Toluene	U	0.00078	0.0050	mg/l		8260C	07/31/15	1
1,2,3-Trichlorobenzene	U	0.00023	0.0010	mg/l		8260C	07/31/15	1
1,2,4-Trichlorobenzene	U	0.00036	0.0010	mg/l		8260C	07/31/15	1
1,1,1-Trichloroethane	U	0.00032	0.0010	mg/l		8260C	07/31/15	1
1,1,2-Trichloroethane	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
Trichloroethene	U	0.00040	0.0010	mg/l		8260C	07/31/15	1
Trichlorofluoromethane	U	0.0012	0.0050	mg/l		8260C	07/31/15	1
1,1,2-Trichlorotrifluoroethane	U	0.00030	0.0010	mg/l		8260C	07/31/15	1
Vinyl chloride	0.0098	0.00026	0.0010	mg/l		8260C	07/31/15	1
Xylenes, Total	U	0.0011	0.0030	mg/l		8260C	07/31/15	1
Surrogate Recovery								
Toluene-d8	106.			% Rec.		8260C	07/31/15	1
Dibromofluoromethane	109.			% Rec.		8260C	07/31/15	1
a,a,a-Trifluorotoluene	102.			% Rec.		8260C	07/31/15	1
4-Bromofluorobenzene	96.4			% Rec.		8260C	07/31/15	1
TCL Base/Neutral Extractables								
Acenaphthene	0.00078	0.00032	0.0010	mg/l	J	8270 D	07/29/15	1
Acenaphthylene	U	0.00031	0.0010	mg/l		8270 D	07/29/15	1

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Est. 1970

REPORT OF ANALYSIS

October 30, 2015

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

Date Received : July 24, 2015
Description : Fillmore Ave.

Sample ID : MW-2

Collected By : Dave Rowlinson
Collection Date : 07/23/15 12:00

ESC Sample # : L778802-02

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qual	Method	Date	Dil.
Acetophenone	U	0.0027	0.010	mg/l		8270 D	07/29/15	1
Anthracene	U	0.00029	0.0010	mg/l		8270 D	07/29/15	1
Atrazine	U	0.00026	0.010	mg/l		8270 D	07/29/15	1
Benzaldehyde	U	0.0014	0.010	mg/l		8270 D	07/29/15	1
Benzo(a)anthracene	U	0.000098	0.0010	mg/l		8270 D	07/29/15	1
Benzo(b)fluoranthene	U	0.000090	0.0010	mg/l		8270 D	07/29/15	1
Benzo(k)fluoranthene	U	0.00036	0.0010	mg/l		8270 D	07/29/15	1
Benzo(g,h,i)perylene	U	0.00016	0.0010	mg/l		8270 D	07/29/15	1
Benzo(a)pyrene	U	0.00034	0.0010	mg/l		8270 D	07/29/15	1
Biphenyl	U	0.00032	0.010	mg/l		8270 D	07/29/15	1
Bis(2-chlorethoxy)methane	U	0.00033	0.010	mg/l		8270 D	07/29/15	1
Bis(2-chloroethyl)ether	U	0.0016	0.010	mg/l		8270 D	07/29/15	1
Bis(2-chloroisopropyl)ether	U	0.00044	0.010	mg/l		8270 D	07/29/15	1
4-Bromophenyl-phenylether	U	0.00034	0.010	mg/l		8270 D	07/29/15	1
Caprolactam	U	0.0026	0.010	mg/l		8270 D	07/29/15	1
Carbazole	U	0.00026	0.010	mg/l		8270 D	07/29/15	1
4-Chloroaniline	U	0.00038	0.010	mg/l		8270 D	07/29/15	1
2-Chloronaphthalene	U	0.00033	0.0010	mg/l		8270 D	07/29/15	1
4-Chlorophenyl-phenylether	U	0.00030	0.010	mg/l		8270 D	07/29/15	1
Chrysene	U	0.00033	0.0010	mg/l		8270 D	07/29/15	1
Dibenz(a,h)anthracene	U	0.00028	0.0010	mg/l		8270 D	07/29/15	1
Dibenzofuran	U	0.00034	0.010	mg/l		8270 D	07/29/15	1
3,3-Dichlorobenzidine	U	0.0020	0.010	mg/l		8270 D	07/29/15	1
2,4-Dinitrotoluene	U	0.0016	0.010	mg/l		8270 D	07/29/15	1
2,6-Dinitrotoluene	U	0.00028	0.010	mg/l		8270 D	07/29/15	1
Fluoranthene	U	0.00031	0.0010	mg/l		8270 D	07/29/15	1
Fluorene	U	0.00032	0.0010	mg/l		8270 D	07/29/15	1
Hexachlorobenzene	U	0.00034	0.0010	mg/l		8270 D	07/29/15	1
Hexachloro-1,3-butadiene	U	0.00033	0.010	mg/l		8270 D	07/29/15	1
Hexachlorocyclopentadiene	U	0.0023	0.010	mg/l		8270 D	07/29/15	1
Hexachloroethane	U	0.00036	0.010	mg/l		8270 D	07/29/15	1
Indeno(1,2,3-cd)pyrene	U	0.00028	0.0010	mg/l		8270 D	07/29/15	1
Isophorone	U	0.00027	0.010	mg/l		8270 D	07/29/15	1
2-Methylnaphthalene	U	0.00031	0.0010	mg/l		8270 D	07/29/15	1
Naphthalene	U	0.00037	0.0010	mg/l		8270 D	07/29/15	1
2-Nitroaniline	U	0.0019	0.010	mg/l		8270 D	07/29/15	1
3-Nitroaniline	U	0.00031	0.010	mg/l		8270 D	07/29/15	1
4-Nitroaniline	U	0.00035	0.010	mg/l		8270 D	07/29/15	1
Nitrobenzene	U	0.00037	0.010	mg/l		8270 D	07/29/15	1
n-Nitrosodiphenylamine	U	0.00030	0.010	mg/l		8270 D	07/29/15	1
n-Nitrosodi-n-propylamine	U	0.00040	0.010	mg/l		8270 D	07/29/15	1
Phenanthrene	U	0.00037	0.0010	mg/l		8270 D	07/29/15	1
Benzylbutyl phthalate	U	0.00028	0.0030	mg/l		8270 D	07/29/15	1

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Tax I.D. 62-0814289
Est. 1970

REPORT OF ANALYSIS

October 30, 2015

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

Date Received : July 24, 2015
Description : Fillmore Ave.

Sample ID : MW-2

Collected By : Dave Rowlinson
Collection Date : 07/23/15 12:00

ESC Sample # : L778802-02

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qual	Method	Date	Dil.
Bis(2-ethylhexyl)phthalate	U	0.00071	0.0030	mg/l		8270 D	07/29/15	1
Di-n-butyl phthalate	0.00034	0.00027	0.0030	mg/l	J	8270 D	07/29/15	1
Diethyl phthalate	U	0.00028	0.0030	mg/l		8270 D	07/29/15	1
Dimethyl phthalate	U	0.00028	0.0030	mg/l		8270 D	07/29/15	1
Di-n-octyl phthalate	U	0.00028	0.0010	mg/l		8270 D	07/29/15	1
Pyrene	U	0.00033	0.0010	mg/l		8270 D	07/29/15	1
1,2,4,5-Tetrachlorobenzene	U	0.0024	0.010	mg/l		8270 D	07/29/15	1
TCL Acid Extractables								
4-Chloro-3-methylphenol	U	0.00026	0.010	mg/l		8270 D	07/29/15	1
2-Chlorophenol	U	0.00028	0.010	mg/l		8270 D	07/29/15	1
2-Methylphenol	U	0.00031	0.010	mg/l		8270 D	07/29/15	1
3&4-Methyl Phenol	U	0.00027	0.010	mg/l		8270 D	07/29/15	1
2,4-Dichlorophenol	U	0.00028	0.010	mg/l		8270 D	07/29/15	1
2,4-Dimethylphenol	U	0.00062	0.010	mg/l		8270 D	07/29/15	1
4,6-Dinitro-2-methylphenol	U	0.0026	0.010	mg/l		8270 D	07/29/15	1
2,4-Dinitrophenol	U	0.0032	0.010	mg/l		8270 D	07/29/15	1
2-Nitrophenol	U	0.00032	0.010	mg/l		8270 D	07/29/15	1
4-Nitrophenol	U	0.0020	0.010	mg/l		8270 D	07/29/15	1
Pentachlorophenol	U	0.00031	0.010	mg/l		8270 D	07/29/15	1
Phenol	0.00034	0.00033	0.010	mg/l	J	8270 D	07/29/15	1
2,4,5-Trichlorophenol	U	0.00024	0.010	mg/l		8270 D	07/29/15	1
2,4,6-Trichlorophenol	U	0.00030	0.010	mg/l		8270 D	07/29/15	1
Surrogate Recovery								
2-Fluorophenol	46.6			% Rec.		8270 D	07/29/15	1
Phenol-d5	42.2			% Rec.		8270 D	07/29/15	1
Nitrobenzene-d5	56.1			% Rec.		8270 D	07/29/15	1
2-Fluorobiphenyl	65.4			% Rec.		8270 D	07/29/15	1
2,4,6-Tribromophenol	76.3			% Rec.		8270 D	07/29/15	1
p-Terphenyl-d14	61.3			% Rec.		8270 D	07/29/15	1

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REPORT OF ANALYSIS

October 30, 2015

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

Date Received : July 24, 2015
Description : Fillmore Ave.
Sample ID : MW-5
Collected By : Dave Rowlinson
Collection Date : 07/23/15 11:30

ESC Sample # : L778802-03

Site ID :

Project # : 8612199

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	2.3	2.0	ug/l	6020	07/31/15	1
Arsenic	1.3	2.0	ug/l	6020	07/31/15	1
Lead	82.	2.0	ug/l	6020	07/31/15	1
Thallium	BDL	2.0	ug/l	6020	07/31/15	1
Mercury	0.080	0.20	ug/l	7470A	07/27/15	1
Aluminum	920	200	ug/l	6010C	07/30/15	1
Barium	180	5.0	ug/l	6010C	07/29/15	1
Beryllium	BDL	2.0	ug/l	6010C	07/29/15	1
Cadmium	3.7	2.0	ug/l	6010C	07/29/15	1
Calcium	190000	1000	ug/l	6010C	07/29/15	1
Chromium	BDL	10.	ug/l	6010C	07/29/15	1
Cobalt	BDL	10.	ug/l	6010C	07/29/15	1
Copper	18.	10.	ug/l	6010C	07/29/15	1
Iron	3000	100	ug/l	6010C	07/29/15	1
Magnesium	35000	1000	ug/l	6010C	07/29/15	1
Manganese	260	10.	ug/l	6010C	07/29/15	1
Nickel	13.	10.	ug/l	6010C	07/29/15	1
Potassium	1300	1000	ug/l	6010C	07/29/15	1
Selenium	BDL	10.	ug/l	6010C	07/29/15	1
Silver	BDL	5.0	ug/l	6010C	07/29/15	1
Sodium	32000	1000	ug/l	6010C	07/29/15	1
Vanadium	BDL	20.	ug/l	6010C	07/29/15	1
Zinc	920	50.	ug/l	6010C	07/29/15	1
Volatile Organics						
Acetone	BDL	50.	ug/l	8260C	07/31/15	1
Benzene	BDL	1.0	ug/l	8260C	07/31/15	1
Bromochloromethane	BDL	1.0	ug/l	8260C	07/31/15	1
Bromodichloromethane	BDL	1.0	ug/l	8260C	07/31/15	1
Bromoform	BDL	1.0	ug/l	8260C	07/31/15	1
Bromomethane	BDL	5.0	ug/l	8260C	07/31/15	1
Carbon disulfide	BDL	1.0	ug/l	8260C	07/31/15	1
Carbon tetrachloride	BDL	1.0	ug/l	8260C	07/31/15	1
Chlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
Chlorodibromomethane	BDL	1.0	ug/l	8260C	07/31/15	1
Chloroethane	BDL	5.0	ug/l	8260C	07/31/15	1
Chloroform	BDL	5.0	ug/l	8260C	07/31/15	1
Chloromethane	BDL	2.5	ug/l	8260C	07/31/15	1
Cyclohexane	BDL	1.0	ug/l	8260C	07/31/15	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260C	07/31/15	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260C	07/31/15	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)



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REPORT OF ANALYSIS

October 30, 2015

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

Date Received : July 24, 2015
Description : Fillmore Ave.
Sample ID : MW-5
Collected By : Dave Rowlinson
Collection Date : 07/23/15 11:30

ESC Sample # : L778802-03

Site ID :

Project # : 8612199

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260C	07/31/15	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260C	07/31/15	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260C	07/31/15	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260C	07/31/15	1
cis-1,2-Dichloroethene	BDL	1.0	ug/l	8260C	07/31/15	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260C	07/31/15	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260C	07/31/15	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	07/31/15	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	07/31/15	1
Ethylbenzene	BDL	1.0	ug/l	8260C	07/31/15	1
2-Hexanone	BDL	10.	ug/l	8260C	07/31/15	1
Isopropylbenzene	BDL	1.0	ug/l	8260C	07/31/15	1
2-Butanone (MEK)	BDL	10.	ug/l	8260C	07/31/15	1
Methyl Acetate	BDL	20.	ug/l	8260C	07/31/15	1
Methyl Cyclohexane	BDL	1.0	ug/l	8260C	07/31/15	1
Methylene Chloride	BDL	5.0	ug/l	8260C	07/31/15	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260C	07/31/15	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260C	07/31/15	1
Styrene	BDL	1.0	ug/l	8260C	07/31/15	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260C	07/31/15	1
Tetrachloroethene	BDL	1.0	ug/l	8260C	07/31/15	1
Toluene	BDL	5.0	ug/l	8260C	07/31/15	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260C	07/31/15	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260C	07/31/15	1
Trichloroethene	BDL	1.0	ug/l	8260C	07/31/15	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260C	07/31/15	1
1,1,2-Trichlorotrifluoroethane	BDL	1.0	ug/l	8260C	07/31/15	1
Vinyl chloride	BDL	1.0	ug/l	8260C	07/31/15	1
Xylenes, Total	BDL	3.0	ug/l	8260C	07/31/15	1
Surrogate Recovery						
Toluene-d8	107.		% Rec.	8260C	07/31/15	1
Dibromofluoromethane	110.		% Rec.	8260C	07/31/15	1
a,a,a-Trifluorotoluene	104.		% Rec.	8260C	07/31/15	1
4-Bromofluorobenzene	93.2		% Rec.	8260C	07/31/15	1
TCL Base/Neutral Extractables						
Acenaphthene	0.54	1.0	ug/l	8270 D	07/29/15	1
Acenaphthylene	BDL	1.0	ug/l	8270 D	07/29/15	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)



YOUR LAB OF CHOICE

12065 Lebanon Rd.
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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

October 30, 2015

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

Date Received : July 24, 2015
Description : Fillmore Ave.
Sample ID : MW-5
Collected By : Dave Rowlinson
Collection Date : 07/23/15 11:30

ESC Sample # : L778802-03

Site ID :

Project # : 8612199

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Acetophenone	BDL	10.	ug/l	8270 D	07/29/15	1
Anthracene	BDL	1.0	ug/l	8270 D	07/29/15	1
Atrazine	BDL	10.	ug/l	8270 D	07/29/15	1
Benzaldehyde	BDL	10.	ug/l	8270 D	07/29/15	1
Benzo(a)anthracene	BDL	1.0	ug/l	8270 D	07/29/15	1
Benzo(b)fluoranthene	BDL	1.0	ug/l	8270 D	07/29/15	1
Benzo(k)fluoranthene	BDL	1.0	ug/l	8270 D	07/29/15	1
Benzo(g,h,i)perylene	BDL	1.0	ug/l	8270 D	07/29/15	1
Benzo(a)pyrene	BDL	1.0	ug/l	8270 D	07/29/15	1
Biphenyl	BDL	10.	ug/l	8270 D	07/29/15	1
Bis(2-chlorethoxy)methane	BDL	10.	ug/l	8270 D	07/29/15	1
Bis(2-chloroethyl)ether	BDL	10.	ug/l	8270 D	07/29/15	1
Bis(2-chloroisopropyl)ether	BDL	10.	ug/l	8270 D	07/29/15	1
4-Bromophenyl-phenylether	BDL	10.	ug/l	8270 D	07/29/15	1
Caprolactam	BDL	10.	ug/l	8270 D	07/29/15	1
Carbazole	0.34	10.	ug/l	8270 D	07/29/15	1
4-Chloroaniline	BDL	10.	ug/l	8270 D	07/29/15	1
2-Chloronaphthalene	BDL	1.0	ug/l	8270 D	07/29/15	1
4-Chlorophenyl-phenylether	BDL	10.	ug/l	8270 D	07/29/15	1
Chrysene	BDL	1.0	ug/l	8270 D	07/29/15	1
Dibenz(a,h)anthracene	BDL	1.0	ug/l	8270 D	07/29/15	1
Dibenzofuran	BDL	10.	ug/l	8270 D	07/29/15	1
3,3-Dichlorobenzidine	BDL	10.	ug/l	8270 D	07/29/15	1
2,4-Dinitrotoluene	BDL	10.	ug/l	8270 D	07/29/15	1
2,6-Dinitrotoluene	BDL	10.	ug/l	8270 D	07/29/15	1
Fluoranthene	BDL	1.0	ug/l	8270 D	07/29/15	1
Fluorene	0.49	1.0	ug/l	8270 D	07/29/15	1
Hexachlorobenzene	BDL	1.0	ug/l	8270 D	07/29/15	1
Hexachloro-1,3-butadiene	BDL	10.	ug/l	8270 D	07/29/15	1
Hexachlorocyclopentadiene	BDL	10.	ug/l	8270 D	07/29/15	1
Hexachloroethane	BDL	10.	ug/l	8270 D	07/29/15	1
Indeno(1,2,3-cd)pyrene	BDL	1.0	ug/l	8270 D	07/29/15	1
Isophorone	BDL	10.	ug/l	8270 D	07/29/15	1
2-Methylnaphthalene	BDL	1.0	ug/l	8270 D	07/29/15	1
Naphthalene	BDL	1.0	ug/l	8270 D	07/29/15	1
2-Nitroaniline	BDL	10.	ug/l	8270 D	07/29/15	1
3-Nitroaniline	BDL	10.	ug/l	8270 D	07/29/15	1
4-Nitroaniline	BDL	10.	ug/l	8270 D	07/29/15	1
Nitrobenzene	BDL	10.	ug/l	8270 D	07/29/15	1
n-Nitrosodiphenylamine	BDL	10.	ug/l	8270 D	07/29/15	1
n-Nitrosodi-n-propylamine	BDL	10.	ug/l	8270 D	07/29/15	1
Phenanthrene	BDL	1.0	ug/l	8270 D	07/29/15	1
Benzylbutyl phthalate	BDL	3.0	ug/l	8270 D	07/29/15	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)



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Est. 1970

REPORT OF ANALYSIS

October 30, 2015

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

ESC Sample # : L778802-03

Date Received : July 24, 2015
Description : Fillmore Ave.

Site ID :

Sample ID : MW-5

Project # : 8612199

Collected By : Dave Rowlinson
Collection Date : 07/23/15 11:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Bis(2-ethylhexyl)phthalate	BDL	3.0	ug/l	8270 D	07/29/15	1
Di-n-butyl phthalate	0.61	3.0	ug/l	8270 D	07/29/15	1
Diethyl phthalate	BDL	3.0	ug/l	8270 D	07/29/15	1
Dimethyl phthalate	BDL	3.0	ug/l	8270 D	07/29/15	1
Di-n-octyl phthalate	BDL	1.0	ug/l	8270 D	07/29/15	1
Pyrene	BDL	1.0	ug/l	8270 D	07/29/15	1
1,2,4,5-Tetrachlorobenzene	BDL	10.	ug/l	8270 D	07/29/15	1
TCL Acid Extractables						
4-Chloro-3-methylphenol	BDL	10.	ug/l	8270 D	07/29/15	1
2-Chlorophenol	BDL	10.	ug/l	8270 D	07/29/15	1
2-Methylphenol	BDL	10.	ug/l	8270 D	07/29/15	1
3&4-Methyl Phenol	BDL	10.	ug/l	8270 D	07/29/15	1
2,4-Dichlorophenol	BDL	10.	ug/l	8270 D	07/29/15	1
2,4-Dimethylphenol	BDL	10.	ug/l	8270 D	07/29/15	1
4,6-Dinitro-2-methylphenol	BDL	10.	ug/l	8270 D	07/29/15	1
2,4-Dinitrophenol	BDL	10.	ug/l	8270 D	07/29/15	1
2-Nitrophenol	BDL	10.	ug/l	8270 D	07/29/15	1
4-Nitrophenol	BDL	10.	ug/l	8270 D	07/29/15	1
Pentachlorophenol	BDL	10.	ug/l	8270 D	07/29/15	1
Phenol	BDL	10.	ug/l	8270 D	07/29/15	1
2,4,5-Trichlorophenol	BDL	10.	ug/l	8270 D	07/29/15	1
2,4,6-Trichlorophenol	BDL	10.	ug/l	8270 D	07/29/15	1
Surrogate Recovery						
2-Fluorophenol	43.6		% Rec.	8270 D	07/29/15	1
Phenol-d5	37.0		% Rec.	8270 D	07/29/15	1
Nitrobenzene-d5	61.6		% Rec.	8270 D	07/29/15	1
2-Fluorobiphenyl	65.2		% Rec.	8270 D	07/29/15	1
2,4,6-Tribromophenol	81.6		% Rec.	8270 D	07/29/15	1
p-Terphenyl-d14	59.5		% Rec.	8270 D	07/29/15	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 08/03/15 09:29 Revised: 10/30/15 16:50



L·A·B S·C·I·E·N·C·E·S

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REPORT OF ANALYSIS

October 30, 2015

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

ESC Sample # : L778802-04

Date Received : July 24, 2015
Description : Fillmore Ave.
Sample ID : MW-6
Collected By : Dave Rowlinson
Collection Date : 07/23/15 11:00

Site ID :

Project # : 8612199

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	0.58	2.0	ug/l	6020	07/31/15	1
Arsenic	1.7	2.0	ug/l	6020	07/31/15	1
Lead	9.7	2.0	ug/l	6020	07/31/15	1
Thallium	BDL	2.0	ug/l	6020	07/31/15	1
Mercury	0.058	0.20	ug/l	7470A	07/27/15	1
Aluminum	980	200	ug/l	6010C	07/30/15	1
Barium	190	5.0	ug/l	6010C	07/29/15	1
Beryllium	BDL	2.0	ug/l	6010C	07/29/15	1
Cadmium	BDL	2.0	ug/l	6010C	07/29/15	1
Calcium	170000	1000	ug/l	6010C	07/29/15	1
Chromium	BDL	10.	ug/l	6010C	07/29/15	1
Cobalt	BDL	10.	ug/l	6010C	07/29/15	1
Copper	BDL	10.	ug/l	6010C	07/29/15	1
Iron	9600	100	ug/l	6010C	07/29/15	1
Magnesium	30000	1000	ug/l	6010C	07/29/15	1
Manganese	1800	10.	ug/l	6010C	07/29/15	1
Nickel	BDL	10.	ug/l	6010C	07/29/15	1
Potassium	3500	1000	ug/l	6010C	07/29/15	1
Selenium	BDL	10.	ug/l	6010C	07/29/15	1
Silver	BDL	5.0	ug/l	6010C	07/29/15	1
Sodium	42000	1000	ug/l	6010C	07/29/15	1
Vanadium	BDL	20.	ug/l	6010C	07/29/15	1
Zinc	120	50.	ug/l	6010C	07/29/15	1
Volatile Organics						
Acetone	BDL	50.	ug/l	8260C	07/31/15	1
Benzene	BDL	1.0	ug/l	8260C	07/31/15	1
Bromochloromethane	BDL	1.0	ug/l	8260C	07/31/15	1
Bromodichloromethane	BDL	1.0	ug/l	8260C	07/31/15	1
Bromoform	BDL	1.0	ug/l	8260C	07/31/15	1
Bromomethane	BDL	5.0	ug/l	8260C	07/31/15	1
Carbon disulfide	BDL	1.0	ug/l	8260C	07/31/15	1
Carbon tetrachloride	BDL	1.0	ug/l	8260C	07/31/15	1
Chlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
Chlorodibromomethane	BDL	1.0	ug/l	8260C	07/31/15	1
Chloroethane	BDL	5.0	ug/l	8260C	07/31/15	1
Chloroform	BDL	5.0	ug/l	8260C	07/31/15	1
Chloromethane	BDL	2.5	ug/l	8260C	07/31/15	1
Cyclohexane	BDL	1.0	ug/l	8260C	07/31/15	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260C	07/31/15	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260C	07/31/15	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)



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REPORT OF ANALYSIS

October 30, 2015

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

Date Received : July 24, 2015
Description : Fillmore Ave.
Sample ID : MW-6
Collected By : Dave Rowlinson
Collection Date : 07/23/15 11:00

ESC Sample # : L778802-04

Site ID :

Project # : 8612199

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260C	07/31/15	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260C	07/31/15	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260C	07/31/15	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260C	07/31/15	1
cis-1,2-Dichloroethene	BDL	1.0	ug/l	8260C	07/31/15	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260C	07/31/15	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260C	07/31/15	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	07/31/15	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	07/31/15	1
Ethylbenzene	BDL	1.0	ug/l	8260C	07/31/15	1
2-Hexanone	BDL	10.	ug/l	8260C	07/31/15	1
Isopropylbenzene	BDL	1.0	ug/l	8260C	07/31/15	1
2-Butanone (MEK)	BDL	10.	ug/l	8260C	07/31/15	1
Methyl Acetate	BDL	20.	ug/l	8260C	07/31/15	1
Methyl Cyclohexane	BDL	1.0	ug/l	8260C	07/31/15	1
Methylene Chloride	BDL	5.0	ug/l	8260C	07/31/15	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260C	07/31/15	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260C	07/31/15	1
Styrene	BDL	1.0	ug/l	8260C	07/31/15	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260C	07/31/15	1
Tetrachloroethene	BDL	1.0	ug/l	8260C	07/31/15	1
Toluene	BDL	5.0	ug/l	8260C	07/31/15	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260C	07/31/15	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260C	07/31/15	1
Trichloroethene	BDL	1.0	ug/l	8260C	07/31/15	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260C	07/31/15	1
1,1,2-Trichlorotrifluoroethane	BDL	1.0	ug/l	8260C	07/31/15	1
Vinyl chloride	0.30	1.0	ug/l	8260C	07/31/15	1
Xylenes, Total	BDL	3.0	ug/l	8260C	07/31/15	1
Surrogate Recovery						
Toluene-d8	109.		# Rec.	8260C	07/31/15	1
Dibromofluoromethane	114.		# Rec.	8260C	07/31/15	1
a,a,a-Trifluorotoluene	103.		# Rec.	8260C	07/31/15	1
4-Bromofluorobenzene	92.6		# Rec.	8260C	07/31/15	1
TCL Base/Neutral Extractables						
Acenaphthene	2.4	1.0	ug/l	8270 D	07/29/15	1
Acenaphthylene	0.43	1.0	ug/l	8270 D	07/29/15	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)



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Est. 1970

REPORT OF ANALYSIS

October 30, 2015

Mr. Dave Rowlinson
GRD
285 Delaware Ave.
Buffalo, NY 14202

Date Received : July 24, 2015
Description : Fillmore Ave.
Sample ID : MW-6
Collected By : Dave Rowlinson
Collection Date : 07/23/15 11:00

ESC Sample # : L778802-04

Site ID :

Project # : 8612199

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Acetophenone	BDL	10.	ug/l	8270 D	07/29/15	1
Anthracene	BDL	1.0	ug/l	8270 D	07/29/15	1
Atrazine	BDL	10.	ug/l	8270 D	07/29/15	1
Benzaldehyde	BDL	10.	ug/l	8270 D	07/29/15	1
Benzo(a)anthracene	BDL	1.0	ug/l	8270 D	07/29/15	1
Benzo(b)fluoranthene	BDL	1.0	ug/l	8270 D	07/29/15	1
Benzo(k)fluoranthene	BDL	1.0	ug/l	8270 D	07/29/15	1
Benzo(g,h,i)perylene	BDL	1.0	ug/l	8270 D	07/29/15	1
Benzo(a)pyrene	BDL	1.0	ug/l	8270 D	07/29/15	1
Biphenyl	BDL	10.	ug/l	8270 D	07/29/15	1
Bis(2-chlorethoxy)methane	BDL	10.	ug/l	8270 D	07/29/15	1
Bis(2-chloroethyl)ether	BDL	10.	ug/l	8270 D	07/29/15	1
Bis(2-chloroisopropyl)ether	BDL	10.	ug/l	8270 D	07/29/15	1
4-Bromophenyl-phenylether	BDL	10.	ug/l	8270 D	07/29/15	1
Caprolactam	BDL	10.	ug/l	8270 D	07/29/15	1
Carbazole	BDL	10.	ug/l	8270 D	07/29/15	1
4-Chloroaniline	BDL	10.	ug/l	8270 D	07/29/15	1
2-Chloronaphthalene	BDL	1.0	ug/l	8270 D	07/29/15	1
4-Chlorophenyl-phenylether	BDL	10.	ug/l	8270 D	07/29/15	1
Chrysene	BDL	1.0	ug/l	8270 D	07/29/15	1
Dibenz(a,h)anthracene	BDL	1.0	ug/l	8270 D	07/29/15	1
Dibenzofuran	BDL	10.	ug/l	8270 D	07/29/15	1
3,3-Dichlorobenzidine	BDL	10.	ug/l	8270 D	07/29/15	1
2,4-Dinitrotoluene	BDL	10.	ug/l	8270 D	07/29/15	1
2,6-Dinitrotoluene	BDL	10.	ug/l	8270 D	07/29/15	1
Fluoranthene	BDL	1.0	ug/l	8270 D	07/29/15	1
Fluorene	BDL	1.0	ug/l	8270 D	07/29/15	1
Hexachlorobenzene	BDL	1.0	ug/l	8270 D	07/29/15	1
Hexachloro-1,3-butadiene	BDL	10.	ug/l	8270 D	07/29/15	1
Hexachlorocyclopentadiene	BDL	10.	ug/l	8270 D	07/29/15	1
Hexachloroethane	BDL	10.	ug/l	8270 D	07/29/15	1
Indeno(1,2,3-cd)pyrene	BDL	1.0	ug/l	8270 D	07/29/15	1
Isophorone	BDL	10.	ug/l	8270 D	07/29/15	1
2-Methylnaphthalene	BDL	1.0	ug/l	8270 D	07/29/15	1
Naphthalene	BDL	1.0	ug/l	8270 D	07/29/15	1
2-Nitroaniline	BDL	10.	ug/l	8270 D	07/29/15	1
3-Nitroaniline	BDL	10.	ug/l	8270 D	07/29/15	1
4-Nitroaniline	BDL	10.	ug/l	8270 D	07/29/15	1
Nitrobenzene	BDL	10.	ug/l	8270 D	07/29/15	1
n-Nitrosodiphenylamine	BDL	10.	ug/l	8270 D	07/29/15	1
n-Nitrosodi-n-propylamine	BDL	10.	ug/l	8270 D	07/29/15	1
Phenanthrene	BDL	1.0	ug/l	8270 D	07/29/15	1
Benzylbutyl phthalate	BDL	3.0	ug/l	8270 D	07/29/15	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)



YOUR LAB OF CHOICE

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Est. 1970

REPORT OF ANALYSIS

October 30, 2015

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

Date Received : July 24, 2015
Description : Fillmore Ave.
Sample ID : MW-6
Collected By : Dave Rowlinson
Collection Date : 07/23/15 11:00

ESC Sample # : L778802-04

Site ID :

Project # : 8612199

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Bis(2-ethylhexyl)phthalate	BDL	3.0	ug/l	8270 D	07/29/15	1
Di-n-butyl phthalate	0.60	3.0	ug/l	8270 D	07/29/15	1
Diethyl phthalate	BDL	3.0	ug/l	8270 D	07/29/15	1
Dimethyl phthalate	BDL	3.0	ug/l	8270 D	07/29/15	1
Di-n-octyl phthalate	BDL	1.0	ug/l	8270 D	07/29/15	1
Pyrene	BDL	1.0	ug/l	8270 D	07/29/15	1
1,2,4,5-Tetrachlorobenzene	BDL	10.	ug/l	8270 D	07/29/15	1
TCL Acid Extractables						
4-Chloro-3-methylphenol	BDL	10.	ug/l	8270 D	07/29/15	1
2-Chlorophenol	BDL	10.	ug/l	8270 D	07/29/15	1
2-Methylphenol	BDL	10.	ug/l	8270 D	07/29/15	1
3&4-Methyl Phenol	BDL	10.	ug/l	8270 D	07/29/15	1
2,4-Dichlorophenol	BDL	10.	ug/l	8270 D	07/29/15	1
2,4-Dimethylphenol	BDL	10.	ug/l	8270 D	07/29/15	1
4,6-Dinitro-2-methylphenol	BDL	10.	ug/l	8270 D	07/29/15	1
2,4-Dinitrophenol	BDL	10.	ug/l	8270 D	07/29/15	1
2-Nitrophenol	BDL	10.	ug/l	8270 D	07/29/15	1
4-Nitrophenol	BDL	10.	ug/l	8270 D	07/29/15	1
Pentachlorophenol	BDL	10.	ug/l	8270 D	07/29/15	1
Phenol	BDL	10.	ug/l	8270 D	07/29/15	1
2,4,5-Trichlorophenol	BDL	10.	ug/l	8270 D	07/29/15	1
2,4,6-Trichlorophenol	BDL	10.	ug/l	8270 D	07/29/15	1
Surrogate Recovery						
2-Fluorophenol	51.5		% Rec.	8270 D	07/29/15	1
Phenol-d5	41.8		% Rec.	8270 D	07/29/15	1
Nitrobenzene-d5	70.6		% Rec.	8270 D	07/29/15	1
2-Fluorobiphenyl	70.1		% Rec.	8270 D	07/29/15	1
2,4,6-Tribromophenol	81.2		% Rec.	8270 D	07/29/15	1
p-Terphenyl-d14	56.6		% Rec.	8270 D	07/29/15	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

The reported analytical results relate only to the sample submitted.

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Reported: 08/03/15 09:29 Revised: 10/30/15 16:50



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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

October 30, 2015

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

ESC Sample # : L778802-05

Date Received : July 24, 2015
Description : Fillmore Ave.
Sample ID : MW-7
Collected By : Dave Rowlinson
Collection Date : 07/23/15 10:00

Site ID :

Project # : 8612199

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	4.2	2.0	ug/l	6020	07/31/15	1
Arsenic	2.1	2.0	ug/l	6020	07/31/15	1
Lead	100	2.0	ug/l	6020	07/31/15	1
Thallium	0.20	2.0	ug/l	6020	07/31/15	1
Mercury	0.081	0.20	ug/l	7470A	07/27/15	1
Aluminum	1700	200	ug/l	6010C	07/30/15	1
Barium	56.	5.0	ug/l	6010C	07/29/15	1
Beryllium	BDL	2.0	ug/l	6010C	07/29/15	1
Cadmium	12.	2.0	ug/l	6010C	07/29/15	1
Calcium	180000	1000	ug/l	6010C	07/29/15	1
Chromium	BDL	10.	ug/l	6010C	07/29/15	1
Cobalt	16.	10.	ug/l	6010C	07/29/15	1
Copper	67.	10.	ug/l	6010C	07/29/15	1
Iron	6200	100	ug/l	6010C	07/29/15	1
Magnesium	24000	1000	ug/l	6010C	07/29/15	1
Manganese	1300	10.	ug/l	6010C	07/29/15	1
Nickel	37.	10.	ug/l	6010C	07/29/15	1
Potassium	6100	1000	ug/l	6010C	07/29/15	1
Selenium	BDL	10.	ug/l	6010C	07/29/15	1
Silver	BDL	5.0	ug/l	6010C	07/29/15	1
Sodium	31000	1000	ug/l	6010C	07/29/15	1
Vanadium	BDL	20.	ug/l	6010C	07/29/15	1
Zinc	9200	50.	ug/l	6010C	07/29/15	1
Volatile Organics						
Acetone	BDL	50.	ug/l	8260C	07/31/15	1
Benzene	BDL	1.0	ug/l	8260C	07/31/15	1
Bromochloromethane	BDL	1.0	ug/l	8260C	07/31/15	1
Bromodichloromethane	BDL	1.0	ug/l	8260C	07/31/15	1
Bromoform	BDL	1.0	ug/l	8260C	07/31/15	1
Bromomethane	BDL	5.0	ug/l	8260C	07/31/15	1
Carbon disulfide	BDL	1.0	ug/l	8260C	07/31/15	1
Carbon tetrachloride	BDL	1.0	ug/l	8260C	07/31/15	1
Chlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
Chlorodibromomethane	BDL	1.0	ug/l	8260C	07/31/15	1
Chloroethane	BDL	5.0	ug/l	8260C	07/31/15	1
Chloroform	BDL	5.0	ug/l	8260C	07/31/15	1
Chloromethane	BDL	2.5	ug/l	8260C	07/31/15	1
Cyclohexane	BDL	1.0	ug/l	8260C	07/31/15	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260C	07/31/15	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260C	07/31/15	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)



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Est. 1970

REPORT OF ANALYSIS

October 30, 2015

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

Date Received : July 24, 2015
Description : Fillmore Ave.

ESC Sample # : L778802-05

Sample ID : MW-7
Collected By : Dave Rowlinson
Collection Date : 07/23/15 10:00

Site ID :

Project # : 8612199

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260C	07/31/15	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260C	07/31/15	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260C	07/31/15	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260C	07/31/15	1
cis-1,2-Dichloroethene	BDL	1.0	ug/l	8260C	07/31/15	1
trans-1,2-Dichloroethene	BDL	1.0	ug/l	8260C	07/31/15	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260C	07/31/15	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	07/31/15	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	07/31/15	1
Ethylbenzene	BDL	1.0	ug/l	8260C	07/31/15	1
2-Hexanone	BDL	10.	ug/l	8260C	07/31/15	1
Isopropylbenzene	BDL	1.0	ug/l	8260C	07/31/15	1
2-Butanone (MEK)	BDL	10.	ug/l	8260C	07/31/15	1
Methyl Acetate	BDL	20.	ug/l	8260C	07/31/15	1
Methyl Cyclohexane	BDL	1.0	ug/l	8260C	07/31/15	1
Methylene Chloride	BDL	5.0	ug/l	8260C	07/31/15	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260C	07/31/15	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260C	07/31/15	1
Styrene	BDL	1.0	ug/l	8260C	07/31/15	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260C	07/31/15	1
Tetrachloroethene	BDL	1.0	ug/l	8260C	07/31/15	1
Toluene	BDL	5.0	ug/l	8260C	07/31/15	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260C	07/31/15	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260C	07/31/15	1
Trichloroethene	2.3	1.0	ug/l	8260C	07/31/15	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260C	07/31/15	1
1,1,2-Trichlorotrifluoroethane	BDL	1.0	ug/l	8260C	07/31/15	1
Vinyl chloride	BDL	1.0	ug/l	8260C	07/31/15	1
Xylenes, Total	BDL	3.0	ug/l	8260C	07/31/15	1
Surrogate Recovery						
Toluene-d8	105.		% Rec.	8260C	07/31/15	1
Dibromofluoromethane	109.		% Rec.	8260C	07/31/15	1
a,a,a-Trifluorotoluene	102.		% Rec.	8260C	07/31/15	1
4-Bromofluorobenzene	93.2		% Rec.	8260C	07/31/15	1
TCL Base/Neutral Extractables						
Acenaphthene	0.54	1.0	ug/l	8270 D	07/29/15	1
Acenaphthylene	0.36	1.0	ug/l	8270 D	07/29/15	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)



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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

October 30, 2015

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

Date Received : July 24, 2015
Description : Fillmore Ave.
Sample ID : MW-7
Collected By : Dave Rowlinson
Collection Date : 07/23/15 10:00

ESC Sample # : L778802-05

Site ID :

Project # : 8612199

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Acetophenone	BDL	10.	ug/l	8270 D	07/29/15	1
Anthracene	BDL	1.0	ug/l	8270 D	07/29/15	1
Atrazine	BDL	10.	ug/l	8270 D	07/29/15	1
Benzaldehyde	BDL	10.	ug/l	8270 D	07/29/15	1
Benzo(a)anthracene	0.26	1.0	ug/l	8270 D	07/29/15	1
Benzo(b)fluoranthene	BDL	1.0	ug/l	8270 D	07/29/15	1
Benzo(k)fluoranthene	BDL	1.0	ug/l	8270 D	07/29/15	1
Benzo(g,h,i)perylene	0.16	1.0	ug/l	8270 D	07/29/15	1
Benzo(a)pyrene	BDL	1.0	ug/l	8270 D	07/29/15	1
Biphenyl	BDL	10.	ug/l	8270 D	07/29/15	1
Bis(2-chlorethoxy)methane	BDL	10.	ug/l	8270 D	07/29/15	1
Bis(2-chloroethyl)ether	BDL	10.	ug/l	8270 D	07/29/15	1
Bis(2-chloroisopropyl)ether	BDL	10.	ug/l	8270 D	07/29/15	1
4-Bromophenyl-phenylether	BDL	10.	ug/l	8270 D	07/29/15	1
Caprolactam	BDL	10.	ug/l	8270 D	07/29/15	1
Carbazole	BDL	10.	ug/l	8270 D	07/29/15	1
4-Chloroaniline	BDL	10.	ug/l	8270 D	07/29/15	1
2-Chloronaphthalene	BDL	1.0	ug/l	8270 D	07/29/15	1
4-Chlorophenyl-phenylether	BDL	10.	ug/l	8270 D	07/29/15	1
Chrysene	BDL	1.0	ug/l	8270 D	07/29/15	1
Dibenz(a,h)anthracene	BDL	1.0	ug/l	8270 D	07/29/15	1
Dibenzofuran	BDL	10.	ug/l	8270 D	07/29/15	1
3,3-Dichlorobenzidine	BDL	10.	ug/l	8270 D	07/29/15	1
2,4-Dinitrotoluene	BDL	10.	ug/l	8270 D	07/29/15	1
2,6-Dinitrotoluene	BDL	10.	ug/l	8270 D	07/29/15	1
Fluoranthene	BDL	1.0	ug/l	8270 D	07/29/15	1
Fluorene	BDL	1.0	ug/l	8270 D	07/29/15	1
Hexachlorobenzene	BDL	1.0	ug/l	8270 D	07/29/15	1
Hexachloro-1,3-butadiene	BDL	10.	ug/l	8270 D	07/29/15	1
Hexachlorocyclopentadiene	BDL	10.	ug/l	8270 D	07/29/15	1
Hexachloroethane	BDL	10.	ug/l	8270 D	07/29/15	1
Indeno(1,2,3-cd)pyrene	BDL	1.0	ug/l	8270 D	07/29/15	1
Isophorone	BDL	10.	ug/l	8270 D	07/29/15	1
2-Methylnaphthalene	BDL	1.0	ug/l	8270 D	07/29/15	1
Naphthalene	0.81	1.0	ug/l	8270 D	07/29/15	1
2-Nitroaniline	BDL	10.	ug/l	8270 D	07/29/15	1
3-Nitroaniline	BDL	10.	ug/l	8270 D	07/29/15	1
4-Nitroaniline	BDL	10.	ug/l	8270 D	07/29/15	1
Nitrobenzene	BDL	10.	ug/l	8270 D	07/29/15	1
n-Nitrosodiphenylamine	BDL	10.	ug/l	8270 D	07/29/15	1
n-Nitrosodi-n-propylamine	BDL	10.	ug/l	8270 D	07/29/15	1
Phenanthrene	BDL	1.0	ug/l	8270 D	07/29/15	1
Benzylbutyl phthalate	BDL	3.0	ug/l	8270 D	07/29/15	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)



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Est. 1970

REPORT OF ANALYSIS

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

October 30, 2015

Date Received : July 24, 2015
Description : Fillmore Ave.
Sample ID : MW-7
Collected By : Dave Rowlinson
Collection Date : 07/23/15 10:00

ESC Sample # : L778802-05

Site ID :

Project # : 8612199

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Bis(2-ethylhexyl)phthalate	BDL	3.0	ug/l	8270 D	07/29/15	1
Di-n-butyl phthalate	0.62	3.0	ug/l	8270 D	07/29/15	1
Diethyl phthalate	BDL	3.0	ug/l	8270 D	07/29/15	1
Dimethyl phthalate	BDL	3.0	ug/l	8270 D	07/29/15	1
Di-n-octyl phthalate	BDL	1.0	ug/l	8270 D	07/29/15	1
Pyrene	BDL	1.0	ug/l	8270 D	07/29/15	1
1,2,4,5-Tetrachlorobenzene	BDL	10.	ug/l	8270 D	07/29/15	1
TCL Acid Extractables						
4-Chloro-3-methylphenol	BDL	10.	ug/l	8270 D	07/29/15	1
2-Chlorophenol	BDL	10.	ug/l	8270 D	07/29/15	1
2-Methylphenol	BDL	10.	ug/l	8270 D	07/29/15	1
3&4-Methyl Phenol	BDL	10.	ug/l	8270 D	07/29/15	1
2,4-Dichlorophenol	BDL	10.	ug/l	8270 D	07/29/15	1
2,4-Dimethylphenol	BDL	10.	ug/l	8270 D	07/29/15	1
4,6-Dinitro-2-methylphenol	BDL	10.	ug/l	8270 D	07/29/15	1
2,4-Dinitrophenol	BDL	10.	ug/l	8270 D	07/29/15	1
2-Nitrophenol	BDL	10.	ug/l	8270 D	07/29/15	1
4-Nitrophenol	BDL	10.	ug/l	8270 D	07/29/15	1
Pentachlorophenol	BDL	10.	ug/l	8270 D	07/29/15	1
Phenol	BDL	10.	ug/l	8270 D	07/29/15	1
2,4,5-Trichlorophenol	BDL	10.	ug/l	8270 D	07/29/15	1
2,4,6-Trichlorophenol	BDL	10.	ug/l	8270 D	07/29/15	1
Surrogate Recovery						
2-Fluorophenol	49.5		% Rec.	8270 D	07/29/15	1
Phenol-d5	39.2		% Rec.	8270 D	07/29/15	1
Nitrobenzene-d5	63.0		% Rec.	8270 D	07/29/15	1
2-Fluorobiphenyl	67.0		% Rec.	8270 D	07/29/15	1
2,4,6-Tribromophenol	84.9		% Rec.	8270 D	07/29/15	1
p-Terphenyl-d14	61.2		% Rec.	8270 D	07/29/15	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Reported: 08/03/15 09:29 Revised: 10/30/15 16:50



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REPORT OF ANALYSIS

October 30, 2015

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

Date Received : July 24, 2015
Description : Fillmore Ave.
Sample ID : MW-8
Collected By : Dave Rowlinson
Collection Date : 07/23/15 09:30

ESC Sample # : L778802-06

Site ID :

Project # : 8612199

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Antimony	0.67	2.0	ug/l	6020	07/31/15	1
Arsenic	2.0	2.0	ug/l	6020	07/31/15	1
Lead	9.2	2.0	ug/l	6020	07/31/15	1
Thallium	BDL	2.0	ug/l	6020	07/31/15	1
Mercury	BDL	0.20	ug/l	7470A	07/27/15	1
Aluminum	BDL	200	ug/l	6010C	07/30/15	1
Barium	140	5.0	ug/l	6010C	07/29/15	1
Beryllium	BDL	2.0	ug/l	6010C	07/29/15	1
Cadmium	BDL	2.0	ug/l	6010C	07/29/15	1
Calcium	230000	1000	ug/l	6010C	07/29/15	1
Chromium	BDL	10.	ug/l	6010C	07/29/15	1
Cobalt	BDL	10.	ug/l	6010C	07/29/15	1
Copper	BDL	10.	ug/l	6010C	07/29/15	1
Iron	5300	100	ug/l	6010C	07/29/15	1
Magnesium	43000	1000	ug/l	6010C	07/29/15	1
Manganese	1400	10.	ug/l	6010C	07/29/15	1
Nickel	BDL	10.	ug/l	6010C	07/29/15	1
Potassium	4400	1000	ug/l	6010C	07/29/15	1
Selenium	BDL	10.	ug/l	6010C	07/29/15	1
Silver	BDL	5.0	ug/l	6010C	07/29/15	1
Sodium	52000	1000	ug/l	6010C	07/29/15	1
Vanadium	BDL	20.	ug/l	6010C	07/29/15	1
Zinc	100	50.	ug/l	6010C	07/29/15	1
Volatile Organics						
Acetone	BDL	50.	ug/l	8260C	07/31/15	1
Benzene	2.6	1.0	ug/l	8260C	07/31/15	1
Bromochloromethane	BDL	1.0	ug/l	8260C	07/31/15	1
Bromodichloromethane	BDL	1.0	ug/l	8260C	07/31/15	1
Bromoform	BDL	1.0	ug/l	8260C	07/31/15	1
Bromomethane	BDL	5.0	ug/l	8260C	07/31/15	1
Carbon disulfide	BDL	1.0	ug/l	8260C	07/31/15	1
Carbon tetrachloride	BDL	1.0	ug/l	8260C	07/31/15	1
Chlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
Chlorodibromomethane	BDL	1.0	ug/l	8260C	07/31/15	1
Chloroethane	BDL	5.0	ug/l	8260C	07/31/15	1
Chloroform	BDL	5.0	ug/l	8260C	07/31/15	1
Chloromethane	BDL	2.5	ug/l	8260C	07/31/15	1
Cyclohexane	0.43	1.0	ug/l	8260C	07/31/15	1
1,2-Dibromo-3-Chloropropane	BDL	5.0	ug/l	8260C	07/31/15	1
1,2-Dibromoethane	BDL	1.0	ug/l	8260C	07/31/15	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)



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REPORT OF ANALYSIS

October 30, 2015

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

ESC Sample # : L778802-06

Date Received : July 24, 2015
Description : Fillmore Ave.

Site ID :

Sample ID : MW-8

Project # : 8612199

Collected By : Dave Rowlinson
Collection Date : 07/23/15 09:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
1,2-Dichlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
1,3-Dichlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
1,4-Dichlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
Dichlorodifluoromethane	BDL	5.0	ug/l	8260C	07/31/15	1
1,1-Dichloroethane	BDL	1.0	ug/l	8260C	07/31/15	1
1,2-Dichloroethane	BDL	1.0	ug/l	8260C	07/31/15	1
1,1-Dichloroethene	BDL	1.0	ug/l	8260C	07/31/15	1
cis-1,2-Dichloroethene	5.3	1.0	ug/l	8260C	07/31/15	1
trans-1,2-Dichloroethene	1.0	1.0	ug/l	8260C	07/31/15	1
1,2-Dichloropropane	BDL	1.0	ug/l	8260C	07/31/15	1
cis-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	07/31/15	1
trans-1,3-Dichloropropene	BDL	1.0	ug/l	8260C	07/31/15	1
Ethylbenzene	BDL	1.0	ug/l	8260C	07/31/15	1
2-Hexanone	BDL	10.	ug/l	8260C	07/31/15	1
Isopropylbenzene	BDL	1.0	ug/l	8260C	07/31/15	1
2-Butanone (MEK)	BDL	10.	ug/l	8260C	07/31/15	1
Methyl Acetate	BDL	20.	ug/l	8260C	07/31/15	1
Methyl Cyclohexane	BDL	1.0	ug/l	8260C	07/31/15	1
Methylene Chloride	BDL	5.0	ug/l	8260C	07/31/15	1
4-Methyl-2-pentanone (MIBK)	BDL	10.	ug/l	8260C	07/31/15	1
Methyl tert-butyl ether	BDL	1.0	ug/l	8260C	07/31/15	1
Styrene	BDL	1.0	ug/l	8260C	07/31/15	1
1,1,2,2-Tetrachloroethane	BDL	1.0	ug/l	8260C	07/31/15	1
Tetrachloroethene	BDL	1.0	ug/l	8260C	07/31/15	1
Toluene	BDL	5.0	ug/l	8260C	07/31/15	1
1,2,3-Trichlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
1,2,4-Trichlorobenzene	BDL	1.0	ug/l	8260C	07/31/15	1
1,1,1-Trichloroethane	BDL	1.0	ug/l	8260C	07/31/15	1
1,1,2-Trichloroethane	BDL	1.0	ug/l	8260C	07/31/15	1
Trichloroethene	BDL	1.0	ug/l	8260C	07/31/15	1
Trichlorofluoromethane	BDL	5.0	ug/l	8260C	07/31/15	1
1,1,2-Trichlorotrifluoroethane	BDL	1.0	ug/l	8260C	07/31/15	1
Vinyl chloride	35.	1.0	ug/l	8260C	07/31/15	1
Xylenes, Total	BDL	3.0	ug/l	8260C	07/31/15	1
Surrogate Recovery						
Toluene-d8	108.		# Rec.	8260C	07/31/15	1
Dibromofluoromethane	109.		# Rec.	8260C	07/31/15	1
a,a,a-Trifluorotoluene	103.		# Rec.	8260C	07/31/15	1
4-Bromofluorobenzene	93.7		# Rec.	8260C	07/31/15	1
TCL Base/Neutral Extractables						
Acenaphthene	1.4	1.0	ug/l	8270 D	07/29/15	1
Acenaphthylene	BDL	1.0	ug/l	8270 D	07/29/15	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)



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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

October 30, 2015

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

ESC Sample # : L778802-06

Date Received : July 24, 2015
Description : Fillmore Ave.
Sample ID : MW-8
Collected By : Dave Rowlinson
Collection Date : 07/23/15 09:30

Site ID :

Project # : 8612199

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Acetophenone	BDL	10.	ug/l	8270 D	07/29/15	1
Anthracene	BDL	1.0	ug/l	8270 D	07/29/15	1
Atrazine	BDL	10.	ug/l	8270 D	07/29/15	1
Benzaldehyde	BDL	10.	ug/l	8270 D	07/29/15	1
Benzo(a)anthracene	BDL	1.0	ug/l	8270 D	07/29/15	1
Benzo(b)fluoranthene	BDL	1.0	ug/l	8270 D	07/29/15	1
Benzo(k)fluoranthene	BDL	1.0	ug/l	8270 D	07/29/15	1
Benzo(g,h,i)perylene	BDL	1.0	ug/l	8270 D	07/29/15	1
Benzo(a)pyrene	BDL	1.0	ug/l	8270 D	07/29/15	1
Biphenyl	BDL	10.	ug/l	8270 D	07/29/15	1
Bis(2-chlorethoxy)methane	BDL	10.	ug/l	8270 D	07/29/15	1
Bis(2-chloroethyl)ether	BDL	10.	ug/l	8270 D	07/29/15	1
Bis(2-chloroisopropyl)ether	BDL	10.	ug/l	8270 D	07/29/15	1
4-Bromophenyl-phenylether	BDL	10.	ug/l	8270 D	07/29/15	1
Caprolactam	BDL	10.	ug/l	8270 D	07/29/15	1
Carbazole	BDL	10.	ug/l	8270 D	07/29/15	1
4-Chloroaniline	BDL	10.	ug/l	8270 D	07/29/15	1
2-Chloronaphthalene	BDL	1.0	ug/l	8270 D	07/29/15	1
4-Chlorophenyl-phenylether	BDL	10.	ug/l	8270 D	07/29/15	1
Chrysene	BDL	1.0	ug/l	8270 D	07/29/15	1
Dibenz(a,h)anthracene	BDL	1.0	ug/l	8270 D	07/29/15	1
Dibenzofuran	BDL	10.	ug/l	8270 D	07/29/15	1
3,3-Dichlorobenzidine	BDL	10.	ug/l	8270 D	07/29/15	1
2,4-Dinitrotoluene	BDL	10.	ug/l	8270 D	07/29/15	1
2,6-Dinitrotoluene	BDL	10.	ug/l	8270 D	07/29/15	1
Fluoranthene	BDL	1.0	ug/l	8270 D	07/29/15	1
Fluorene	BDL	1.0	ug/l	8270 D	07/29/15	1
Hexachlorobenzene	BDL	1.0	ug/l	8270 D	07/29/15	1
Hexachloro-1,3-butadiene	BDL	10.	ug/l	8270 D	07/29/15	1
Hexachlorocyclopentadiene	BDL	10.	ug/l	8270 D	07/29/15	1
Hexachloroethane	BDL	10.	ug/l	8270 D	07/29/15	1
Indeno(1,2,3-cd)pyrene	BDL	1.0	ug/l	8270 D	07/29/15	1
Isophorone	BDL	10.	ug/l	8270 D	07/29/15	1
2-Methylnaphthalene	BDL	1.0	ug/l	8270 D	07/29/15	1
Naphthalene	BDL	1.0	ug/l	8270 D	07/29/15	1
2-Nitroaniline	BDL	10.	ug/l	8270 D	07/29/15	1
3-Nitroaniline	BDL	10.	ug/l	8270 D	07/29/15	1
4-Nitroaniline	BDL	10.	ug/l	8270 D	07/29/15	1
Nitrobenzene	BDL	10.	ug/l	8270 D	07/29/15	1
n-Nitrosodiphenylamine	BDL	10.	ug/l	8270 D	07/29/15	1
n-Nitrosodi-n-propylamine	BDL	10.	ug/l	8270 D	07/29/15	1
Phenanthrene	BDL	1.0	ug/l	8270 D	07/29/15	1
Benzylbutyl phthalate	BDL	3.0	ug/l	8270 D	07/29/15	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)



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REPORT OF ANALYSIS

October 30, 2015

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

ESC Sample # : L778802-06

Date Received : July 24, 2015
Description : Fillmore Ave.

Site ID :

Sample ID : MW-8

Project # : 8612199

Collected By : Dave Rowlinson
Collection Date : 07/23/15 09:30

Parameter	Result	Det. Limit	Units	Method	Date	Dil.
Bis(2-ethylhexyl)phthalate	BDL	3.0	ug/l	8270 D	07/29/15	1
Di-n-butyl phthalate	0.64	3.0	ug/l	8270 D	07/29/15	1
Diethyl phthalate	BDL	3.0	ug/l	8270 D	07/29/15	1
Dimethyl phthalate	BDL	3.0	ug/l	8270 D	07/29/15	1
Di-n-octyl phthalate	BDL	1.0	ug/l	8270 D	07/29/15	1
Pyrene	BDL	1.0	ug/l	8270 D	07/29/15	1
1,2,4,5-Tetrachlorobenzene	BDL	10.	ug/l	8270 D	07/29/15	1
TCL Acid Extractables						
4-Chloro-3-methylphenol	BDL	10.	ug/l	8270 D	07/29/15	1
2-Chlorophenol	BDL	10.	ug/l	8270 D	07/29/15	1
2-Methylphenol	BDL	10.	ug/l	8270 D	07/29/15	1
3&4-Methyl Phenol	1.3	10.	ug/l	8270 D	07/29/15	1
2,4-Dichlorophenol	BDL	10.	ug/l	8270 D	07/29/15	1
2,4-Dimethylphenol	BDL	10.	ug/l	8270 D	07/29/15	1
4,6-Dinitro-2-methylphenol	BDL	10.	ug/l	8270 D	07/29/15	1
2,4-Dinitrophenol	BDL	10.	ug/l	8270 D	07/29/15	1
2-Nitrophenol	BDL	10.	ug/l	8270 D	07/29/15	1
4-Nitrophenol	BDL	10.	ug/l	8270 D	07/29/15	1
Pentachlorophenol	BDL	10.	ug/l	8270 D	07/29/15	1
Phenol	BDL	10.	ug/l	8270 D	07/29/15	1
2,4,5-Trichlorophenol	BDL	10.	ug/l	8270 D	07/29/15	1
2,4,6-Trichlorophenol	BDL	10.	ug/l	8270 D	07/29/15	1
Surrogate Recovery						
2-Fluorophenol	42.9		% Rec.	8270 D	07/29/15	1
Phenol-d5	36.6		% Rec.	8270 D	07/29/15	1
Nitrobenzene-d5	60.6		% Rec.	8270 D	07/29/15	1
2-Fluorobiphenyl	69.4		% Rec.	8270 D	07/29/15	1
2,4,6-Tribromophenol	79.5		% Rec.	8270 D	07/29/15	1
p-Terphenyl-d14	61.4		% Rec.	8270 D	07/29/15	1

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Note:

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Est. 1970

REPORT OF ANALYSIS

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

October 30, 2015

Date Received : July 24, 2015
Description : Fillmore Ave.
Sample ID : MW-8 DUP
Collected By : Dave Rowlinson
Collection Date : 07/23/15 09:30

ESC Sample # : L778802-07

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qual	Method	Date	Dil.
Volatile Organics								
Acetone	U	0.010	0.050	mg/l		8260C	07/31/15	1
Benzene	0.0023	0.00033	0.0010	mg/l		8260C	07/31/15	1
Bromochloromethane	U	0.00052	0.0010	mg/l		8260C	07/31/15	1
Bromodichloromethane	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
Bromoform	U	0.00047	0.0010	mg/l		8260C	07/31/15	1
Bromomethane	U	0.00087	0.0050	mg/l		8260C	07/31/15	1
Carbon disulfide	U	0.00028	0.0010	mg/l		8260C	07/31/15	1
Carbon tetrachloride	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
Chlorobenzene	U	0.00035	0.0010	mg/l		8260C	07/31/15	1
Chlorodibromomethane	U	0.00033	0.0010	mg/l		8260C	07/31/15	1
Chloroethane	U	0.00045	0.0050	mg/l		8260C	07/31/15	1
Chloroform	U	0.00032	0.0050	mg/l		8260C	07/31/15	1
Chloromethane	U	0.00028	0.0025	mg/l		8260C	07/31/15	1
Cyclohexane	U	0.00039	0.0010	mg/l		8260C	07/31/15	1
1,2-Dibromo-3-Chloropropane	U	0.0013	0.0050	mg/l		8260C	07/31/15	1
1,2-Dibromoethane	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
1,2-Dichlorobenzene	U	0.00035	0.0010	mg/l		8260C	07/31/15	1
1,3-Dichlorobenzene	U	0.00022	0.0010	mg/l		8260C	07/31/15	1
1,4-Dichlorobenzene	U	0.00027	0.0010	mg/l		8260C	07/31/15	1
Dichlorodifluoromethane	U	0.00055	0.0050	mg/l		8260C	07/31/15	1
1,1-Dichloroethane	U	0.00026	0.0010	mg/l		8260C	07/31/15	1
1,2-Dichloroethane	U	0.00036	0.0010	mg/l		8260C	07/31/15	1
1,1-Dichloroethene	U	0.00040	0.0010	mg/l		8260C	07/31/15	1
cis-1,2-Dichloroethene	0.0047	0.00026	0.0010	mg/l		8260C	07/31/15	1
trans-1,2-Dichloroethene	U	0.00040	0.0010	mg/l		8260C	07/31/15	1
1,2-Dichloropropane	U	0.00031	0.0010	mg/l		8260C	07/31/15	1
cis-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260C	07/31/15	1
trans-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260C	07/31/15	1
Ethylbenzene	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
2-Hexanone	U	0.0038	0.010	mg/l		8260C	07/31/15	1
Isopropylbenzene	U	0.00033	0.0010	mg/l		8260C	07/31/15	1
2-Butanone (MEK)	U	0.0039	0.010	mg/l		8260C	07/31/15	1
Methyl Acetate	U	0.0043	0.020	mg/l		8260C	07/31/15	1
Methyl Cyclohexane	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
Methylene Chloride	U	0.0010	0.0050	mg/l		8260C	07/31/15	1
4-Methyl-2-pentanone (MIBK)	U	0.0021	0.010	mg/l		8260C	07/31/15	1
Methyl tert-butyl ether	U	0.00037	0.0010	mg/l		8260C	07/31/15	1
Styrene	U	0.00031	0.0010	mg/l		8260C	07/31/15	1
1,1,2,2-Tetrachloroethane	U	0.00013	0.0010	mg/l		8260C	07/31/15	1
Tetrachloroethene	U	0.00037	0.0010	mg/l		8260C	07/31/15	1
Toluene	U	0.00078	0.0050	mg/l		8260C	07/31/15	1
1,2,3-Trichlorobenzene	U	0.00023	0.0010	mg/l		8260C	07/31/15	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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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

October 30, 2015

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

Date Received : July 24, 2015
Description : Fillmore Ave.

Sample ID : MW-8 DUP

Collected By : Dave Rowlinson
Collection Date : 07/23/15 09:30

ESC Sample # : L778802-07

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qual	Method	Date	Dil.
1,2,4-Trichlorobenzene	U	0.00036	0.0010	mg/l		8260C	07/31/15	1
1,1,1-Trichloroethane	U	0.00032	0.0010	mg/l		8260C	07/31/15	1
1,1,2-Trichloroethane	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
Trichloroethene	U	0.00040	0.0010	mg/l		8260C	07/31/15	1
Trichlorofluoromethane	U	0.0012	0.0050	mg/l		8260C	07/31/15	1
1,1,2-Trichlorotrifluoroethane	U	0.00030	0.0010	mg/l		8260C	07/31/15	1
Vinyl chloride	0.033	0.00026	0.0010	mg/l		8260C	07/31/15	1
Xylenes, Total	U	0.0011	0.0030	mg/l		8260C	07/31/15	1
Surrogate Recovery								
Toluene-d8	107.			% Rec.		8260C	07/31/15	1
Dibromofluoromethane	108.			% Rec.		8260C	07/31/15	1
a,a,a-Trifluorotoluene	102.			% Rec.		8260C	07/31/15	1
4-Bromofluorobenzene	94.3			% Rec.		8260C	07/31/15	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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Est. 1970

REPORT OF ANALYSIS

October 30, 2015

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

Date Received : July 24, 2015
Description : Fillmore Ave.

Sample ID : TRIP BLANK

Collected By : Dave Rowlinson
Collection Date : 07/23/15 00:00

ESC Sample # : L778802-08

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qual	Method	Date	Dil.
Volatile Organics								
Acetone	U	0.010	0.050	mg/l		8260C	07/31/15	1
Benzene	U	0.00033	0.0010	mg/l		8260C	07/31/15	1
Bromochloromethane	U	0.00052	0.0010	mg/l		8260C	07/31/15	1
Bromodichloromethane	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
Bromoform	U	0.00047	0.0010	mg/l		8260C	07/31/15	1
Bromomethane	U	0.00087	0.0050	mg/l		8260C	07/31/15	1
Carbon disulfide	U	0.00028	0.0010	mg/l		8260C	07/31/15	1
Carbon tetrachloride	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
Chlorobenzene	U	0.00035	0.0010	mg/l		8260C	07/31/15	1
Chlorodibromomethane	U	0.00033	0.0010	mg/l		8260C	07/31/15	1
Chloroethane	U	0.00045	0.0050	mg/l		8260C	07/31/15	1
Chloroform	U	0.00032	0.0050	mg/l		8260C	07/31/15	1
Chloromethane	U	0.00028	0.0025	mg/l		8260C	07/31/15	1
Cyclohexane	U	0.00039	0.0010	mg/l		8260C	07/31/15	1
1,2-Dibromo-3-Chloropropane	U	0.0013	0.0050	mg/l		8260C	07/31/15	1
1,2-Dibromoethane	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
1,2-Dichlorobenzene	U	0.00035	0.0010	mg/l		8260C	07/31/15	1
1,3-Dichlorobenzene	U	0.00022	0.0010	mg/l		8260C	07/31/15	1
1,4-Dichlorobenzene	U	0.00027	0.0010	mg/l		8260C	07/31/15	1
Dichlorodifluoromethane	U	0.00055	0.0050	mg/l		8260C	07/31/15	1
1,1-Dichloroethane	U	0.00026	0.0010	mg/l		8260C	07/31/15	1
1,2-Dichloroethane	U	0.00036	0.0010	mg/l		8260C	07/31/15	1
1,1-Dichloroethene	U	0.00040	0.0010	mg/l		8260C	07/31/15	1
cis-1,2-Dichloroethene	U	0.00026	0.0010	mg/l		8260C	07/31/15	1
trans-1,2-Dichloroethene	0.00092	0.00040	0.0010	mg/l	J	8260C	07/31/15	1
1,2-Dichloropropane	U	0.00031	0.0010	mg/l		8260C	07/31/15	1
cis-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260C	07/31/15	1
trans-1,3-Dichloropropene	U	0.00042	0.0010	mg/l		8260C	07/31/15	1
Ethylbenzene	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
2-Hexanone	U	0.0038	0.010	mg/l		8260C	07/31/15	1
Isopropylbenzene	U	0.00033	0.0010	mg/l		8260C	07/31/15	1
2-Butanone (MEK)	U	0.0039	0.010	mg/l		8260C	07/31/15	1
Methyl Acetate	U	0.0043	0.020	mg/l		8260C	07/31/15	1
Methyl Cyclohexane	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
Methylene Chloride	U	0.0010	0.0050	mg/l		8260C	07/31/15	1
4-Methyl-2-pentanone (MIBK)	U	0.0021	0.010	mg/l		8260C	07/31/15	1
Methyl tert-butyl ether	U	0.00037	0.0010	mg/l		8260C	07/31/15	1
Styrene	U	0.00031	0.0010	mg/l		8260C	07/31/15	1
1,1,2,2-Tetrachloroethane	U	0.00013	0.0010	mg/l		8260C	07/31/15	1
Tetrachloroethene	U	0.00037	0.0010	mg/l		8260C	07/31/15	1
Toluene	U	0.00078	0.0050	mg/l		8260C	07/31/15	1
1,2,3-Trichlorobenzene	U	0.00023	0.0010	mg/l		8260C	07/31/15	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: 08/03/15 09:29 Revised: 10/30/15 16:51



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Tax I.D. 62-0814289

Est. 1970

REPORT OF ANALYSIS

October 30, 2015

Mr. Dave Rowlinson
GHD
285 Delaware Ave.
Buffalo, NY 14202

Date Received : July 24, 2015
Description : Fillmore Ave.

Sample ID : TRIP BLANK

Collected By : Dave Rowlinson
Collection Date : 07/23/15 00:00

ESC Sample # : L778802-08

Site ID :

Project # : 8612199

Parameter	Result	MDL	RDL	Units	Qual	Method	Date	Dil.
1,2,4-Trichlorobenzene	U	0.00036	0.0010	mg/l		8260C	07/31/15	1
1,1,1-Trichloroethane	U	0.00032	0.0010	mg/l		8260C	07/31/15	1
1,1,2-Trichloroethane	U	0.00038	0.0010	mg/l		8260C	07/31/15	1
Trichloroethene	U	0.00040	0.0010	mg/l		8260C	07/31/15	1
Trichlorofluoromethane	U	0.0012	0.0050	mg/l		8260C	07/31/15	1
1,1,2-Trichlorotrifluoroethane	U	0.00030	0.0010	mg/l		8260C	07/31/15	1
Vinyl chloride	U	0.00026	0.0010	mg/l		8260C	07/31/15	1
Xylenes, Total	U	0.0011	0.0030	mg/l		8260C	07/31/15	1
Surrogate Recovery								
Toluene-d8	107.			% Rec.		8260C	07/31/15	1
Dibromofluoromethane	115.			% Rec.		8260C	07/31/15	1
a,a,a-Trifluorotoluene	101.			% Rec.		8260C	07/31/15	1
4-Bromofluorobenzene	93.1			% Rec.		8260C	07/31/15	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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Reported: 08/03/15 09:29 Revised: 10/30/15 16:51

Attachment A
List of Analytes with QC Qualifiers

Sample Number	Work Group	Sample Type	Analyte	Run ID	Qualifier
L778802-01	WG805793	SAMP	2-Butanone (MEK)	R3055301	J
	WG805261	SAMP	Thallium	R3054952	J
	WG804806	SAMP	Mercury	R3053083	J
	WG804971	SAMP	Di-n-butyl phthalate	R3054350	J
L778802-02	WG805793	SAMP	2-Butanone (MEK)	R3055301	J
	WG805261	SAMP	Antimony	R3054952	J6
	WG805261	SAMP	Thallium	R3054952	J
	WG804806	SAMP	Mercury	R3053083	J
	WG804971	SAMP	Acenaphthene	R3054350	J
	WG804971	SAMP	Di-n-butyl phthalate	R3054350	J
	WG804971	SAMP	Phenol	R3054350	J
	WG805260	SAMP	Aluminum	R3054646	V
	WG805260	SAMP	Calcium	R3054468	V
	WG805260	SAMP	Iron	R3054468	V
	WG805260	SAMP	Magnesium	R3054468	V
	WG805260	SAMP	Sodium	R3054468	V
L778802-03	WG805793	SAMP	2-Butanone (MEK)	R3055301	J
	WG805261	SAMP	Arsenic	R3054952	J
	WG804806	SAMP	Mercury	R3053083	J
	WG804971	SAMP	Acenaphthene	R3054350	J
	WG804971	SAMP	Carbazole	R3054350	J
	WG804971	SAMP	Fluorene	R3054350	J
L778802-04	WG804971	SAMP	Di-n-butyl phthalate	R3054350	J
	WG805793	SAMP	2-Butanone (MEK)	R3055301	J
	WG805793	SAMP	Vinyl chloride	R3055301	J
	WG805261	SAMP	Antimony	R3054952	J
	WG805261	SAMP	Arsenic	R3054952	J
	WG804806	SAMP	Mercury	R3053083	J
	WG804971	SAMP	Acenaphthylene	R3054350	J
L778802-05	WG805793	SAMP	Di-n-butyl phthalate	R3054350	J
	WG805793	SAMP	2-Butanone (MEK)	R3055301	J
	WG805261	SAMP	Thallium	R3054952	J
	WG804806	SAMP	Mercury	R3053083	J
	WG804971	SAMP	Acenaphthene	R3054350	J
	WG804971	SAMP	Acenaphthylene	R3054350	J
	WG804971	SAMP	Benzo(a)anthracene	R3054350	J
	WG804971	SAMP	Benzo(g,h,i)perylene	R3054350	J
	WG804971	SAMP	Naphthalene	R3054350	J
L778802-06	WG804971	SAMP	Di-n-butyl phthalate	R3054350	J
	WG805793	SAMP	Cyclohexane	R3055301	J
	WG805793	SAMP	2-Butanone (MEK)	R3055301	J
	WG805261	SAMP	Antimony	R3054952	J
	WG805261	SAMP	Arsenic	R3054952	J
	WG804971	SAMP	Di-n-butyl phthalate	R3054350	J
L778802-07	WG804971	SAMP	3&4-Methyl Phenol	R3054350	J
L778802-08	WG805793	SAMP	2-Butanone (MEK)	R3055301	J
	WG805793	SAMP	trans-1,2-Dichloroethene	R3055301	J
	WG805793	SAMP	2-Butanone (MEK)	R3055301	J

Attachment B
Explanation of QC Qualifier Codes

Qualifier	Meaning
J	(EPA) - Estimated value below the lowest calibration point. Confidence correlates with concentration.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low
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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Est. 1970

October 30, 2015

L778802

Analyte	Result	Laboratory Blank Units	% Rec.	Limit	Batch	Date Analyzed
Mercury	< .0002	mg/l			WG804806	07/27/15 10:40
1,1,1-Trichloroethane	< .001	mg/l			WG804784	07/25/15 20:41
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG804784	07/25/15 20:41
1,1,2-Trichloroethane	< .001	mg/l			WG804784	07/25/15 20:41
1,1,2-Trichlorotrifluoroethane	< .001	mg/l			WG804784	07/25/15 20:41
1,1-Dichloroethane	< .001	mg/l			WG804784	07/25/15 20:41
1,1-Dichloroethene	< .001	mg/l			WG804784	07/25/15 20:41
1,2,3-Trichlorobenzene	< .001	mg/l			WG804784	07/25/15 20:41
1,2,4-Trichlorobenzene	< .001	mg/l			WG804784	07/25/15 20:41
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG804784	07/25/15 20:41
1,2-Dibromoethane	< .001	mg/l			WG804784	07/25/15 20:41
1,2-Dichlorobenzene	< .001	mg/l			WG804784	07/25/15 20:41
1,2-Dichloroethane	< .001	mg/l			WG804784	07/25/15 20:41
1,2-Dichloropropane	< .001	mg/l			WG804784	07/25/15 20:41
1,3-Dichlorobenzene	< .001	mg/l			WG804784	07/25/15 20:41
1,4-Dichlorobenzene	< .001	mg/l			WG804784	07/25/15 20:41
2-Butanone (MEK)	< .01	mg/l			WG804784	07/25/15 20:41
2-Hexanone	< .01	mg/l			WG804784	07/25/15 20:41
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG804784	07/25/15 20:41
Acetone	< .05	mg/l			WG804784	07/25/15 20:41
Benzene	< .001	mg/l			WG804784	07/25/15 20:41
Bromochloromethane	< .001	mg/l			WG804784	07/25/15 20:41
Bromodichloromethane	< .001	mg/l			WG804784	07/25/15 20:41
Bromoform	< .001	mg/l			WG804784	07/25/15 20:41
Bromomethane	< .005	mg/l			WG804784	07/25/15 20:41
Carbon disulfide	< .001	mg/l			WG804784	07/25/15 20:41
Carbon tetrachloride	< .001	mg/l			WG804784	07/25/15 20:41
Chlorobenzene	< .001	mg/l			WG804784	07/25/15 20:41
Chlorodibromomethane	< .001	mg/l			WG804784	07/25/15 20:41
Chloroethane	< .005	mg/l			WG804784	07/25/15 20:41
Chloroform	< .005	mg/l			WG804784	07/25/15 20:41
Chloromethane	< .0025	mg/l			WG804784	07/25/15 20:41
cis-1,2-Dichloroethene	< .001	mg/l			WG804784	07/25/15 20:41
cis-1,3-Dichloropropene	< .001	mg/l			WG804784	07/25/15 20:41
Cyclohexane	< .001	mg/l			WG804784	07/25/15 20:41
Dichlorodifluoromethane	< .005	mg/l			WG804784	07/25/15 20:41
Ethylbenzene	< .001	mg/l			WG804784	07/25/15 20:41
Isopropylbenzene	< .001	mg/l			WG804784	07/25/15 20:41
Methyl Acetate	< .02	mg/l			WG804784	07/25/15 20:41
Methyl Cyclohexane	< .001	mg/l			WG804784	07/25/15 20:41
Methyl tert-butyl ether	< .001	mg/l			WG804784	07/25/15 20:41
Methylene Chloride	< .005	mg/l			WG804784	07/25/15 20:41
Styrene	< .001	mg/l			WG804784	07/25/15 20:41
Tetrachloroethene	< .001	mg/l			WG804784	07/25/15 20:41
Toluene	< .005	mg/l			WG804784	07/25/15 20:41
trans-1,2-Dichloroethene	< .001	mg/l			WG804784	07/25/15 20:41
trans-1,3-Dichloropropene	< .001	mg/l			WG804784	07/25/15 20:41
Trichloroethene	< .001	mg/l			WG804784	07/25/15 20:41
Trichlorofluoromethane	< .005	mg/l			WG804784	07/25/15 20:41
Vinyl chloride	< .001	mg/l			WG804784	07/25/15 20:41
Xylenes, Total	< .003	mg/l			WG804784	07/25/15 20:41
4-Bromofluorobenzene	¶ Rec.	105.0	80.1-120		WG804784	07/25/15 20:41
Dibromofluoromethane	¶ Rec.	95.30	79-121		WG804784	07/25/15 20:41
Toluene-d8	¶ Rec.	107.0	90-115		WG804784	07/25/15 20:41
a,a,a-Trifluorotoluene	¶ Rec.	112.0	90.4-116		WG804784	07/25/15 20:41

* 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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Est. 1970

Quality Assurance Report
Level II

October 30, 2015

1778802

Analyte	Result	Laboratory Blank Units	% Rec	Limit	Batch	Date Analyzed
1,2,4,5-Tetrachlorobenzene	< .01	mg/l			WG804971	07/29/15 05:46
2,4,5-Trichlorophenol	< .01	mg/l			WG804971	07/29/15 05:46
2,4,6-Trichlorophenol	< .01	mg/l			WG804971	07/29/15 05:46
2,4-Dichlorophenol	< .01	mg/l			WG804971	07/29/15 05:46
2,4-Dimethylphenol	< .01	mg/l			WG804971	07/29/15 05:46
2,4-Dinitrophenol	< .01	mg/l			WG804971	07/29/15 05:46
2,4-Dinitrotoluene	< .01	mg/l			WG804971	07/29/15 05:46
2,6-Dinitrotoluene	< .01	mg/l			WG804971	07/29/15 05:46
2-Chloronaphthalene	< .001	mg/l			WG804971	07/29/15 05:46
2-Chlorophenol	< .01	mg/l			WG804971	07/29/15 05:46
2-Methylnaphthalene	< .001	mg/l			WG804971	07/29/15 05:46
2-Methylphenol	< .01	mg/l			WG804971	07/29/15 05:46
2-Nitroaniline	< .01	mg/l			WG804971	07/29/15 05:46
2-Nitrophenol	< .01	mg/l			WG804971	07/29/15 05:46
3,4-Methyl Phenol	< .01	mg/l			WG804971	07/29/15 05:46
3,3-Dichlorobenzidine	< .01	mg/l			WG804971	07/29/15 05:46
3-Nitroaniline	< .01	mg/l			WG804971	07/29/15 05:46
4,6-Dinitro-2-methylphenol	< .01	mg/l			WG804971	07/29/15 05:46
4-Bromophenyl-phenylether	< .01	mg/l			WG804971	07/29/15 05:46
4-Chloro-3-methylphenol	< .01	mg/l			WG804971	07/29/15 05:46
4-Chloroaniline	< .01	mg/l			WG804971	07/29/15 05:46
4-Chlorophenyl-phenylether	< .01	mg/l			WG804971	07/29/15 05:46
4-Nitroaniline	< .01	mg/l			WG804971	07/29/15 05:46
4-Nitrophenol	< .01	mg/l			WG804971	07/29/15 05:46
Acenaphthene	< .001	mg/l			WG804971	07/29/15 05:46
Acenaphthylene	< .001	mg/l			WG804971	07/29/15 05:46
Acetophenone	< .01	mg/l			WG804971	07/29/15 05:46
Anthracene	< .001	mg/l			WG804971	07/29/15 05:46
Atrazine	< .01	mg/l			WG804971	07/29/15 05:46
Benzaldehyde	< .01	mg/l			WG804971	07/29/15 05:46
Benzo(a)anthracene	< .001	mg/l			WG804971	07/29/15 05:46
Benzo(a)pyrene	< .001	mg/l			WG804971	07/29/15 05:46
Benzo(b)fluoranthene	< .001	mg/l			WG804971	07/29/15 05:46
Benzo(g,h,i)perylene	< .001	mg/l			WG804971	07/29/15 05:46
Benzo(k)fluoranthene	< .001	mg/l			WG804971	07/29/15 05:46
Benzylbutyl phthalate	< .003	mg/l			WG804971	07/29/15 05:46
Biphenyl	< .01	mg/l			WG804971	07/29/15 05:46
Bis(2-chlorethoxy)methane	< .01	mg/l			WG804971	07/29/15 05:46
Bis(2-chloroethyl)ether	< .01	mg/l			WG804971	07/29/15 05:46
Bis(2-chloroisopropyl)ether	< .01	mg/l			WG804971	07/29/15 05:46
Bis(2-ethylhexyl)phthalate	< .003	mg/l			WG804971	07/29/15 05:46
Caprolactam	< .01	mg/l			WG804971	07/29/15 05:46
Carbazole	< .01	mg/l			WG804971	07/29/15 05:46
Chrysene	< .001	mg/l			WG804971	07/29/15 05:46
Di-n-butyl phthalate	< .003	mg/l			WG804971	07/29/15 05:46
Di-n-octyl phthalate	< .003	mg/l			WG804971	07/29/15 05:46
Dibenz(a,h)anthracene	< .001	mg/l			WG804971	07/29/15 05:46
Dibenzofuran	< .01	mg/l			WG804971	07/29/15 05:46
Diethyl phthalate	< .003	mg/l			WG804971	07/29/15 05:46
Dimethyl phthalate	< .003	mg/l			WG804971	07/29/15 05:46
Fluoranthene	< .001	mg/l			WG804971	07/29/15 05:46
Fluorene	< .001	mg/l			WG804971	07/29/15 05:46
Hexachloro-1,3-butadiene	< .01	mg/l			WG804971	07/29/15 05:46
Hexachlorobenzene	< .001	mg/l			WG804971	07/29/15 05:46
Hexachlorocyclopentadiene	< .01	mg/l			WG804971	07/29/15 05:46
Hexachloroethane	< .01	mg/l			WG804971	07/29/15 05:46
Indeno(1,2,3-cd)pyrene	< .001	mg/l			WG804971	07/29/15 05:46
Isophorone	< .01	mg/l			WG804971	07/29/15 05:46
n-Nitrosodi-n-propylamine	< .01	mg/l			WG804971	07/29/15 05:46

* 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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L778802

Analyte	Result	Laboratory Blank Units	% Rec.	Limit	Batch	Date Analyzed
n-Nitrosodiphenylamine	< .01	mg/l			WG804971	07/29/15 05:46
Naphthalene	< .001	mg/l			WG804971	07/29/15 05:46
Nitrobenzene	< .01	mg/l			WG804971	07/29/15 05:46
Pentachlorophenol	< .01	mg/l			WG804971	07/29/15 05:46
Phenanthrene	< .001	mg/l			WG804971	07/29/15 05:46
Phenol	< .01	mg/l			WG804971	07/29/15 05:46
Pyrene	< .001	mg/l			WG804971	07/29/15 05:46
2,4,6-Tribromophenol		% Rec.	65.40	11.2-130	WG804971	07/29/15 05:46
2-Fluorobiphenyl		% Rec.	57.80	29.5-131	WG804971	07/29/15 05:46
2-Fluorophenol		% Rec.	42.70	10-77.9	WG804971	07/29/15 05:46
Nitrobenzene-d5		% Rec.	52.60	21.8-123	WG804971	07/29/15 05:46
Phenol-d5		% Rec.	36.00	5-70.1	WG804971	07/29/15 05:46
p-Terphenyl-d14		% Rec.	52.60	29.3-137	WG804971	07/29/15 05:46
Barium	< .005	mg/l			WG805260	07/29/15 18:45
Beryllium	< .002	mg/l			WG805260	07/29/15 18:45
Cadmium	< .002	mg/l			WG805260	07/29/15 18:45
Calcium	< 1	mg/l			WG805260	07/29/15 18:45
Chromium	< .01	mg/l			WG805260	07/29/15 18:45
Cobalt	< .01	mg/l			WG805260	07/29/15 18:45
Copper	< .01	mg/l			WG805260	07/29/15 18:45
Iron	< .1	mg/l			WG805260	07/29/15 18:45
Magnesium	< 1	mg/l			WG805260	07/29/15 18:45
Manganese	< .01	mg/l			WG805260	07/29/15 18:45
Nickel	< .01	mg/l			WG805260	07/29/15 18:45
Potassium	< 1	mg/l			WG805260	07/29/15 18:45
Selenium	< .01	mg/l			WG805260	07/29/15 18:45
Silver	< .005	mg/l			WG805260	07/29/15 18:45
Sodium	< 1	mg/l			WG805260	07/29/15 18:45
Vanadium	< .02	mg/l			WG805260	07/29/15 18:45
Zinc	< .05	mg/l			WG805260	07/29/15 18:45
Aluminum	< .2	mg/l			WG805260	07/30/15 10:14
1,1,1-Trichloroethane	< .001	mg/l			WG805793	07/31/15 07:53
1,1,2,2-Tetrachloroethane	< .001	mg/l			WG805793	07/31/15 07:53
1,1,2-Trichloroethane	< .001	mg/l			WG805793	07/31/15 07:53
1,1,2-Trichlorotrifluoroethane	< .001	mg/l			WG805793	07/31/15 07:53
1,1-Dichloroethane	< .001	mg/l			WG805793	07/31/15 07:53
1,1-Dichloroethene	< .001	mg/l			WG805793	07/31/15 07:53
1,2,3-Trichlorobenzene	< .001	mg/l			WG805793	07/31/15 07:53
1,2,4-Trichlorobenzene	< .001	mg/l			WG805793	07/31/15 07:53
1,2-Dibromo-3-Chloropropane	< .005	mg/l			WG805793	07/31/15 07:53
1,2-Dibromoethane	< .001	mg/l			WG805793	07/31/15 07:53
1,2-Dichlorobenzene	< .001	mg/l			WG805793	07/31/15 07:53
1,2-Dichloroethane	< .001	mg/l			WG805793	07/31/15 07:53
1,2-Dichloropropane	< .001	mg/l			WG805793	07/31/15 07:53
1,3-Dichlorobenzene	< .001	mg/l			WG805793	07/31/15 07:53
1,4-Dichlorobenzene	< .001	mg/l			WG805793	07/31/15 07:53
2-Butanone (MEK)	< .01	mg/l			WG805793	07/31/15 07:53
2-Hexanone	< .01	mg/l			WG805793	07/31/15 07:53
4-Methyl-2-pentanone (MIBK)	< .01	mg/l			WG805793	07/31/15 07:53
Acetone	< .05	mg/l			WG805793	07/31/15 07:53
Benzene	< .001	mg/l			WG805793	07/31/15 07:53
Bromochloromethane	< .001	mg/l			WG805793	07/31/15 07:53
Bromodichloromethane	< .001	mg/l			WG805793	07/31/15 07:53
Bromoform	< .001	mg/l			WG805793	07/31/15 07:53
Bromomethane	< .005	mg/l			WG805793	07/31/15 07:53

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L778802

Analyte	Result	Laboratory Blank Units	% Rec	Limit	Batch	Date Analyzed
Carbon disulfide	< .001	mg/l			WG805793	07/31/15 07:53
Carbon tetrachloride	< .001	mg/l			WG805793	07/31/15 07:53
Chlorobenzene	< .001	mg/l			WG805793	07/31/15 07:53
Chlorodibromomethane	< .001	mg/l			WG805793	07/31/15 07:53
Chloroethane	< .005	mg/l			WG805793	07/31/15 07:53
Chloroform	< .005	mg/l			WG805793	07/31/15 07:53
Chloromethane	< .0025	mg/l			WG805793	07/31/15 07:53
cis-1,2-Dichloroethene	< .001	mg/l			WG805793	07/31/15 07:53
cis-1,3-Dichloropropene	< .001	mg/l			WG805793	07/31/15 07:53
Cyclohexane	< .001	mg/l			WG805793	07/31/15 07:53
Dichlorodifluoromethane	< .005	mg/l			WG805793	07/31/15 07:53
Ethylbenzene	< .001	mg/l			WG805793	07/31/15 07:53
Isopropylbenzene	< .001	mg/l			WG805793	07/31/15 07:53
Methyl Acetate	< .02	mg/l			WG805793	07/31/15 07:53
Methyl Cyclohexane	< .001	mg/l			WG805793	07/31/15 07:53
Methyl tert-butyl ether	< .001	mg/l			WG805793	07/31/15 07:53
Methylene Chloride	< .005	mg/l			WG805793	07/31/15 07:53
Styrene	< .001	mg/l			WG805793	07/31/15 07:53
Tetrachloroethene	< .001	mg/l			WG805793	07/31/15 07:53
Toluene	< .005	mg/l			WG805793	07/31/15 07:53
trans-1,2-Dichloroethene	< .001	mg/l			WG805793	07/31/15 07:53
trans-1,3-Dichloropropene	< .001	mg/l			WG805793	07/31/15 07:53
Trichloroethene	< .001	mg/l			WG805793	07/31/15 07:53
Trichlorofluoromethane	< .005	mg/l			WG805793	07/31/15 07:53
Vinyl chloride	< .001	mg/l			WG805793	07/31/15 07:53
Xylenes, Total	< .003	mg/l			WG805793	07/31/15 07:53
4-Bromofluorobenzene		% Rec.	94.00	80.1-120	WG805793	07/31/15 07:53
Dibromofluoromethane		% Rec.	110.0	79-121	WG805793	07/31/15 07:53
Toluene-d8		% Rec.	108.0	90-115	WG805793	07/31/15 07:53
a,a,a-Trifluorotoluene		% Rec.	103.0	90.4-116	WG805793	07/31/15 07:53
Antimony	< .002	mg/l			WG805261	07/31/15 21:16
Arsenic	< .002	mg/l			WG805261	07/31/15 21:16
Lead	< .002	mg/l			WG805261	07/31/15 21:16
Thallium	< .002	mg/l			WG805261	07/31/15 21:16

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Mercury	mg/l	.003	0.00308	103.	80-120	WG804806
1,1,1-Trichloroethane	mg/l	.025	0.0244	97.4	71.1-129	WG804784
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0286	114.	79.3-123	WG804784
1,1,2-Trichloroethane	mg/l	.025	0.0277	111.	81.6-120	WG804784
1,1,2-Trichlorotrifluoroethane	mg/l	.025	0.0246	98.3	62-141	WG804784
1,1-Dichloroethane	mg/l	.025	0.0247	98.8	71.7-127	WG804784
1,1-Dichloroethene	mg/l	.025	0.0246	98.6	59.9-137	WG804784
1,2,3-Trichlorobenzene	mg/l	.025	0.0280	112.	75.7-134	WG804784
1,2,4-Trichlorobenzene	mg/l	.025	0.0283	113.	76.1-136	WG804784
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0276	110.	64.8-131	WG804784
1,2-Dibromoethane	mg/l	.025	0.0278	111.	79.8-122	WG804784
1,2-Dichlorobenzene	mg/l	.025	0.0261	104.	84.7-118	WG804784
1,2-Dichloroethane	mg/l	.025	0.0249	99.5	65.3-126	WG804784
1,2-Dichloropropane	mg/l	.025	0.0261	105.	77.4-125	WG804784
1,3-Dichlorobenzene	mg/l	.025	0.0281	112.	77.6-127	WG804784
1,4-Dichlorobenzene	mg/l	.025	0.0249	99.6	82.2-114	WG804784
2-Butanone (MEK)	mg/l	.125	0.135	108.	46.4-155	WG804784

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Analyte	Units	Laboratory Control Known Val	Sample Result	% Rec	Limit	Batch
2-Hexanone	mg/l	.125	0.146	116.	59.4-151	WG804784
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.149	120.	63.3-138	WG804784
Acetone	mg/l	.125	0.138	110.	28.7-175	WG804784
Benzene	mg/l	.025	0.0238	95.1	73-122	WG804784
Bromochloromethane	mg/l	.025	0.0256	102.	78.9-123	WG804784
Bromodichloromethane	mg/l	.025	0.0272	109.	75.5-121	WG804784
Bromoform	mg/l	.025	0.0329	132.*	71.5-131	WG804784
Bromomethane	mg/l	.025	0.0191	76.4	22.4-187	WG804784
Carbon disulfide	mg/l	.025	0.0241	96.5	53-134	WG804784
Carbon tetrachloride	mg/l	.025	0.0252	101.	70.9-129	WG804784
Chlorobenzene	mg/l	.025	0.0275	110.	79.7-122	WG804784
Chlorodibromomethane	mg/l	.025	0.0284	114.	78.2-124	WG804784
Chloroethane	mg/l	.025	0.0204	81.6	41.2-153	WG804784
Chloroform	mg/l	.025	0.0243	97.4	73.2-125	WG804784
Chloromethane	mg/l	.025	0.0252	101.	55.8-134	WG804784
cis-1, 2-Dichloroethene	mg/l	.025	0.0241	96.3	77.3-122	WG804784
cis-1, 3-Dichloropropene	mg/l	.025	0.0265	106.	77.7-124	WG804784
Dichlorodifluoromethane	mg/l	.025	0.0268	107.	56-134	WG804784
Ethylbenzene	mg/l	.025	0.0267	107.	80.9-121	WG804784
Isopropylbenzene	mg/l	.025	0.0273	109.	81.6-124	WG804784
Methyl tert-butyl ether	mg/l	.025	0.0285	114.	70.1-125	WG804784
Methylene Chloride	mg/l	.025	0.0246	98.3	69.5-120	WG804784
Styrene	mg/l	.025	0.0281	112.	79.9-124	WG804784
Tetrachloroethene	mg/l	.025	0.0286	114.	73.5-130	WG804784
Toluene	mg/l	.025	0.0259	104.	77.9-116	WG804784
trans-1, 2-Dichloroethene	mg/l	.025	0.0241	96.4	72.6-125	WG804784
trans-1, 3-Dichloropropene	mg/l	.025	0.0251	100.	73.5-127	WG804784
Trichloroethene	mg/l	.025	0.0277	111.	79.5-121	WG804784
Trichlorofluoromethane	mg/l	.025	0.0195	77.9	49.1-157	WG804784
Vinyl chloride	mg/l	.025	0.0208	83.2	61.5-134	WG804784
Xylenes, Total	mg/l	.075	0.0795	106.	79.2-122	WG804784
4-Bromofluorobenzene				106.0	80.1-120	WG804784
Dibromofluoromethane				95.10	79-121	WG804784
Toluene-d8				107.0	90-115	WG804784
a, a, a-Trifluorotoluene				109.0	90.4-116	WG804784
1, 2, 4, 5-Tetrachlorobenzene	mg/l	.05	0.0331	66.2	30.7-102	WG804971
2, 4, 5-Trichlorophenol	mg/l	.05	0.0369	73.8	34.9-112	WG804971
2, 4, 6-Trichlorophenol	mg/l	.05	0.0353	70.6	29.8-107	WG804971
2, 4-Dichlorophenol	mg/l	.05	0.0342	68.5	31.4-103	WG804971
2, 4-Dimethylphenol	mg/l	.05	0.0366	73.2	31.9-107	WG804971
2, 4-Dinitrophenol	mg/l	.05	0.0373	74.5	24.2-128	WG804971
2, 4-Dinitrotoluene	mg/l	.05	0.0375	74.9	31.2-105	WG804971
2, 6-Dinitrotoluene	mg/l	.05	0.0382	76.5	30.6-106	WG804971
2-Chloronaphthalene	mg/l	.05	0.0319	63.8	33.6-105	WG804971
2-Chlorophenol	mg/l	.05	0.0305	61.0	26.2-91.5	WG804971
2-Methylnaphthalene	mg/l	.05	0.0288	57.7	33.8-98.6	WG804971
2-Methylphenol	mg/l	.05	0.0298	59.5	26.4-86.9	WG804971
2-Nitroaniline	mg/l	.05	0.0387	77.4	35.6-113	WG804971
2-Nitrophenol	mg/l	.05	0.0365	72.9	25.9-106	WG804971
3&4-Methyl Phenol	mg/l	.05	0.0324	64.8	27.9-92	WG804971
3, 3-Dichlorobenzidine	mg/l	.05	0.0368	73.6	27.2-142	WG804971
3-Nitroaniline	mg/l	.05	0.0350	70.0	33.6-103	WG804971
4, 6-Dinitro-2-methylphenol	mg/l	.05	0.0433	86.6	18.4-148	WG804971
4-Bromophenyl-phenylether	mg/l	.05	0.0357	71.4	40.7-116	WG804971
4-Chloro-3-methylphenol	mg/l	.05	0.0359	71.8	35.7-100	WG804971
4-Chloroaniline	mg/l	.05	0.0281	56.1	32-104	WG804971
4-Chlorophenyl-phenylether	mg/l	.05	0.0348	69.5	39-113	WG804971

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Analyte	Units	Laboratory Control Known Val	Sample Result	% Rec	Limit	Batch
4-Nitroaniline	mg/l	.05	0.0462	92.4	35.4-124	WG804971
4-Nitrophenol	mg/l	.05	0.0239	47.7	10-52.7	WG804971
Acenaphthene	mg/l	.05	0.0320	64.0	38.7-109	WG804971
Acenaphthylene	mg/l	.05	0.0327	65.4	36-106	WG804971
Acetophenone	mg/l	.05	0.0270	54.0	41.6-104	WG804971
Anthracene	mg/l	.05	0.0360	72.1	43.6-113	WG804971
Atrazine	mg/l	.05	0.0387	77.3	50-123	WG804971
Benzaldehyde	mg/l	.05	0.0236	47.1	11.7-132.2	WG804971
Benzo(a)anthracene	mg/l	.05	0.0334	66.8	51.2-112	WG804971
Benzo(a)pyrene	mg/l	.05	0.0357	71.5	45.6-106	WG804971
Benzo(b)fluoranthene	mg/l	.05	0.0368	73.7	47.6-111	WG804971
Benzo(g,h,i)perylene	mg/l	.05	0.0385	76.9	45.2-117	WG804971
Benzo(k)fluoranthene	mg/l	.05	0.0358	71.5	49.4-114	WG804971
Benzylbutyl phthalate	mg/l	.05	0.0350	70.0	31.8-123	WG804971
Biphenyl	mg/l	.05	0.0334	66.7	38-103	WG804971
Bis(2-chloroethoxy)methane	mg/l	.05	0.0315	63.1	37.2-111	WG804971
Bis(2-chloroethyl)ether	mg/l	.05	0.0304	60.8	22.6-108	WG804971
Bis(2-chloroisopropyl)ether	mg/l	.05	0.0330	66.1	32.9-100	WG804971
Bis(2-ethylhexyl)phthalate	mg/l	.05	0.0344	68.9	36.9-134	WG804971
Caprolactam	mg/l	.05	0.00898	18.0	10-40.4	WG804971
Carbazole	mg/l	.05	0.0435	86.9	49-110	WG804971
Chrysene	mg/l	.05	0.0350	70.0	54.6-120	WG804971
Di-n-butyl phthalate	mg/l	.05	0.0375	75.0	41.8-120	WG804971
Di-n-octyl phthalate	mg/l	.05	0.0349	69.7	39.7-112	WG804971
Dibenz(a,h)anthracene	mg/l	.05	0.0367	73.5	42.8-118	WG804971
Dibenzo furan	mg/l	.05	0.0337	67.5	42.4-105	WG804971
Diethyl phthalate	mg/l	.05	0.0369	73.8	36.5-129	WG804971
Dimethyl phthalate	mg/l	.05	0.0374	74.9	35.3-128	WG804971
Fluoranthene	mg/l	.05	0.0367	73.4	45.9-115	WG804971
Fluorene	mg/l	.05	0.0343	68.7	41-112	WG804971
Hexachloro-1,3-butadiene	mg/l	.05	0.0300	60.0	16.1-104	WG804971
Hexachlorobenzene	mg/l	.05	0.0363	72.6	38.5-116	WG804971
Hexachlorocyclopentadiene	mg/l	.05	0.0234	46.8	10-121	WG804971
Hexachloroethane	mg/l	.05	0.0297	59.4	16.5-89.8	WG804971
Indeno[1,2,3-cd]pyrene	mg/l	.05	0.0375	74.9	45-116	WG804971
Isophorone	mg/l	.05	0.0348	69.7	35.4-112	WG804971
n-Nitrosodi-n-propylamine	mg/l	.05	0.0373	74.5	33.2-106	WG804971
n-Nitrosodiphenylamine	mg/l	.05	0.0355	70.9	44.4-113	WG804971
Naphthalene	mg/l	.05	0.0307	61.4	32.2-101	WG804971
Nitrobenzene	mg/l	.05	0.0331	66.1	31.4-106	WG804971
Pentachlorophenol	mg/l	.05	0.0387	77.5	10.9-97.4	WG804971
Phenanthrene	mg/l	.05	0.0347	69.5	46.4-113	WG804971
Phenol	mg/l	.05	0.0202	40.4	10-57.9	WG804971
Pyrene	mg/l	.05	0.0338	67.6	46.3-117	WG804971
2,4,6-Tribromophenol				70.00	11.2-130	WG804971
2-Fluorobiphenyl				62.10	29.5-131	WG804971
2-Fluorophenol				49.20	10-77.9	WG804971
Nitrobenzene-d5				59.40	21.8-123	WG804971
Phenol-d5				37.00	5-70.1	WG804971
p-Terphenyl-d14				55.50	29.3-137	WG804971
Barium	mg/l	1	1.07	107.	80-120	WG805260
Beryllium	mg/l	1	1.07	107.	80-120	WG805260
Cadmium	mg/l	1	1.06	106.	80-120	WG805260
Calcium	mg/l	10	10.1	101.	80-120	WG805260
Chromium	mg/l	1	1.03	103.	80-120	WG805260
Cobalt	mg/l	1	1.04	104.	80-120	WG805260
Copper	mg/l	1	1.02	102.	80-120	WG805260

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Iron	mg/l	1	1.02	102.	80-120	WG805260
Magnesium	mg/l	10	10.2	102.	80-120	WG805260
Manganese	mg/l	1	1.01	101.	80-120	WG805260
Nickel	mg/l	1	1.03	103.	80-120	WG805260
Potassium	mg/l	10	9.85	99.0	80-120	WG805260
Selenium	mg/l	1	1.10	110.	80-120	WG805260
Silver	mg/l	1	1.05	105.	80-120	WG805260
Sodium	mg/l	10	9.92	99.0	80-120	WG805260
Vanadium	mg/l	1	1.06	106.	80-120	WG805260
Zinc	mg/l	1	1.01	101.	80-120	WG805260
Aluminum	mg/l	1	1.00	100.	80-120	WG805260
1,1,1-Trichloroethane	mg/l	.025	0.0248	99.3	71.1-129	WG805793
1,1,2,2-Tetrachloroethane	mg/l	.025	0.0233	93.1	79.3-123	WG805793
1,1,2-Trichloroethane	mg/l	.025	0.0224	89.5	81.6-120	WG805793
1,1,2-Trichlorotrifluoroethane	mg/l	.025	0.0263	105.	62-141	WG805793
1,1-Dichloroethane	mg/l	.025	0.0284	114.	71.7-127	WG805793
1,1-Dichloroethene	mg/l	.025	0.0255	102.	59.9-137	WG805793
1,2,3-Trichlorobenzene	mg/l	.025	0.0231	92.3	75.7-134	WG805793
1,2,4-Trichlorobenzene	mg/l	.025	0.0239	95.6	76.1-136	WG805793
1,2-Dibromo-3-Chloropropane	mg/l	.025	0.0216	86.4	64.8-131	WG805793
1,2-Dibromoethane	mg/l	.025	0.0228	91.1	79.8-122	WG805793
1,2-Dichlorobenzene	mg/l	.025	0.0244	97.7	84.7-118	WG805793
1,2-Dichloroethane	mg/l	.025	0.0261	104.	79.8-122	WG805793
1,2-Dichloropropane	mg/l	.025	0.0275	110.	77.4-125	WG805793
1,3-Dichlorobenzene	mg/l	.025	0.0229	91.7	77.6-127	WG805793
1,4-Dichlorobenzene	mg/l	.025	0.0231	92.5	82.2-114	WG805793
2-Butanone (MEK)	mg/l	.125	0.160	128.	46.4-155	WG805793
2-Hexanone	mg/l	.125	0.133	106.	59.4-151	WG805793
4-Methyl-2-pentanone (MIBK)	mg/l	.125	0.151	121.	63.3-138	WG805793
Acetone	mg/l	.125	0.152	122.	28.7-175	WG805793
Benzene	mg/l	.025	0.0271	108.	73-122	WG805793
Bromochloromethane	mg/l	.025	0.0259	104.	78.9-123	WG805793
Bromodichloromethane	mg/l	.025	0.0248	99.4	75.5-121	WG805793
Bromoform	mg/l	.025	0.0226	90.4	71.5-131	WG805793
Bromomethane	mg/l	.025	0.0267	107.	22.4-187	WG805793
Carbon disulfide	mg/l	.025	0.0237	94.8	53-134	WG805793
Carbon tetrachloride	mg/l	.025	0.0257	103.	70.9-129	WG805793
Chlorobenzene	mg/l	.025	0.0232	92.8	79.7-122	WG805793
Chlorodibromomethane	mg/l	.025	0.0235	94.1	78.2-124	WG805793
Chloroethane	mg/l	.025	0.0253	101.	41.2-153	WG805793
Chloroform	mg/l	.025	0.0272	109.	73.2-125	WG805793
Chloromethane	mg/l	.025	0.0268	107.	55.8-134	WG805793
cis-1,2-Dichloroethene	mg/l	.025	0.0259	103.	77.3-122	WG805793
cis-1,3-Dichloropropene	mg/l	.025	0.0252	101.	77.7-124	WG805793
Dichlorodifluoromethane	mg/l	.025	0.0223	89.3	56-134	WG805793
Ethylbenzene	mg/l	.025	0.0226	90.2	80.9-121	WG805793
Isopropylbenzene	mg/l	.025	0.0233	93.1	81.6-124	WG805793
Methyl tert-butyl ether	mg/l	.025	0.0246	98.5	70.1-125	WG805793
Methylene Chloride	mg/l	.025	0.0280	112.	69.5-120	WG805793
Styrene	mg/l	.025	0.0241	96.3	79.9-124	WG805793
Tetrachloroethene	mg/l	.025	0.0223	89.0	73.5-130	WG805793
Toluene	mg/l	.025	0.0255	102.	77.9-116	WG805793
trans-1,2-Dichloroethene	mg/l	.025	0.0256	102.	72.6-125	WG805793
trans-1,3-Dichloropropene	mg/l	.025	0.0254	101.	73.5-127	WG805793
Trichloroethene	mg/l	.025	0.0246	98.3	79.5-121	WG805793
Trichlorofluoromethane	mg/l	.025	0.0281	113.	49.1-157	WG805793
Vinyl chloride	mg/l	.025	0.0251	101.	61.5-134	WG805793

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Quality Assurance Report
Level II

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L778802

Analyte	Units	Laboratory Control Sample Known Val	Result	% Rec	Limit	Batch
Xylenes, Total	mg/l	.075	0.0690	92.0	79.2-122	WG805793
4-Bromofluorobenzene				97.60	80.1-120	WG805793
Dibromofluoromethane				107.0	79-121	WG805793
Toluene-d8				105.0	90-115	WG805793
a,a,a-Trifluorotoluene				102.0	90.4-116	WG805793
Antimony	mg/l	.05	0.0535	107.	80-120	WG805261
Arsenic	mg/l	.05	0.0500	100.	80-120	WG805261
Lead	mg/l	.05	0.0501	100.	80-120	WG805261
Thallium	mg/l	.05	0.0497	99.0	80-120	WG805261

Analyte	Units	Laboratory Control Sample Duplicate	Result	Ref	%Rec	Limit	RPD	Limit	Batch
Mercury	mg/l	0.00298	0.00308	99.0		80-120	3.00	20	WG804806
1,1,1-Trichloroethane	mg/l	0.0247	0.0244	99.0		71.1-129	1.21	20	WG804784
1,1,2,2-Tetrachloroethane	mg/l	0.0295	0.0286	118.		79.3-123	3.07	20	WG804784
1,1,2-Trichloroethane	mg/l	0.0290	0.0277	116.		81.6-120	4.47	20	WG804784
1,1,2-Trichlorotrifluoroethane	mg/l	0.0253	0.0246	101.		62-141	3.03	20	WG804784
1,1-Dichloroethane	mg/l	0.0251	0.0247	100.		71.7-127	1.52	20	WG804784
1,1-Dichloroethene	mg/l	0.0260	0.0246	104.		59.9-137	5.47	20	WG804784
1,2,3-Trichlorobenzene	mg/l	0.0280	0.0280	112.		75.7-134	0.0100	20	WG804784
1,2,4-Trichlorobenzene	mg/l	0.0291	0.0283	116.		76.1-136	2.84	20	WG804784
1,2-Dibromo-3-Chloropropane	mg/l	0.0274	0.0276	109.		64.8-131	0.730	20	WG804784
1,2-Dibromoethane	mg/l	0.0287	0.0278	115.		79.8-122	3.33	20	WG804784
1,2-Dichlorobenzene	mg/l	0.0267	0.0261	107.		84.7-118	2.31	20	WG804784
1,2-Dichloroethane	mg/l	0.0255	0.0249	102.		65.3-126	2.53	20	WG804784
1,2-Dichloropropane	mg/l	0.0269	0.0261	108.		77.4-125	2.92	20	WG804784
1,3-Dichlorobenzene	mg/l	0.0293	0.0281	117.		77.6-127	4.34	20	WG804784
1,4-Dichlorobenzene	mg/l	0.0255	0.0249	102.		82.2-114	2.25	20	WG804784
2-Butanone (MEK)	mg/l	0.136	0.135	109.		46.4-155	0.630	20	WG804784
2-Hexanone	mg/l	0.151	0.146	121.		59.4-151	3.84	20	WG804784
4-Methyl-2-pentanone (MIBK)	mg/l	0.149	0.149	119.		63.3-138	0.440	20	WG804784
Acetone	mg/l	0.139	0.138	111.		28.7-175	1.14	20.9	WG804784
Benzene	mg/l	0.0245	0.0238	98.0		73-122	3.04	20	WG804784
Bromochloromethane	mg/l	0.0258	0.0256	103.		78.9-123	1.10	20	WG804784
Bromodichloromethane	mg/l	0.0277	0.0272	111.		75.5-121	1.95	20	WG804784
Bromoform	mg/l	0.0346	0.0329	138*		71.5-131	5.01	20	WG804784
Bromomethane	mg/l	0.0206	0.0191	82.0		22.4-187	7.74	20	WG804784
Carbon disulfide	mg/l	0.0251	0.0241	100.		53-134	4.10	20	WG804784
Carbon tetrachloride	mg/l	0.0257	0.0252	103.		70.9-129	2.20	20	WG804784
Chlorobenzene	mg/l	0.0284	0.0275	114.		79.7-122	3.13	20	WG804784
Chlorodibromomethane	mg/l	0.0301	0.0284	120.		78.2-124	5.74	20	WG804784
Chloroethane	mg/l	0.0213	0.0204	85.0		41.2-153	4.46	20	WG804784
Chloroform	mg/l	0.0250	0.0243	100.		73.2-125	2.71	20	WG804784
Chloromethane	mg/l	0.0263	0.0252	105.		55.8-134	4.22	20	WG804784
cis-1,2-Dichloroethene	mg/l	0.0251	0.0241	100.		77.3-122	3.97	20	WG804784
cis-1,3-Dichloropropene	mg/l	0.0275	0.0265	110.		77.7-124	3.84	20	WG804784
Dichlorodifluoromethane	mg/l	0.0273	0.0268	109.		56-134	1.84	20	WG804784
Ethylbenzene	mg/l	0.0274	0.0267	110.		80.9-121	2.75	20	WG804784
Isopropylbenzene	mg/l	0.0284	0.0273	114.		81.6-124	4.03	20	WG804784
Methyl tert-butyl ether	mg/l	0.0285	0.0285	114.		70.1-125	0.120	20	WG804784
Methylene Chloride	mg/l	0.0250	0.0246	100.		69.5-120	1.74	20	WG804784
Styrene	mg/l	0.0291	0.0281	116.		79.9-124	3.63	20	WG804784
Tetrachloroethene	mg/l	0.0298	0.0286	119.		73.5-130	4.12	20	WG804784
Toluene	mg/l	0.0264	0.0259	106.		77.9-116	1.96	20	WG804784

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L·A·B S·C·I·E·N·C·E·S

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Level II

October 30, 2015

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Analyte	Units	Laboratory Result	Control Ref	Sample tRec	Duplicate Limit	RPD	Limit	Batch
trans-1,2-Dichloroethene	mg/l	0.0250	0.0241	100.	72.6-125	3.47	20	WG804784
trans-1,3-Dichloropropene	mg/l	0.0257	0.0251	103.	73.5-127	2.38	20	WG804784
Trichloroethene	mg/l	0.0288	0.0277	115.	79.5-121	3.86	20	WG804784
Trichlorofluoromethane	mg/l	0.0206	0.0195	82.0	49.1-157	5.50	20	WG804784
Vinyl chloride	mg/l	0.0223	0.0208	89.0	61.5-134	6.85	20	WG804784
Xylenes, Total	mg/l	0.0826	0.0795	110.	79.2-122	3.80	20	WG804784
4-Bromofluorobenzene				107.0	80.1-120			WG804784
Dibromofluoromethane				94.40	79-121			WG804784
Toluene-d8				106.0	90-115			WG804784
a,a,a-Trifluorotoluene				109.0	90.4-116			WG804784
1,2,4,5-Tetrachlorobenzene	mg/l	0.0353	0.0331	71.0	30.7-102	6.40	27.7	WG804971
2,4,5-Trichlorophenol	mg/l	0.0374	0.0369	75.0	34.9-112	1.39	23.9	WG804971
2,4,6-Trichlorophenol	mg/l	0.0373	0.0353	74.0	29.8-107	5.47	24.1	WG804971
2,4-Dichlorophenol	mg/l	0.0362	0.0342	72.0	31.4-103	5.61	24.9	WG804971
2,4-Dimethylphenol	mg/l	0.0379	0.0366	76.0	31.9-107	3.44	25.7	WG804971
2,4-Dinitrophenol	mg/l	0.0374	0.0373	75.0	24.2-128	0.400	20.5	WG804971
2,4-Dinitrotoluene	mg/l	0.0395	0.0375	79.0	31.2-105	5.20	22	WG804971
2,6-Dinitrotoluene	mg/l	0.0366	0.0382	73.0	30.6-106	4.27	23.1	WG804971
2-Choronaphthalene	mg/l	0.0328	0.0319	66.0	33.6-105	2.75	23	WG804971
2-Chlorophenol	mg/l	0.0331	0.0305	66.0	26.2-91.5	8.05	26.5	WG804971
2-Methylnaphthalene	mg/l	0.0313	0.0288	62.0	33.8-98.6	8.18	24.2	WG804971
2-Methylphenol	mg/l	0.0306	0.0298	61.0	26.4-86.9	2.91	26.5	WG804971
2-Nitroaniline	mg/l	0.0373	0.0387	75.0	35.6-113	3.74	20.9	WG804971
2-Nitrophenol	mg/l	0.0344	0.0365	69.0	25.9-106	5.73	26.9	WG804971
3&4-Methyl Phenol	mg/l	0.0351	0.0324	70.0	27.9-92	7.95	27	WG804971
3,3-Dichlorobenzidine	mg/l	0.0392	0.0368	78.0	27.2-142	6.31	22.3	WG804971
3-Nitroaniline	mg/l	0.0365	0.0350	73.0	33.6-103	4.09	21.8	WG804971
4,6-Dinitro-2-methylphenol	mg/l	0.0449	0.0433	90.0	18.4-148	3.65	24.4	WG804971
4-Bromophenyl-phenylether	mg/l	0.0384	0.0357	77.0	40.7-116	7.32	21	WG804971
4-Chloro-3-methylphenol	mg/l	0.0384	0.0359	77.0	35.7-100	6.55	22.9	WG804971
4-Chloroaniline	mg/l	0.0306	0.0281	61.0	32-104	8.67	26.4	WG804971
4-Chlorophenyl-phenylether	mg/l	0.0340	0.0348	68.0	39-113	2.20	20.9	WG804971
4-Nitroaniline	mg/l	0.0449	0.0462	90.0	35.4-124	2.93	23.1	WG804971
4-Nitrophenol	mg/l	0.0240	0.0239	48.0	10-52.7	0.770	40	WG804971
Acenaphthene	mg/l	0.0332	0.0320	66.0	38.7-109	3.61	21.5	WG804971
Acenaphthylene	mg/l	0.0345	0.0327	69.0	36-106	5.31	21	WG804971
Acetophenone	mg/l	0.0288	0.0270	58.0	41.6-104	6.32	24.8	WG804971
Anthracene	mg/l	0.0371	0.0360	74.0	43.6-113	2.87	18.8	WG804971
Atrazine	mg/l	0.0381	0.0387	76.0	50-123	1.51	21.5	WG804971
Benzaldehyde	mg/l	0.0279	0.0236	56.0	11.7-132.2	16.7	25.2	WG804971
Benzo(a)anthracene	mg/l	0.0359	0.0334	72.0	51.2-112	7.30	20	WG804971
Benzo(a)pyrene	mg/l	0.0356	0.0357	71.0	45.6-106	0.350	20	WG804971
Benzo(b)fluoranthene	mg/l	0.0371	0.0368	74.0	47.6-111	0.800	20	WG804971
Benzo(g,h,i)perylene	mg/l	0.0391	0.0385	78.0	45.2-117	1.58	20	WG804971
Benzo(k)fluoranthene	mg/l	0.0362	0.0358	72.0	49.4-114	1.15	20	WG804971
Benzylbutyl phthalate	mg/l	0.0377	0.0350	75.0	31.8-123	7.31	20.7	WG804971
Biphenyl	mg/l	0.0344	0.0334	69.0	38-103	3.08	20.1	WG804971
Bis(2-chloroethoxy)methane	mg/l	0.0333	0.0315	67.0	37.2-111	5.42	24.1	WG804971
Bis(2-chloroethyl)ether	mg/l	0.0316	0.0304	63.0	22.6-108	4.00	27.9	WG804971
Bis(2-chloroisopropyl)ether	mg/l	0.0346	0.0330	69.0	32.9-100	4.65	25.1	WG804971
Bis(2-ethylhexyl)phthalate	mg/l	0.0373	0.0344	75.0	36.9-134	8.01	23.6	WG804971
Caprolactam	mg/l	0.00949	0.00898	19.0	10-40.4	5.62	40	WG804971
Carbazole	mg/l	0.0433	0.0435	87.0	49-110	0.310	20	WG804971
Chrysene	mg/l	0.0378	0.0350	76.0	54.6-120	7.80	20	WG804971
Di-n-butyl phthalate	mg/l	0.0392	0.0375	78.0	41.8-120	4.46	20.2	WG804971
Di-n-octyl phthalate	mg/l	0.0377	0.0349	75.0	39.7-112	7.68	21.1	WG804971
Dibenzo(a,h)anthracene	mg/l	0.0374	0.0367	75.0	42.8-118	1.70	20	WG804971

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Analyte	Units	Laboratory Result	Control Ref	%Rec	Duplicate Limit	RPD	Limit	Batch
Dibenzofuran	mg/l	0.0344	0.0337	69.0	42.4-105	1.98	20	WG804971
Diethyl phthalate	mg/l	0.0365	0.0369	73.0	36.5-129	1.09	20	WG804971
Dimethyl phthalate	mg/l	0.0369	0.0374	74.0	35.3-128	1.32	20.8	WG804971
Fluoranthene	mg/l	0.0374	0.0367	75.0	45.9-115	2.02	20	WG804971
Fluorene	mg/l	0.0351	0.0343	70.0	41-112	2.27	20.2	WG804971
Hexachloro-1,3-butadiene	mg/l	0.0324	0.0300	65.0	16.1-104	7.77	31.2	WG804971
Hexachlorobenzene	mg/l	0.0389	0.0363	78.0	38.5-116	7.05	20.1	WG804971
Hexachlorocyclopentadiene	mg/l	0.0225	0.0234	45.0	10-121	4.01	27.9	WG804971
Hexachloroethane	mg/l	0.0317	0.0297	63.0	16.5-89.8	6.41	30.7	WG804971
Indeno[1,2,3-cd]pyrene	mg/l	0.0384	0.0375	77.0	45-116	2.51	20	WG804971
Isophorone	mg/l	0.0369	0.0348	74.0	35.4-112	5.64	21.5	WG804971
n-Nitrosodi-n-propylamine	mg/l	0.0388	0.0373	78.0	33.2-106	3.96	23.7	WG804971
n-Nitrosodiphenylamine	mg/l	0.0384	0.0355	77.0	44.4-113	8.03	20	WG804971
Naphthalene	mg/l	0.0326	0.0307	65.0	32.2-101	6.00	23.8	WG804971
Nitrobenzene	mg/l	0.0339	0.0331	68.0	31.4-106	2.42	25.7	WG804971
Pentachlorophenol	mg/l	0.0378	0.0387	76.0	10.9-97.4	2.60	35.1	WG804971
Phenanthrene	mg/l	0.0354	0.0347	71.0	46.4-113	1.83	20	WG804971
Phenol	mg/l	0.0232	0.0202	46.0	10-57.9	13.6	35	WG804971
Pyrene	mg/l	0.0372	0.0338	74.0	46.3-117	9.42	20	WG804971
2,4,6-Tribromophenol				78.30	11.2-130			WG804971
2-Fluorobiphenyl				61.20	29.5-131			WG804971
2-Fluorophenol				50.50	10-77.9			WG804971
Nitrobenzene-d5				60.90	21.8-123			WG804971
Phenol-d5				40.40	5-70.1			WG804971
p-Terphenyl-d14				59.00	29.3-137			WG804971
Barium	mg/l	1.06	1.07	106.	80-120	1.00	20	WG805260
Beryllium	mg/l	1.07	1.07	106.	80-120	0.0	20	WG805260
Cadmium	mg/l	1.05	1.06	105.	80-120	1.00	20	WG805260
Calcium	mg/l	10.1	10.1	101.	80-120	0.0	20	WG805260
Chromium	mg/l	1.02	1.03	102.	80-120	1.00	20	WG805260
Cobalt	mg/l	1.04	1.04	104.	80-120	1.00	20	WG805260
Copper	mg/l	1.01	1.02	101.	80-120	0.0	20	WG805260
Iron	mg/l	1.03	1.02	103.	80-120	1.00	20	WG805260
Magnesium	mg/l	10.3	10.2	103.	80-120	1.00	20	WG805260
Manganese	mg/l	1.00	1.01	100.	80-120	1.00	20	WG805260
Nickel	mg/l	1.02	1.03	102.	80-120	1.00	20	WG805260
Potassium	mg/l	9.88	9.85	99.0	80-120	0.0	20	WG805260
Selenium	mg/l	1.10	1.10	110.	80-120	1.00	20	WG805260
Silver	mg/l	1.04	1.05	104.	80-120	1.00	20	WG805260
Sodium	mg/l	9.94	9.92	99.0	80-120	0.0	20	WG805260
Vanadium	mg/l	1.05	1.06	105.	80-120	0.0	20	WG805260
Zinc	mg/l	1.00	1.01	100.	80-120	1.00	20	WG805260
Aluminum	mg/l	1.04	1.00	104.	80-120	4.00	20	WG805260
1,1,1-Trichloroethane	mg/l	0.0251	0.0248	100.	71.1-129	1.06	20	WG805793
1,1,2,2-Tetrachloroethane	mg/l	0.0246	0.0233	98.0	79.3-123	5.59	20	WG805793
1,1,2-Trichloroethane	mg/l	0.0230	0.0224	92.0	81.6-120	2.86	20	WG805793
1,1,2-Trichlorotrifluoroethane	mg/l	0.0272	0.0263	109.	62-141	3.55	20	WG805793
1,1-Dichloroethane	mg/l	0.0274	0.0284	110.	71.7-127	3.62	20	WG805793
1,1-Dichloroethene	mg/l	0.0265	0.0255	106.	59.9-137	4.00	20	WG805793
1,2,3-Trichlorobenzene	mg/l	0.0235	0.0231	94.0	75.7-134	2.00	20	WG805793
1,2,4-Trichlorobenzene	mg/l	0.0239	0.0239	95.0	76.1-136	0.140	20	WG805793
1,2-Dibromo-3-Chloropropane	mg/l	0.0231	0.0216	92.0	64.8-131	6.89	20	WG805793
1,2-Dibromoethane	mg/l	0.0234	0.0228	94.0	79.8-122	2.76	20	WG805793
1,2-Dichlorobenzene	mg/l	0.0242	0.0244	97.0	84.7-118	0.810	20	WG805793
1,2-Dichloroethane	mg/l	0.0261	0.0261	104.	79.8-122	0.0800	20	WG805793

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Level II

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L778802

Analyte	Units	Laboratory Result	Control Ref	% Rec	Duplicate Limit	RPD	Limit	Batch
1,2-Dichloropropane	mg/l	0.0278	0.0275	111.	77.4-125	0.910	20	WG805793
1,3-Dichlorobenzene	mg/l	0.0236	0.0229	94.0	77.6-127	2.83	20	WG805793
1,4-Dichlorobenzene	mg/l	0.0235	0.0231	94.0	82.2-114	1.45	20	WG805793
2-Butanone (MEK)	mg/l	0.167	0.160	133.	46.4-155	4.04	20	WG805793
2-Hexanone	mg/l	0.142	0.133	114.	59.4-151	6.62	20	WG805793
4-Methyl-2-pentanone (MIBK)	mg/l	0.164	0.151	131.	63.3-138	8.31	20	WG805793
Acetone	mg/l	0.151	0.152	121.	28.7-175	0.930	20.9	WG805793
Benzene	mg/l	0.0276	0.0271	110.	73-122	1.88	20	WG805793
Bromochloromethane	mg/l	0.0267	0.0259	107.	78.9-123	3.22	20	WG805793
Bromodichloromethane	mg/l	0.0248	0.0248	99.0	75.5-121	0.220	20	WG805793
Bromoform	mg/l	0.0245	0.0226	98.0	71.5-131	7.08	20	WG805793
Bromomethane	mg/l	0.0275	0.0267	110.	22.4-187	3.15	20	WG805793
Carbon disulfide	mg/l	0.0237	0.0237	95.0	53-134	0.0800	20	WG805793
Carbon tetrachloride	mg/l	0.0261	0.0257	104.	70.9-129	1.55	20	WG805793
Chlorobenzene	mg/l	0.0231	0.0232	92.0	79.7-122	0.260	20	WG805793
Chlorodibromomethane	mg/l	0.0238	0.0235	95.0	78.2-124	0.990	20	WG805793
Chloroethane	mg/l	0.0243	0.0253	97.0	41.2-153	3.90	20	WG805793
Chloroform	mg/l	0.0271	0.0272	108.	73.2-125	0.660	20	WG805793
Chloromethane	mg/l	0.0269	0.0268	108.	55.8-134	0.230	20	WG805793
cis-1,2-Dichloroethene	mg/l	0.0260	0.0259	104.	77.3-122	0.340	20	WG805793
cis-1,3-Dichloropropene	mg/l	0.0256	0.0252	102.	77.7-124	1.53	20	WG805793
Dichlorodifluoromethane	mg/l	0.0222	0.0223	89.0	56-134	0.700	20	WG805793
Ethylbenzene	mg/l	0.0230	0.0226	92.0	80.9-121	2.08	20	WG805793
Isopropylbenzene	mg/l	0.0232	0.0233	93.0	81.6-124	0.290	20	WG805793
Methyl tert-butyl ether	mg/l	0.0249	0.0246	100.	70.1-125	1.15	20	WG805793
Methylene Chloride	mg/l	0.0261	0.0280	104.	69.5-120	6.74	20	WG805793
Styrene	mg/l	0.0243	0.0241	97.0	79.9-124	1.08	20	WG805793
Tetrachloroethene	mg/l	0.0214	0.0223	86.0	73.5-130	3.96	20	WG805793
Toluene	mg/l	0.0255	0.0255	102.	77.9-116	0.250	20	WG805793
trans-1,2-Dichloroethene	mg/l	0.0252	0.0256	101.	72.6-125	1.34	20	WG805793
trans-1,3-Dichloropropene	mg/l	0.0259	0.0254	103.	73.5-127	2.00	20	WG805793
Trichloroethene	mg/l	0.0238	0.0246	95.0	79.5-121	3.08	20	WG805793
Trichlorofluoromethane	mg/l	0.0282	0.0281	113.	49.1-157	0.430	20	WG805793
Vinyl chloride	mg/l	0.0262	0.0251	105.	61.5-134	3.99	20	WG805793
Xylenes, Total	mg/l	0.0689	0.0690	92.0	79.2-122	0.260	20	WG805793
4-Bromofluorobenzene				97.30	80.1-120			WG805793
Dibromofluoromethane				108.0	79-121			WG805793
Toluene-d8				107.0	90-115			WG805793
a,a,a-Trifluorotoluene				101.0	90.4-116			WG805793
Antimony	mg/l	0.0523	0.0535	105.	80-120	2.00	20	WG805261
Arsenic	mg/l	0.0486	0.0500	97.0	80-120	3.00	20	WG805261
Lead	mg/l	0.0490	0.0501	98.0	80-120	2.00	20	WG805261
Thallium	mg/l	0.0485	0.0497	97.0	80-120	2.00	20	WG805261

Analyte	Units	Matrix Spike					Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec	Limit		
Mercury	mg/l	0.00289	0.0000141	.003	96.0	75-125	L778726-01	WG804806
Mercury	mg/l	0.00297	0.000121	.003	95.0	75-125	L778802-02	WG804806
1,1,1-Trichloroethane	mg/l	0.0238	0.0	.025	95.0	58.7-134	L778802-02	WG804784
1,1,2,2-Tetrachloroethane	mg/l	0.0288	0.0	.025	120.	64.9-145	L778802-02	WG804784
1,1,2-Trichloroethane	mg/l	0.0286	0.0	.025	120.	74.1-130	L778802-02	WG804784
1,1,2-Trichlorotrifluoroethane	mg/l	0.0236	0.0	.025	94.0	53.7-150	L778802-02	WG804784
1,1-Dichloroethane	mg/l	0.0246	0.0	.025	98.0	64-134	L778802-02	WG804784
1,1-Dichloroethene	mg/l	0.0244	0.0	.025	98.0	48.8-144	L778802-02	WG804784

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Analyte	Units	Matrix Spike						Ref Samp	Batch
		MS Res	Ref Res	TV	% Rec	Limit			
1,2,3-Trichlorobenzene	mg/l	0.0290	0.0	.025	120.	65.7-143	L778802-02	WG804784	
1,2,4-Trichlorobenzene	mg/l	0.0295	0.0	.025	120.	67-146	L778802-02	WG804784	
1,2-Dibromo-3-Chloropropane	mg/l	0.0291	0.0	.025	120.	63.9-142	L778802-02	WG804784	
1,2-Dibromoethane	mg/l	0.0280	0.0	.025	110.	73.8-131	L778802-02	WG804784	
1,2-Dichlorobenzene	mg/l	0.0265	0.0	.025	110.	77.4-127	L778802-02	WG804784	
1,2-Dichloroethane	mg/l	0.0257	0.0	.025	100.	60.7-132	L778802-02	WG804784	
1,2-Dichloropropane	mg/l	0.0271	0.0	.025	110.	69.7-130	L778802-02	WG804784	
1,3-Dichlorobenzene	mg/l	0.0275	0.0	.025	110.	67.9-136	L778802-02	WG804784	
1,4-Dichlorobenzene	mg/l	0.0254	0.0	.025	100.	74.4-123	L778802-02	WG804784	
2-Butanone (MEK)	mg/l	0.112	0.0	.125	89.0	45-156	L778802-02	WG804784	
2-Hexanone	mg/l	0.126	0.0	.125	100.	59.4-154	L778802-02	WG804784	
4-Methyl-2-pentanone (MIBK)	mg/l	0.144	0.0	.125	120.	60.7-150	L778802-02	WG804784	
Acetone	mg/l	0.0728	0.0	.125	58.0	25-156	L778802-02	WG804784	
Benzene	mg/l	0.0266	0.00318	.025	94.0	58.6-133	L778802-02	WG804784	
Bromochloromethane	mg/l	0.0260	0.0	.025	100.	74.4-128	L778802-02	WG804784	
Bromodichloromethane	mg/l	0.0277	0.0	.025	110.	69.2-127	L778802-02	WG804784	
Bromoform	mg/l	0.0325	0.0	.025	130.	66.3-140	L778802-02	WG804784	
Bromomethane	mg/l	0.0197	0.0	.025	79.0	16.6-183	L778802-02	WG804784	
Carbon disulfide	mg/l	0.0237	0.0	.025	95.0	34.9-138	L778802-02	WG804784	
Carbon tetrachloride	mg/l	0.0243	0.0	.025	97.0	60.6-139	L778802-02	WG804784	
Chlorobenzene	mg/l	0.0279	0.000367	.025	110.	70.1-130	L778802-02	WG804784	
Chlorodibromomethane	mg/l	0.0282	0.0	.025	110.	71.6-132	L778802-02	WG804784	
Chloroethane	mg/l	0.0194	0.0	.025	78.0	33.3-155	L778802-02	WG804784	
Chloroform	mg/l	0.0244	0.0	.025	98.0	66.1-133	L778802-02	WG804784	
Chloromethane	mg/l	0.0242	0.0	.025	97.0	40.7-139	L778802-02	WG804784	
cis-1,2-Dichloroethylene	mg/l	0.0255	0.00115	.025	97.0	60.6-136	L778802-02	WG804784	
cis-1,3-Dichloropropene	mg/l	0.0274	0.0	.025	110.	71.1-129	L778802-02	WG804784	
Dichlorodifluoromethane	mg/l	0.0257	0.0	.025	100.	42.2-146	L778802-02	WG804784	
Ethylbenzene	mg/l	0.0260	0.0	.025	100.	62.7-136	L778802-02	WG804784	
Isopropylbenzene	mg/l	0.0263	0.0	.025	100.	67.4-136	L778802-02	WG804784	
Methyl tert-butyl ether	mg/l	0.0274	0.0	.025	110.	61.4-136	L778802-02	WG804784	
Methylene Chloride	mg/l	0.0256	0.00140	.025	97.0	61.5-125	L778802-02	WG804784	
Styrene	mg/l	0.0275	0.0	.025	110.	68.2-133	L778802-02	WG804784	
Tetrachloroethene	mg/l	0.0274	0.0	.025	110.	57.4-141	L778802-02	WG804784	
Toluene	mg/l	0.0261	0.0	.025	100.	67.8-124	L778802-02	WG804784	
trans-1,2-Dichloroethylene	mg/l	0.0243	0.0	.025	97.0	61-132	L778802-02	WG804784	
trans-1,3-Dichloropropene	mg/l	0.0259	0.0	.025	100.	66.3-136	L778802-02	WG804784	
Trichloroethylene	mg/l	0.0276	0.0	.025	110.	48.9-148	L778802-02	WG804784	
Trichlorofluoromethane	mg/l	0.0193	0.0	.025	77.0	39.9-165	L778802-02	WG804784	
Vinyl chloride	mg/l	0.0243	0.00650	.025	71.0	44.3-143	L778802-02	WG804784	
Xylenes, Total	mg/l	0.0779	0.0	.075	100.	65.6-133	L778802-02	WG804784	
4-Bromofluorobenzene					101.0	80.1-120		WG804784	
Dibromofluoromethane					94.80	79-121		WG804784	
Toluene-d8					106.0	90-115		WG804784	
a,a,a-Trifluorotoluene					108.0	90.4-116		WG804784	
1,2,4,5-Tetrachlorobenzene	mg/l	0.0371	0.0	.05	74.0	26.2-113	L778802-02	WG804971	
2,4,5-Trichlorophenol	mg/l	0.0417	0.0	.05	84.0	30.6-120	L778802-02	WG804971	
2,4,6-Trichlorophenol	mg/l	0.0402	0.0	.05	80.0	19.1-114	L778802-02	WG804971	
2,4-Dichlorophenol	mg/l	0.0382	0.0	.05	76.0	34.7-107	L778802-02	WG804971	
2,4-Dimethylphenol	mg/l	0.0404	0.0	.05	81.0	10-152	L778802-02	WG804971	
2,4-Dinitrophenol	mg/l	0.0451	0.0	.05	90.0	10-136	L778802-02	WG804971	
2,4-Dinitrotoluene	mg/l	0.0431	0.0	.05	86.0	16.2-135	L778802-02	WG804971	
2,6-Dinitrotoluene	mg/l	0.0413	0.0	.05	83.0	25.2-124	L778802-02	WG804971	
2-Chloronaphthalene	mg/l	0.0371	0.0	.05	74.0	29.7-114	L778802-02	WG804971	
2-Chlorophenol	mg/l	0.0315	0.0	.05	63.0	13.9-105	L778802-02	WG804971	
2-Methylnaphthalene	mg/l	0.0322	0.0	.05	64.0	24.6-114	L778802-02	WG804971	
2-Methylphenol	mg/l	0.0314	0.0	.05	63.0	10-133	L778802-02	WG804971	

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L-A-B S-C-I-E-N-C-E-S

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Analyte	Units	Matrix Spike				% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV					
2-Nitroaniline	mg/l	0.0431	0.0	.05	86.0	23.5-134	L778802-02	WG804971	
2-Nitrophenol	mg/l	0.0373	0.0	.05	75.0	26.7-114	L778802-02	WG804971	
3,4-Methyl Phenol	mg/l	0.0354	0.0	.05	71.0	17.4-100	L778802-02	WG804971	
3,3-Dichlorobenzidine	mg/l	0.0159	0.0	.05	32.0	10-162	L778802-02	WG804971	
3-Nitroaniline	mg/l	0.0398	0.0	.05	80.0	10-128	L778802-02	WG804971	
4,6-Dinitro-2-methylphenol	mg/l	0.0456	0.0	.05	91.0	10-151	L778802-02	WG804971	
4-Bromophenyl-phenylether	mg/l	0.0416	0.0	.05	83.0	34.3-135	L778802-02	WG804971	
4-Chloro-3-methylphenol	mg/l	0.0413	0.0	.05	83.0	35.7-110	L778802-02	WG804971	
4-Chloroaniline	mg/l	0.0314	0.0	.05	63.0	10-123	L778802-02	WG804971	
4-Chlorophenyl-phenylether	mg/l	0.0371	0.0	.05	74.0	35.6-127	L778802-02	WG804971	
4-Nitroaniline	mg/l	0.0490	0.0	.05	98.0	10-168	L778802-02	WG804971	
4-Nitrophenol	mg/l	0.0258	0.0	.05	52.0	10-130	L778802-02	WG804971	
Acenaphthene	mg/l	0.0376	0.000777	.05	74.0	30.7-124	L778802-02	WG804971	
Acenaphthylene	mg/l	0.0383	0.0	.05	76.0	29-122	L778802-02	WG804971	
Acetophenone	mg/l	0.0281	0.0	.05	56.0	24.2-127	L778802-02	WG804971	
Anthracene	mg/l	0.0396	0.0	.05	79.0	34.2-135	L778802-02	WG804971	
Atrazine	mg/l	0.0425	0.0	.05	85.0	23.1-172	L778802-02	WG804971	
Benzaldehyde	mg/l	0.0272	0.0	.05	54.0	10-152	L778802-02	WG804971	
Benzo(a)anthracene	mg/l	0.0371	0.0	.05	74.0	35.7-138	L778802-02	WG804971	
Benzo(a)pyrene	mg/l	0.0390	0.0	.05	78.0	23.3-135	L778802-02	WG804971	
Benzo(b)fluoranthene	mg/l	0.0389	0.0	.05	78.0	23-145	L778802-02	WG804971	
Benzo(g,h,i)perylene	mg/l	0.0425	0.0	.05	85.0	10-148	L778802-02	WG804971	
Benzo(k)fluoranthene	mg/l	0.0396	0.0	.05	79.0	29.5-143	L778802-02	WG804971	
Benzylbutyl phthalate	mg/l	0.0394	0.0	.05	79.0	13.3-159	L778802-02	WG804971	
Biphenyl	mg/l	0.0376	0.0	.05	75.0	26.4-118	L778802-02	WG804971	
Bis(2-chloroethoxy)methane	mg/l	0.0344	0.0	.05	69.0	26.4-127	L778802-02	WG804971	
Bis(2-chloroethyl)ether	mg/l	0.0323	0.0	.05	65.0	10-154	L778802-02	WG804971	
Bis(2-chloroisopropyl)ether	mg/l	0.0323	0.0	.05	64.0	19.4-126	L778802-02	WG804971	
Bis(2-ethylhexyl)phthalate	mg/l	0.0371	0.000180	.05	74.0	15.5-152	L778802-02	WG804971	
Caprolactam	mg/l	0.0108	0.0	.05	22.0	10-64	L778802-02	WG804971	
Carbazole	mg/l	0.0459	0.0	.05	92.0	33.3-134	L778802-02	WG804971	
Chrysene	mg/l	0.0390	0.0	.05	78.0	37-145	L778802-02	WG804971	
Di-n-butyl phthalate	mg/l	0.0419	0.000341	.05	83.0	26-152	L778802-02	WG804971	
Di-n-octyl phthalate	mg/l	0.0374	0.0	.05	75.0	12.3-145	L778802-02	WG804971	
Dibenz(a,h)anthracene	mg/l	0.0403	0.0	.05	81.0	10-147	L778802-02	WG804971	
Dibenzo furan	mg/l	0.0382	0.0	.05	76.0	28-127	L778802-02	WG804971	
Diethyl phthalate	mg/l	0.0408	0.0	.05	82.0	21.6-154	L778802-02	WG804971	
Dimethyl phthalate	mg/l	0.0426	0.0	.05	85.0	10-157	L778802-02	WG804971	
Fluoranthene	mg/l	0.0389	0.0	.05	78.0	37.1-139	L778802-02	WG804971	
Fluorene	mg/l	0.0386	0.0	.05	77.0	10-162	L778802-02	WG804971	
Hexachloro-1,3-butadiene	mg/l	0.0340	0.0	.05	68.0	15.7-109	L778802-02	WG804971	
Hexachlorobenzene	mg/l	0.0404	0.0	.05	81.0	31.9-135	L778802-02	WG804971	
Hexachlorocyclopentadiene	mg/l	0.0247	0.0	.05	49.0	10-123	L778802-02	WG804971	
Hexachloroethane	mg/l	0.0314	0.0	.05	63.0	10.4-105	L778802-02	WG804971	
Indeno(1,2,3-cd)pyrene	mg/l	0.0415	0.0	.05	83.0	10-145	L778802-02	WG804971	
Isophorone	mg/l	0.0383	0.0	.05	77.0	25.9-133	L778802-02	WG804971	
n-Nitrosodi-n-propylamine	mg/l	0.0404	0.0	.05	81.0	23.9-125	L778802-02	WG804971	
n-Nitrosodiphenylamine	mg/l	0.0396	0.0	.05	79.0	20.6-150	L778802-02	WG804971	
Naphthalene	mg/l	0.0337	0.0	.05	68.0	20.2-114	L778802-02	WG804971	
Nitrobenzene	mg/l	0.0362	0.0	.05	72.0	23.1-121	L778802-02	WG804971	
Pentachlorophenol	mg/l	0.0445	0.0	.05	89.0	10-108	L778802-02	WG804971	
Phenanthrene	mg/l	0.0375	0.0	.05	75.0	33-139	L778802-02	WG804971	
Phenol	mg/l	0.0221	0.000335	.05	44.0	10-64.1	L778802-02	WG804971	
Pyrene	mg/l	0.0375	0.0	.05	75.0	35.5-139	L778802-02	WG804971	
2,4,6-Tribromophenol					83.60	11.2-130		WG804971	
2-Fluorobiphenyl					69.90	29.5-131		WG804971	
2-Fluorophenol					48.80	10-77.9		WG804971	
Nitrobenzene-d5					64.90	21.8-123		WG804971	
Phenol-d5					38.90	5-70.1		WG804971	

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Quality Assurance Report
Level II

October 30, 2015

L778802

Analyte	Units	Matrix Spike				% Rec	Limit	Ref Samp	Batch
		MS Res	Ref Res	TV					
p-Terphenyl-d14					60.40	29.3-137			
Barium	mg/l	1.68	0.727	1	96.0	75-125	L778802-02	WG805260	
Beryllium	mg/l	1.03	0.00185	1	100.	75-125	L778802-02	WG805260	
Cadmium	mg/l	1.09	0.00120	1	110.	75-125	L778802-02	WG805260	
Calcium	mg/l	404.	406.	10	0.0*	75-125	L778802-02	WG805260	
Chromium	mg/l	1.01	0.0512	1	95.0	75-125	L778802-02	WG805260	
Cobalt	mg/l	1.11	0.0307	1	110.	75-125	L778802-02	WG805260	
Copper	mg/l	1.14	0.164	1	98.0	75-125	L778802-02	WG805260	
Iron	mg/l	120.	126.	1	0.0*	75-125	L778802-02	WG805260	
Magnesium	mg/l	171.	165.	10	59.0*	75-125	L778802-02	WG805260	
Manganese	mg/l	2.29	1.39	1	91.0	75-125	L778802-02	WG805260	
Nickel	mg/l	1.14	0.0841	1	110.	75-125	L778802-02	WG805260	
Potassium	mg/l	15.9	7.20	10	87.0	75-125	L778802-02	WG805260	
Selenium	mg/l	1.13	0.00204	1	110.	75-125	L778802-02	WG805260	
Silver	mg/l	1.11	-0.00117	1	110.	75-125	L778802-02	WG805260	
Sodium	mg/l	63.4	54.9	10	85.0	75-125	L778802-02	WG805260	
Vanadium	mg/l	1.07	0.0718	1	100.	75-125	L778802-02	WG805260	
Zinc	mg/l	1.54	0.632	1	91.0	75-125	L778802-02	WG805260	
Aluminum	mg/l	31.1	31.1	1	1.00*	75-125	L778802-02	WG805260	
1,1,1-Trichloroethane	mg/l	0.0267	0.0	.025	110.	62.8-138	L778802-02	WG805793	
1,1,2,2-Tetrachloroethane	mg/l	0.0251	0.0	.025	100.	64.9-145	L778802-02	WG805793	
1,1,2-Trichloroethane	mg/l	0.0238	0.0	.025	95.0	74.1-130	L778802-02	WG805793	
1,1,2-Trichlorotrifluoroethane	mg/l	0.0303	0.0	.025	120.	53.7-150	L778802-02	WG805793	
1,1-Dichloroethane	mg/l	0.0297	0.0	.025	120.	64-134	L778802-02	WG805793	
1,1-Dichloroethene	mg/l	0.0296	0.0	.025	120.	48.8-144	L778802-02	WG805793	
1,2,3-Trichlorobenzene	mg/l	0.0224	0.0	.025	90.0	65.7-143	L778802-02	WG805793	
1,2,4-Trichlorobenzene	mg/l	0.0241	0.0	.025	96.0	67-146	L778802-02	WG805793	
1,2-Dibromo-3-Chloropropane	mg/l	0.0232	0.0	.025	93.0	63.9-142	L778802-02	WG805793	
1,2-Dibromoethane	mg/l	0.0243	0.0	.025	97.0	73.8-131	L778802-02	WG805793	
1,2-Dichlorobenzene	mg/l	0.0249	0.0	.025	100.	77.4-127	L778802-02	WG805793	
1,2-Dichloroethane	mg/l	0.0276	0.0	.025	110.	60.7-132	L778802-02	WG805793	
1,2-Dichloropropane	mg/l	0.0293	0.0	.025	120.	69.7-130	L778802-02	WG805793	
1,3-Dichlorobenzene	mg/l	0.0239	0.0	.025	96.0	67.9-136	L778802-02	WG805793	
1,4-Dichlorobenzene	mg/l	0.0241	0.0	.025	96.0	74.4-123	L778802-02	WG805793	
2-Butanone (MEK)	mg/l	0.145	0.0	.125	120.	45-156	L778802-02	WG805793	
2-Hexanone	mg/l	0.131	0.0	.125	100.	59.4-154	L778802-02	WG805793	
4-Methyl-2-pentanone (MIBK)	mg/l	0.165	0.0	.125	130.	60.7-150	L778802-02	WG805793	
Acetone	mg/l	0.0982	0.00296	.125	76.0	25-156	L778802-02	WG805793	
Benzene	mg/l	0.0325	0.00426	.025	110.	50.6-133	L778802-02	WG805793	
Bromochloromethane	mg/l	0.0283	0.0	.025	110.	74.4-128	L778802-02	WG805793	
Bromodichloromethane	mg/l	0.0257	0.0	.025	100.	69.2-127	L778802-02	WG805793	
Bromoform	mg/l	0.0240	0.0	.025	96.0	66.3-140	L778802-02	WG805793	
Bromomethane	mg/l	0.0289	0.0	.025	120.	16.6-183	L778802-02	WG805793	
Carbon disulfide	mg/l	0.0288	0.0	.025	120.	34.9-138	L778802-02	WG805793	
Carbon tetrachloride	mg/l	0.0274	0.0	.025	110.	60.6-139	L778802-02	WG805793	
Chlorobenzene	mg/l	0.0245	0.0	.025	98.0	70.1-130	L778802-02	WG805793	
Chlorodibromomethane	mg/l	0.0245	0.0	.025	98.0	71.6-132	L778802-02	WG805793	
Chloroethane	mg/l	0.0267	0.0	.025	110.	33.3-155	L778802-02	WG805793	
Chloroform	mg/l	0.0288	0.0	.025	120.	66.1-133	L778802-02	WG805793	
Chloromethane	mg/l	0.0286	0.0	.025	120.	40.7-139	L778802-02	WG805793	
cis-1,2-Dichloroethene	mg/l	0.0286	0.00149	.025	110.	60.6-136	L778802-02	WG805793	
cis-1,3-Dichloropropene	mg/l	0.0266	0.0	.025	110.	71.1-129	L778802-02	WG805793	
Dichlorodifluoromethane	mg/l	0.0243	0.0	.025	97.0	42.2-146	L778802-02	WG805793	
Ethylbenzene	mg/l	0.0243	0.0	.025	97.0	62.7-136	L778802-02	WG805793	
Isopropylbenzene	mg/l	0.0243	0.0	.025	97.0	67.4-136	L778802-02	WG805793	
Methyl tert-butyl ether	mg/l	0.0260	0.0	.025	100.	61.4-136	L778802-02	WG805793	
Methylene Chloride	mg/l	0.0280	0.000340	.025	110.	61.5-125	L778802-02	WG805793	

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L778802

Analyte	Units	Matrix	Spike			% Rec	Limit	Ref Samp	Batch
	MS Res	Ref Res	TV						
Styrene	mg/l	0.0250	0.0	.025	100.	68.2-133	L778802-02	WG805793	
Tetrachloroethene	mg/l	0.0227	0.0	.025	91.0	57.4-141	L778802-02	WG805793	
Toluene	mg/l	0.0269	0.0	.025	110.	67.8-124	L778802-02	WG805793	
trans-1,2-Dichloroethene	mg/l	0.0279	0.0	.025	110.	61-132	L778802-02	WG805793	
trans-1,3-Dichloropropene	mg/l	0.0271	0.0	.025	110.	66.3-136	L778802-02	WG805793	
Trichloroethene	mg/l	0.0250	0.0	.025	100.	48.9-148	L778802-02	WG805793	
Trichlorofluoromethane	mg/l	0.0305	0.0	.025	120.	39.9-165	L778802-02	WG805793	
Vinyl chloride	mg/l	0.0354	0.00978	.025	100.	44.3-143	L778802-02	WG805793	
Xylenes, Total	mg/l	0.0723	0.0	.075	96.0	65.6-133	L778802-02	WG805793	
4-Bromofluorobenzene					97.10	80.1-120			
Dibromofluoromethane					111.0	79-121			
Toluene-d8					107.0	90-115			
a,a,a-Trifluorotoluene					99.70	90.4-116			
Antimony	mg/l	0.0345	0.00228	.05	65.0*	75-125	L778802-02	WG805261	
Arsenic	mg/l	0.152	0.104	.05	94.0	75-125	L778802-02	WG805261	
Lead	mg/l	0.161	0.112	.05	98.0	75-125	L778802-02	WG805261	
Thallium	mg/l	0.0489	0.000862	.05	96.0	75-125	L778802-02	WG805261	

Analyte	Units	Matrix	Spike	Duplicate						
	MSD	Ref	TV	%Rec		Limit	RPD	Limit	Ref Samp	Batch
Mercury	mg/l	0.00320	0.00297	102.		75-125	7.00	20	L778802-02	WG804806
Mercury	mg/l	0.00296	0.00289	98.0		75-125	2.00	20	L778726-01	WG804806
1,1,1-Trichloroethane	mg/l	0.0247	0.0238	98.7		58.7-134	3.67	20	L778802-02	WG804784
1,1,2,2-Tetrachloroethane	mg/l	0.0304	0.0288	122.		64.9-145	5.61	20	L778802-02	WG804784
1,1,2-Trichloroethane	mg/l	0.0290	0.0286	116.		74.1-130	1.09	20	L778802-02	WG804784
1,1,2-Trichlorotrifluoroethane	mg/l	0.0244	0.0236	97.6		53.7-150	3.17	20	L778802-02	WG804784
1,1-Dichloroethane	mg/l	0.0254	0.0246	102.		64-134	3.30	20	L778802-02	WG804784
1,1-Dichloroethene	mg/l	0.0252	0.0244	101.		48.8-144	3.21	20	L778802-02	WG804784
1,2,3-Trichlorobenzene	mg/l	0.0281	0.0290	112.		65.7-143	3.08	20	L778802-02	WG804784
1,2,4-Trichlorobenzene	mg/l	0.0284	0.0295	114.		67-146	3.70	20	L778802-02	WG804784
1,2-Dibromo-3-Chloropropane	mg/l	0.0269	0.0291	108.		63.9-142	7.62	20.2	L778802-02	WG804784
1,2-Dibromoethane	mg/l	0.0289	0.0280	116.		73.8-131	3.15	20	L778802-02	WG804784
1,2-Dichlorobenzene	mg/l	0.0263	0.0265	105.		77.4-127	0.710	20	L778802-02	WG804784
1,2-Dichloroethane	mg/l	0.0263	0.0257	105.		60.7-132	2.57	20	L778802-02	WG804784
1,2-Dichloropropane	mg/l	0.0275	0.0271	110.		69.7-130	1.72	20	L778802-02	WG804784
1,3-Dichlorobenzene	mg/l	0.0284	0.0275	114.		67.9-136	3.02	20	L778802-02	WG804784
1,4-Dichlorobenzene	mg/l	0.0253	0.0254	101.		74.4-123	0.570	20	L778802-02	WG804784
2-Butanone (MEK)	mg/l	0.114	0.112	91.0		45-156	1.79	20.8	L778802-02	WG804784
2-Hexanone	mg/l	0.130	0.126	104.		59.4-154	3.11	20.1	L778802-02	WG804784
4-Methyl-2-pentanone (MIBK)	mg/l	0.152	0.144	122.		60.7-150	5.84	20	L778802-02	WG804784
Acetone	mg/l	0.0755	0.0728	60.4		25-156	3.66	21.5	L778802-02	WG804784
Benzene	mg/l	0.0271	0.0266	95.9		58.6-133	2.04	20	L778802-02	WG804784
Bromochloromethane	mg/l	0.0266	0.0260	106.		74.4-128	2.10	20	L778802-02	WG804784
Bromodichloromethane	mg/l	0.0284	0.0277	114.		69.2-127	2.58	20	L778802-02	WG804784
Bromoform	mg/l	0.0343	0.0325	137.		66.3-140	5.24	20	L778802-02	WG804784
Bromomethane	mg/l	0.0210	0.0197	84.1		16.6-183	6.63	20.5	L778802-02	WG804784
Carbon disulfide	mg/l	0.0251	0.0237	100.		34.9-138	5.59	20	L778802-02	WG804784
Carbon tetrachloride	mg/l	0.0256	0.0243	102.		60.6-139	4.97	20	L778802-02	WG804784
Chlorobenzene	mg/l	0.0287	0.0279	113.		70.1-130	2.73	20	L778802-02	WG804784
Chlorodibromomethane	mg/l	0.0299	0.0282	120.		71.6-132	5.63	20	L778802-02	WG804784
Chloroethane	mg/l	0.0206	0.0194	82.3		33.3-155	5.65	20	L778802-02	WG804784
Chloroform	mg/l	0.0254	0.0244	102.		66.1-133	3.90	20	L778802-02	WG804784
Chloromethane	mg/l	0.0258	0.0242	103.		40.7-139	6.27	20	L778802-02	WG804784
cis-1,2-Dichloroethene	mg/l	0.0265	0.0255	101.		60.6-136	3.89	20	L778802-02	WG804784

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				%Rec	Limit			
cis-1,3-Dichloropropene	mg/l	0.0280	0.0274	112.	71.1-129	2.11	20	L778802-02 WG804784
Dichlorodifluoromethane	mg/l	0.0272	0.0257	109.	42.2-146	5.62	20	L778802-02 WG804784
Ethylbenzene	mg/l	0.0269	0.0260	108.	62.7-136	3.41	20	L778802-02 WG804784
Isopropylbenzene	mg/l	0.0276	0.0263	110.	67.4-136	4.97	20	L778802-02 WG804784
Methyl tert-butyl ether	mg/l	0.0296	0.0274	118.	61.4-136	7.45	20	L778802-02 WG804784
Methylene Chloride	mg/l	0.0267	0.0256	101.	61.5-125	4.21	20	L778802-02 WG804784
Styrene	mg/l	0.0290	0.0275	116.	68.2-133	5.12	20	L778802-02 WG804784
Tetrachloroethene	mg/l	0.0284	0.0274	114.	57.4-141	3.70	20	L778802-02 WG804784
Toluene	mg/l	0.0267	0.0261	107.	67.8-124	2.63	20	L778802-02 WG804784
trans-1,2-Dichloroethene	mg/l	0.0251	0.0243	100.	61-132	3.23	20	L778802-02 WG804784
trans-1,3-Dichloropropene	mg/l	0.0263	0.0259	105.	66.3-136	1.80	20	L778802-02 WG804784
Trichloroethene	mg/l	0.0284	0.0276	114.	48.9-148	2.88	20	L778802-02 WG804784
Trichlorofluoromethane	mg/l	0.0200	0.0193	79.8	39.9-165	3.56	20	L778802-02 WG804784
Vinyl chloride	mg/l	0.0256	0.0243	76.5	44.3-143	5.12	20	L778802-02 WG804784
Xylenes, Total	mg/l	0.0816	0.0779	109.	65.6-133	4.65	20	L778802-02 WG804784
4-Bromofluorobenzene				104.0	80.1-120			WG804784
Dibromofluoromethane				97.60	79-121			WG804784
Toluene-d8				108.0	90-115			WG804784
a,a,a-Trifluorotoluene				110.0	90.4-116			WG804784
1,2,4,5-Tetrachlorobenzene	mg/l	0.0369	0.0371	73.9	26.2-113	0.400	29.8	L778802-02 WG804971
2,4,5-Trichlorophenol	mg/l	0.0415	0.0417	83.0	30.6-120	0.540	33.8	L778802-02 WG804971
2,4,6-Trichlorophenol	mg/l	0.0405	0.0402	81.0	19.1-114	0.750	29.9	L778802-02 WG804971
2,4-Dichlorophenol	mg/l	0.0400	0.0382	79.9	34.7-107	4.39	27.3	L778802-02 WG804971
2,4-Dimethylphenol	mg/l	0.0411	0.0404	82.2	10-152	1.82	35.4	L778802-02 WG804971
2,4-Dinitrophenol	mg/l	0.0444	0.0451	88.8	10-136	1.53	40	L778802-02 WG804971
2,4-Dinitrotoluene	mg/l	0.0432	0.0431	86.4	16.2-135	0.160	20.6	L778802-02 WG804971
2,6-Dinitrotoluene	mg/l	0.0417	0.0413	83.4	25.2-124	0.950	22.2	L778802-02 WG804971
2-Chloronaphthalene	mg/l	0.0366	0.0371	73.1	29.7-114	1.56	24.2	L778802-02 WG804971
2-Chlorophenol	mg/l	0.0320	0.0315	63.9	13.9-105	1.32	32.4	L778802-02 WG804971
2-Methylnaphthalene	mg/l	0.0329	0.0322	65.8	24.6-114	2.21	23.7	L778802-02 WG804971
2-Methylphenol	mg/l	0.0321	0.0314	64.3	10-133	2.43	40	L778802-02 WG804971
2-Nitroaniline	mg/l	0.0421	0.0431	84.3	23.5-134	2.22	21.8	L778802-02 WG804971
2-Nitrophenol	mg/l	0.0404	0.0373	80.8	26.7-114	7.84	34	L778802-02 WG804971
3&4-Methyl Phenol	mg/l	0.0368	0.0354	73.6	17.4-100	3.90	27.7	L778802-02 WG804971
3,3-Dichlorobenzidine	mg/l	0.0195	0.0159	39.1	10-162	20.4	26.9	L778802-02 WG804971
3-Nitroaniline	mg/l	0.0402	0.0398	80.4	10-128	0.960	23	L778802-02 WG804971
4,6-Dinitro-2-methylphenol	mg/l	0.0442	0.0456	88.5	10-151	3.08	37.4	L778802-02 WG804971
4-Bromophenyl-phenylether	mg/l	0.0380	0.0416	76.0	34.3-135	9.01	23.2	L778802-02 WG804971
4-Chloro-3-methylphenol	mg/l	0.0416	0.0413	83.1	35.7-110	0.690	20	L778802-02 WG804971
4-Chloroaniline	mg/l	0.0316	0.0314	63.2	10-123	0.620	21.9	L778802-02 WG804971
4-Chlorophenyl-phenylether	mg/l	0.0370	0.0371	73.9	35.6-127	0.230	20	L778802-02 WG804971
4-Nitroaniline	mg/l	0.0481	0.0490	96.2	10-168	1.89	22.4	L778802-02 WG804971
4-Nitrophenol	mg/l	0.0237	0.0258	47.5	10-130	8.26	40	L778802-02 WG804971
Acenaphthene	mg/l	0.0361	0.0376	70.6	30.7-124	4.19	22.6	L778802-02 WG804971
Acenaphthylene	mg/l	0.0378	0.0383	75.6	29-122	1.23	23.9	L778802-02 WG804971
Acetophenone	mg/l	0.0287	0.0281	57.4	24.2-127	2.21	34.9	L778802-02 WG804971
Anthracene	mg/l	0.0388	0.0396	77.6	34.2-135	1.94	20	L778802-02 WG804971
Atrazine	mg/l	0.0433	0.0425	86.5	23.1-172	1.88	20	L778802-02 WG804971
Benzaldehyde	mg/l	0.0279	0.0272	55.7	10-152	2.55	37.7	L778802-02 WG804971
Benzo(a)anthracene	mg/l	0.0381	0.0371	76.3	35.7-138	2.84	20	L778802-02 WG804971
Benzo(a)pyrene	mg/l	0.0378	0.0390	75.6	23.3-135	3.22	20	L778802-02 WG804971
Benzo(b)fluoranthene	mg/l	0.0385	0.0389	77.1	23-145	0.990	20	L778802-02 WG804971
Benzo(g,h,i)perylene	mg/l	0.0417	0.0425	83.3	10-148	2.04	21	L778802-02 WG804971
Benzo(k)fluoranthene	mg/l	0.0393	0.0396	78.6	29.5-143	0.720	20	L778802-02 WG804971
Benzylbutyl phthalate	mg/l	0.0415	0.0394	83.1	13.3-159	5.18	21.2	L778802-02 WG804971
Biphenyl	mg/l	0.0372	0.0376	74.4	26.4-118	1.13	20	L778802-02 WG804971
Bis(2-chlorethoxy)methane	mg/l	0.0352	0.0344	70.4	26.4-127	2.33	25.8	L778802-02 WG804971

* Performance of this Analyte is outside of established criteria.

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YOUR LAB OF CHOICE

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Quality Assurance Report
Level II

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Fax (615) 758-5859

Tax I.D. 62-0814289

Est. 1970

October 30, 2015

L778802

Analyte	Units	MSD	Matrix Ref	Spike %Rec	Duplicate		Limit	RPD	Limit	Ref	Samp	Batch
					1	2						
Bis(2-chloroethyl)ether	mg/l	0.0320	0.0323	64.0	10-154	0.870	40	L778802-02				WG804971
Bis(2-chloroisopropyl)ether	mg/l	0.0353	0.0323	70.6	19.4-126	8.99	37.2	L778802-02				WG804971
Bis(2-ethylhexyl)phthalate	mg/l	0.0385	0.0371	76.6	15.5-152	3.72	27.6	L778802-02				WG804971
Caprolactam	mg/l	0.0130	0.0108	26.0	10-64	18.3	37.3	L778802-02				WG804971
Carbazole	mg/l	0.0454	0.0459	90.8	33.3-134	1.15	20	L778802-02				WG804971
Chrysene	mg/l	0.0401	0.0390	80.2	37-145	2.90	20	L778802-02				WG804971
Di-n-butyl phthalate	mg/l	0.0413	0.0419	81.8	26-152	1.54	20	L778802-02				WG804971
Di-n-octyl phthalate	mg/l	0.0398	0.0374	79.5	12.3-145	6.02	22.9	L778802-02				WG804971
Dibenz(a,h)anthracene	mg/l	0.0398	0.0403	79.7	10-147	1.16	22.3	L778802-02				WG804971
Dibenzofuran	mg/l	0.0374	0.0382	74.8	28-127	2.11	20	L778802-02				WG804971
Diethyl phthalate	mg/l	0.0417	0.0408	83.5	21.6-154	2.27	20	L778802-02				WG804971
Dimethyl phthalate	mg/l	0.0415	0.0426	82.9	10-157	2.71	20	L778802-02				WG804971
Fluoranthene	mg/l	0.0392	0.0389	78.3	37.1-139	0.610	20	L778802-02				WG804971
Fluorene	mg/l	0.0375	0.0386	75.1	10-162	2.71	20	L778802-02				WG804971
Hexachloro-1,3-butadiene	mg/l	0.0343	0.0340	68.7	15.7-109	0.950	37.6	L778802-02				WG804971
Hexachlorobenzene	mg/l	0.0392	0.0404	78.4	31.9-135	3.07	20	L778802-02				WG804971
Hexachlorocyclopentadiene	mg/l	0.0246	0.0247	49.2	10-123	0.390	27.8	L778802-02				WG804971
Hexachloroethane	mg/l	0.0324	0.0314	64.9	10.4-105	3.37	40	L778802-02				WG804971
Indeno(1,2,3- <i>cd</i>)pyrene	mg/l	0.0410	0.0415	81.9	10-145	1.24	20	L778802-02				WG804971
Isophorone	mg/l	0.0395	0.0383	78.9	25.9-133	3.02	22.9	L778802-02				WG804971
n-Nitrosodi-n-propylamine	mg/l	0.0421	0.0404	84.3	23.9-125	4.26	29.7	L778802-02				WG804971
n-Nitrosodiphenylamine	mg/l	0.0395	0.0396	79.1	20.6-150	0.0100	20	L778802-02				WG804971
Naphthalene	mg/l	0.0328	0.0337	65.6	20.2-114	2.86	27.5	L778802-02				WG804971
Nitrobenzene	mg/l	0.0357	0.0362	71.5	23.1-121	1.16	29	L778802-02				WG804971
Pentachlorophenol	mg/l	0.0449	0.0445	89.7	10-108	0.750	40	L778802-02				WG804971
Phenanthrene	mg/l	0.0365	0.0375	73.0	33-139	2.73	20	L778802-02				WG804971
Phenol	mg/l	0.0237	0.0221	46.7	10-64.1	6.74	40	L778802-02				WG804971
Pyrene	mg/l	0.0380	0.0375	76.1	35.5-139	1.47	20	L778802-02				WG804971
2,4,6-Tribromophenol				81.90	11.2-130							WG804971
2-Fluorobiphenyl				64.80	29.5-131							WG804971
2-Fluorophenol				54.40	10-77.9							WG804971
Nitrobenzene-d5				64.70	21.8-123							WG804971
Phenol-d5				44.50	5-70.1							WG804971
p-Terphenyl-d14				65.10	29.3-137							WG804971
Barium	mg/l	1.68	1.68	95.6	75-125	0.0	20	L778802-02				WG805260
Beryllium	mg/l	1.02	1.03	102.	75-125	1.00	20	L778802-02				WG805260
Cadmium	mg/l	1.09	1.09	109.	75-125	0.0	20	L778802-02				WG805260
Calcium	mg/l	397.	404.	0*	75-125	2.00	20	L778802-02				WG805260
Chromium	mg/l	0.999	1.01	94.8	75-125	1.00	20	L778802-02				WG805260
Cobalt	mg/l	1.11	1.11	108.	75-125	0.0	20	L778802-02				WG805260
Copper	mg/l	1.13	1.14	96.7	75-125	1.00	20	L778802-02				WG805260
Iron	mg/l	117.	120.	0*	75-125	3.00	20	L778802-02				WG805260
Magnesium	mg/l	167.	171.	13.0*	75-125	3.00	20	L778802-02				WG805260
Manganese	mg/l	2.28	2.29	89.2	75-125	1.00	20	L778802-02				WG805260
Nickel	mg/l	1.14	1.14	105.	75-125	0.0	20	L778802-02				WG805260
Potassium	mg/l	15.6	15.9	84.2	75-125	2.00	20	L778802-02				WG805260
Selenium	mg/l	1.13	1.13	113.	75-125	0.0	20	L778802-02				WG805260
Silver	mg/l	1.09	1.11	109.	75-125	1.00	20	L778802-02				WG805260
Sodium	mg/l	62.3	63.4	73.8*	75-125	2.00	20	L778802-02				WG805260
Vanadium	mg/l	1.05	1.07	98.3	75-125	1.00	20	L778802-02				WG805260
Zinc	mg/l	1.53	1.54	90.0	75-125	1.00	20	L778802-02				WG805260
Aluminum	mg/l	30.4	31.1	0*	75-125	2.00	20	L778802-02				WG805260
1,1,1-Trichloroethane	mg/l	0.0261	0.0267	104.	62.8-138	2.23	20	L778802-02				WG805793
1,1,2,2-Tetrachloroethane	mg/l	0.0264	0.0251	106.	64.9-145	5.31	20	L778802-02				WG805793
1,1,2-Trichloroethane	mg/l	0.0250	0.0238	99.8	74.1-130	4.81	20	L778802-02				WG805793

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**Quality Assurance Report
Level II**

October 30, 2015

L778802

Analyte	Units	MSD	Ref	Matrix	Spike	Duplicate	RPD	Limit Ref Samp	Batch
				%Rec	Limit				
1,1,2-Trichlorotrifluoroethane	mg/l	0.0283	0.0303	113.	53.7-150	6.69	20	L778802-02	WG805793
1,1-Dichloroethane	mg/l	0.0299	0.0297	120.	64-134	0.730	20	L778802-02	WG805793
1,1-Dichloroethene	mg/l	0.0276	0.0296	110.	48.8-144	6.99	20	L778802-02	WG805793
1,2,3-Trichlorobenzene	mg/l	0.0244	0.0224	97.6	65.7-143	8.62	20	L778802-02	WG805793
1,2,4-Trichlorobenzene	mg/l	0.0257	0.0241	103.	67-146	6.63	20	L778802-02	WG805793
1,2-Dibromo-3-Chloropropane	mg/l	0.0258	0.0232	103.	63.9-142	10.4	20.2	L778802-02	WG805793
1,2-Dibromoethane	mg/l	0.0259	0.0243	104.	73.8-131	6.28	20	L778802-02	WG805793
1,2-Dichlorobenzene	mg/l	0.0255	0.0249	102.	77.4-127	2.41	20	L778802-02	WG805793
1,2-Dichloroethane	mg/l	0.0274	0.0276	110.	60.7-132	0.720	20	L778802-02	WG805793
1,2-Dichloropropane	mg/l	0.0284	0.0293	114.	69.7-130	2.99	20	L778802-02	WG805793
1,3-Dichlorobenzene	mg/l	0.0246	0.0239	98.5	67.9-136	2.95	20	L778802-02	WG805793
1,4-Dichlorobenzene	mg/l	0.0247	0.0241	99.0	74.4-123	2.68	20	L778802-02	WG805793
2-Butanone (MEK)	mg/l	0.139	0.145	112.	45-156	3.53	20.8	L778802-02	WG805793
2-Hexanone	mg/l	0.129	0.131	103.	59.4-154	1.46	20.1	L778802-02	WG805793
4-Methyl-2-pentanone (MIBK)	mg/l	0.166	0.165	132.	60.7-150	0.430	20	L778802-02	WG805793
Acetone	mg/l	0.0905	0.0982	70.1	25-156	8.14	21.5	L778802-02	WG805793
Benzene	mg/l	0.0325	0.0325	113.	58.6-133	0.110	20	L778802-02	WG805793
Bromochloromethane	mg/l	0.0280	0.0283	112.	74.4-128	0.960	20	L778802-02	WG805793
Bromodichloromethane	mg/l	0.0263	0.0257	105.	69.2-127	2.27	20	L778802-02	WG805793
Bromoform	mg/l	0.0252	0.0240	101.	66.3-140	4.74	20	L778802-02	WG805793
Bromomethane	mg/l	0.0286	0.0289	114.	16.6-183	1.36	20.5	L778802-02	WG805793
Carbon disulfide	mg/l	0.0269	0.0288	108.	34.9-138	6.63	20	L778802-02	WG805793
Carbon tetrachloride	mg/l	0.0280	0.0274	112.	60.6-139	2.10	20	L778802-02	WG805793
Chlorobenzene	mg/l	0.0250	0.0245	99.8	70.1-130	1.67	20	L778802-02	WG805793
Chlorodibromomethane	mg/l	0.0255	0.0245	102.	71.6-132	4.03	20	L778802-02	WG805793
Chloroethane	mg/l	0.0262	0.0267	105.	33.3-155	1.66	20	L778802-02	WG805793
Chloroform	mg/l	0.0284	0.0288	113.	66.1-133	1.38	20	L778802-02	WG805793
Chlormethane	mg/l	0.0274	0.0286	110.	40.7-139	4.27	20	L778802-02	WG805793
cis-1,2-Dichloroethene	mg/l	0.0284	0.0286	107.	60.6-136	0.840	20	L778802-02	WG805793
cis-1,3-Dichloropropene	mg/l	0.0272	0.0266	109.	71.1-129	2.28	20	L778802-02	WG805793
Dichlorodifluoromethane	mg/l	0.0232	0.0243	92.7	42.2-146	4.55	20	L778802-02	WG805793
Ethylbenzene	mg/l	0.0250	0.0243	100.	62.7-136	2.84	20	L778802-02	WG805793
Isopropylbenzene	mg/l	0.0251	0.0243	100.	67.4-136	3.01	20	L778802-02	WG805793
Methyl tert-butyl ether	mg/l	0.0263	0.0260	105.	61.4-136	1.02	20	L778802-02	WG805793
Methylene Chloride	mg/l	0.0284	0.0280	112.	61.5-125	1.39	20	L778802-02	WG805793
Styrene	mg/l	0.0259	0.0250	104.	68.2-133	3.77	20	L778802-02	WG805793
Tetrachloroethene	mg/l	0.0232	0.0227	92.7	57.4-141	2.21	20	L778802-02	WG805793
Toluene	mg/l	0.0270	0.0269	108.	67.8-124	0.650	20	L778802-02	WG805793
trans-1,2-Dichloroethene	mg/l	0.0282	0.0279	113.	61-132	0.910	20	L778802-02	WG805793
trans-1,3-Dichloropropene	mg/l	0.0268	0.0271	107.	66.3-136	1.18	20	L778802-02	WG805793
Trichloroethene	mg/l	0.0251	0.0250	100.	48.9-148	0.580	20	L778802-02	WG805793
Trichlorofluoromethane	mg/l	0.0307	0.0305	123.	39.9-165	0.660	20	L778802-02	WG805793
Vinyl chloride	mg/l	0.0330	0.0354	92.7	44.3-143	7.22	20	L778802-02	WG805793
Xylenes, Total	mg/l	0.0747	0.0723	99.5	65.6-133	3.25	20	L778802-02	WG805793
4-Bromofluorobenzene				98.40	80.1-120				WG805793
Dibromofluoromethane				107.0	79-121				WG805793
Toluene-d8				107.0	90-115				WG805793
a,a,a-Trifluorotoluene				100.0	90.4-116				WG805793
Antimony	mg/l	0.0362	0.0345	67.8*	75-125	5.00	20	L778802-02	WG805261
Arsenic	mg/l	0.152	0.152	95.5	75-125	0.0	20	L778802-02	WG805261
Lead	mg/l	0.161	0.161	98.4	75-125	0.0	20	L778802-02	WG805261
Thallium	mg/l	0.0497	0.0489	97.7	75-125	2.00	20	L778802-02	WG805261

Post Spike

* Performance of this Analyte is outside of established criteria.
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YOUR LAB OF CHOICE

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Fax (615) 758-5859

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Est. 1970

October 30, 2015

Post Spike

Serial Dilution

Batch number /Run number / Sample number cross reference

WG804806: R3053083: L778802-01 02 03 04 05 06
WG804784: R3053441: L778802-01 02 03 04 05 06 07 08
WG804971: R3054350 R3054481: L778802-01 02 03 04 05 06
WG805260: R3054468 R3054646: L778802-01 02 03 04 05 06
WG805261: R3054952: L778802-01 02 03 04 05 06
WG805793: R3055301: L778802-01 02 03 04 05 06 07 08

* * Calculations are performed prior to rounding of reported values.

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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

Report to:
Mr. Dave Rowlinson

Project
Description: Fillmore Ave.

Phone: 716-692-8503 748-6620
Fax: (716) 748-6621

Client Project #
8612199

City/State
Collected: Tonawanda, NY

Lab Project #
STEARNSANY-FILLMORE

Collected by (print):
Dave Rowlinson

Site/Facility ID #

P.O. #
8612199-232

Date Results Needed

Rush? (Lab MUST Be Notified)
Same Day 200%
Next Day 100%
Two Day 50%
Three Day 25%

Email? No Yes

FAX? No Yes

No.
of
Cntrs

Collected by (signature):
N Rowlinson
Immediately
Packed on Ice N Y X

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	8270TCL 100ml Amb NoPres	TAL Metals 500ml HDPE HNO3 ✓ 2	V8260TCL 40ml Amb HCl	V8260TCL 40ml Amb HCl-Blk
MW-1	G	GW		7/23/15	12:30	5	X	X	X	
MW-2		GW			12:00	5	X	X	X	
MW-5		GW			11:30	5	X	X	X	
MW-6		GW			11:00	5	X	X	X	
MW-7		GW			10:00	5	X	X	X	
MW-8		GW			9:30	5	X	X	X	
MS @ MW-2		GW			12:00	5	X	X	X	
MSD @ MM-2		GW			12:00	5	X	X	X	
FIELD DUP @MW-8	✓	GW			9:30	57			X	
TRIP BLANK		GW				1			X	

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

Remarks: Please mark sample used for MS and MSD.

Analysis / Container / Preservative

Chain of Custody Page ____ of ____



YOUR LAB OF CHOICE

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Mount Juliet, TN 37122
Phone: 615-758-5858
Fax: 615-758-5859



L# 778802
A228

Acctnum: STEARNSANY

Template: T87989

Prelogin: PS16922

TSR: 044 - Leslie Newton

PR: 7-7-15 MW

Shipped Via: FedEx Ground

Rem./Contaminant Sample # (list only)

-01

-02

-03

-04

-05

-06

-07

-08

-09

-01

-02

-03

-04

-05

-06

pH Temp

Flow Other

644313562495

Hold #

Condition: OW (lab use only) 2012

COC Seal Intact: Y N NA

pH Checked: NCF:

Relinquished by: (Signature)
Dave Rowlinson

Date: 07-23-15 Time: 16:00

Received by: (Signature)

Relinquished by: (Signature)

Date: Time:

Received by: (Signature)

Relinquished by: (Signature)

Date: Time:

Received for lab by: (Signature)

Temp: °C Bottles Received:

32 46

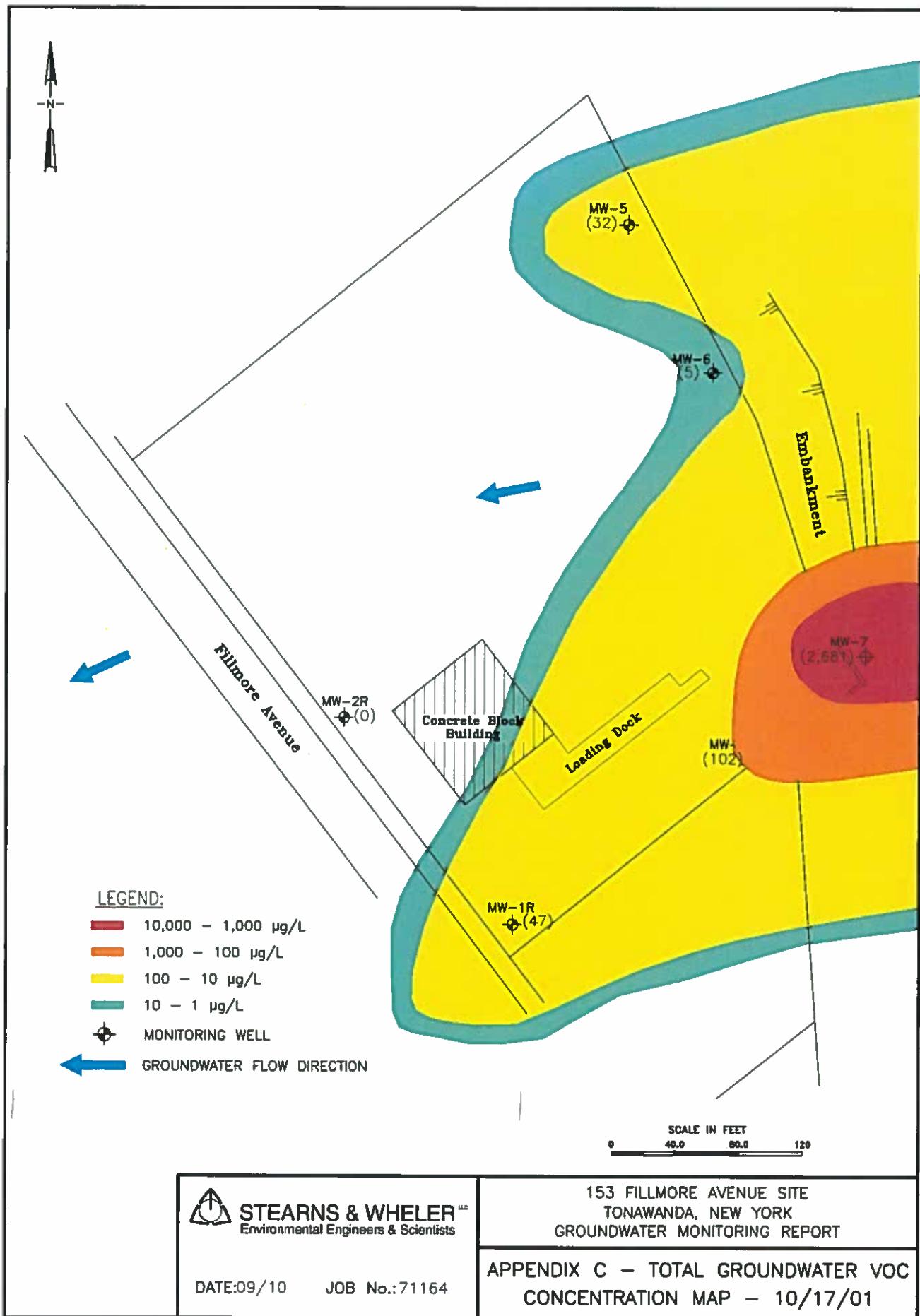
Date: Time:

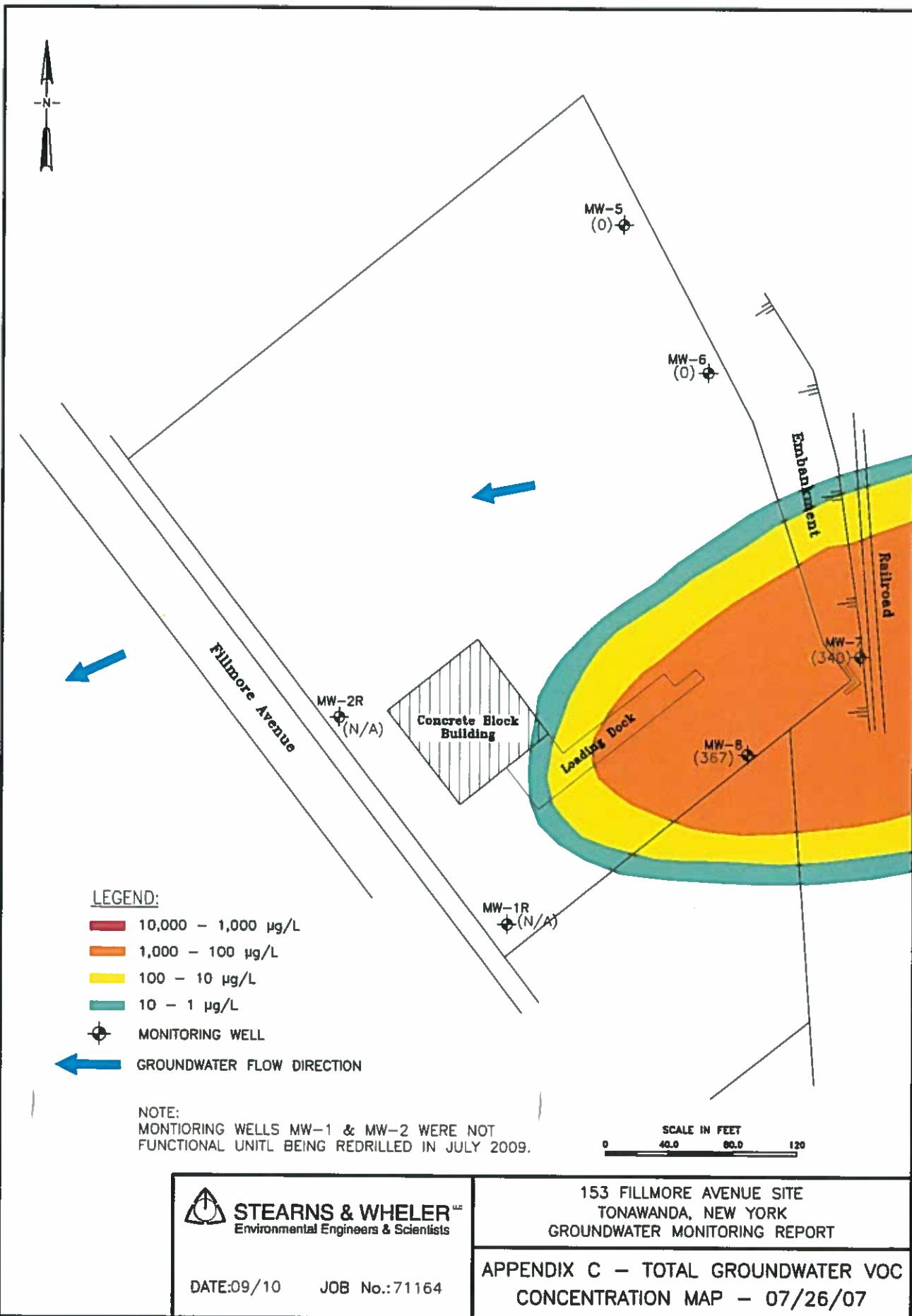
7/24/15 0900

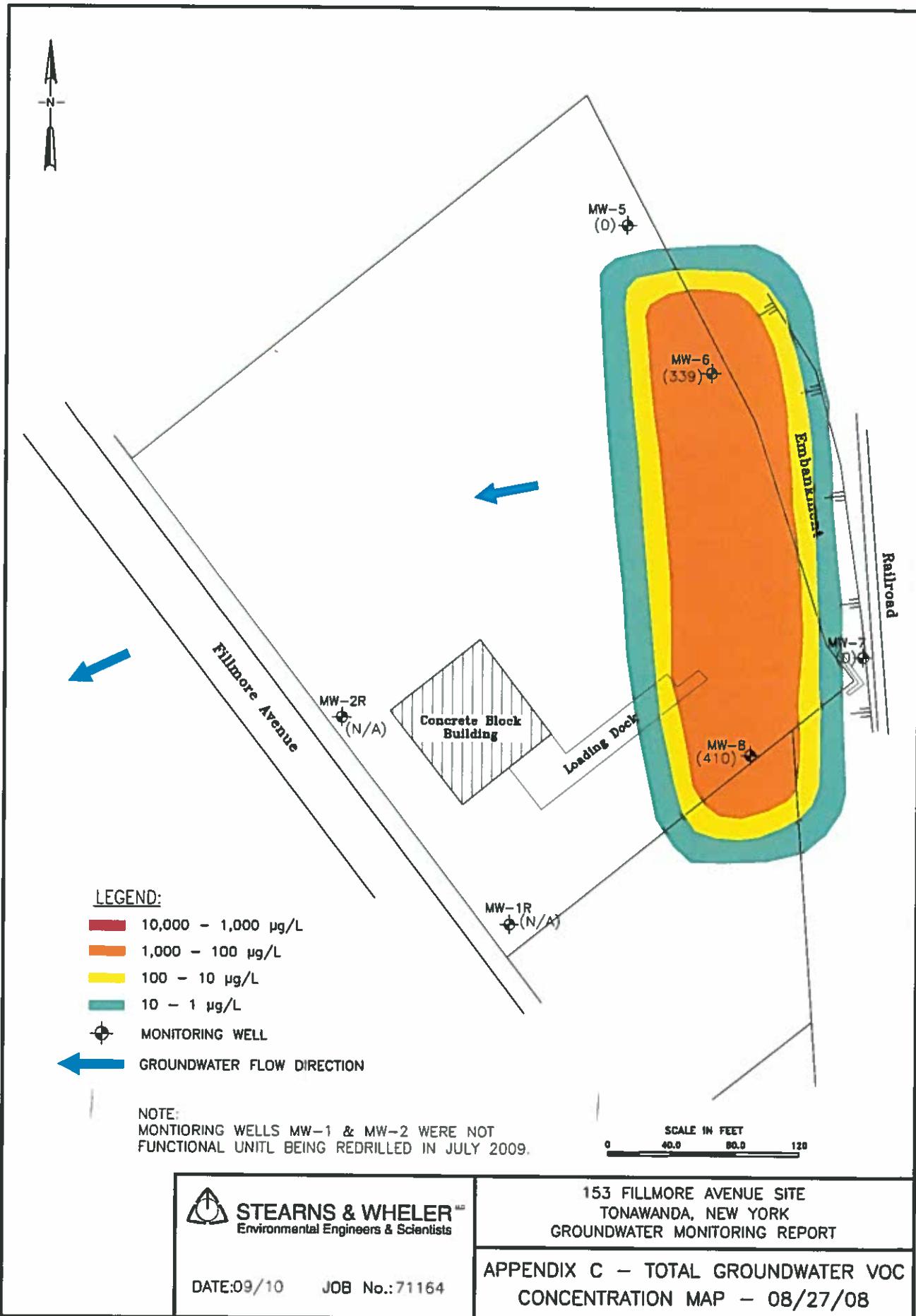
APPENDIX C

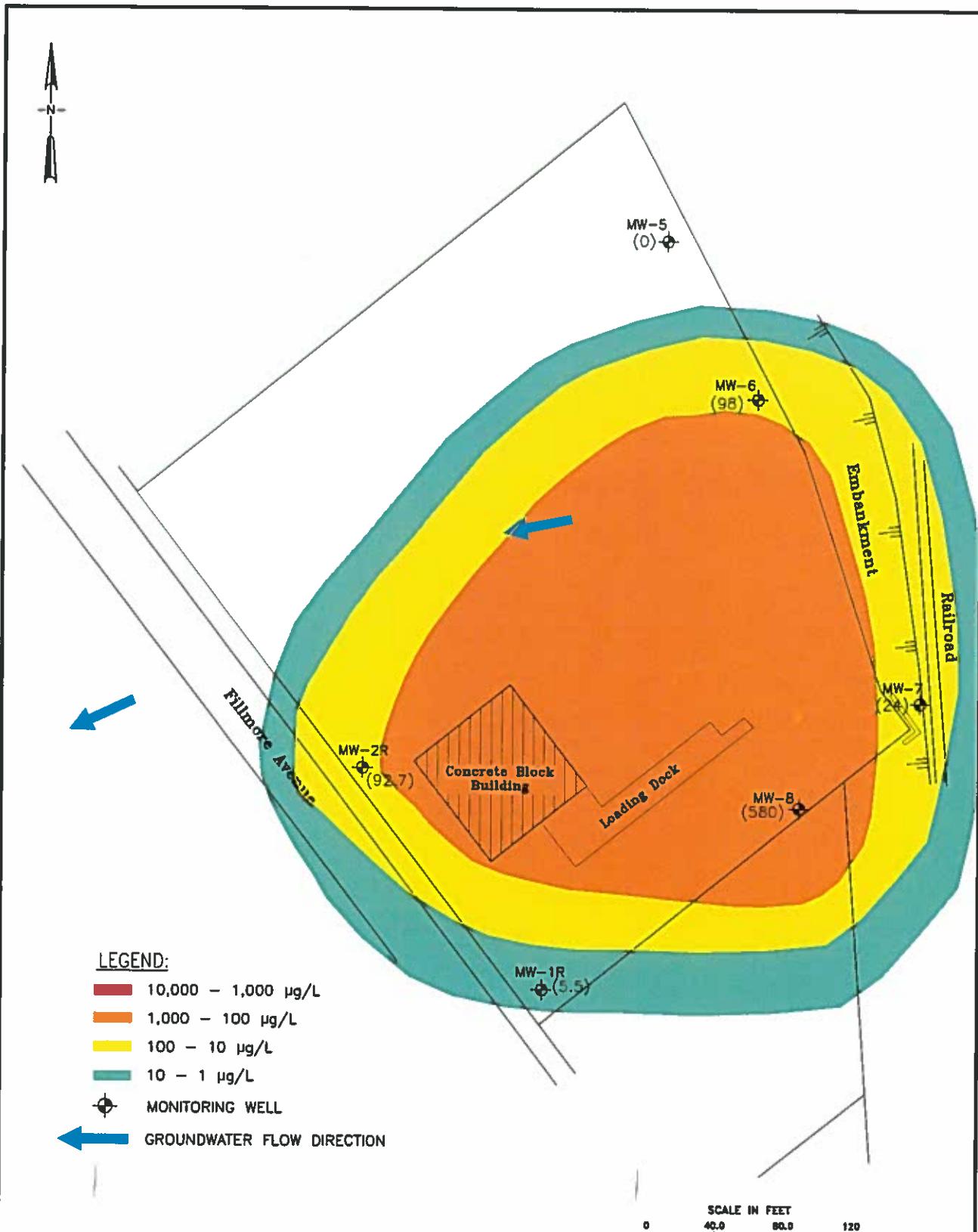
HISTORICAL GROUNDWATER TOTAL VOC CONCENTRATION FIGURES









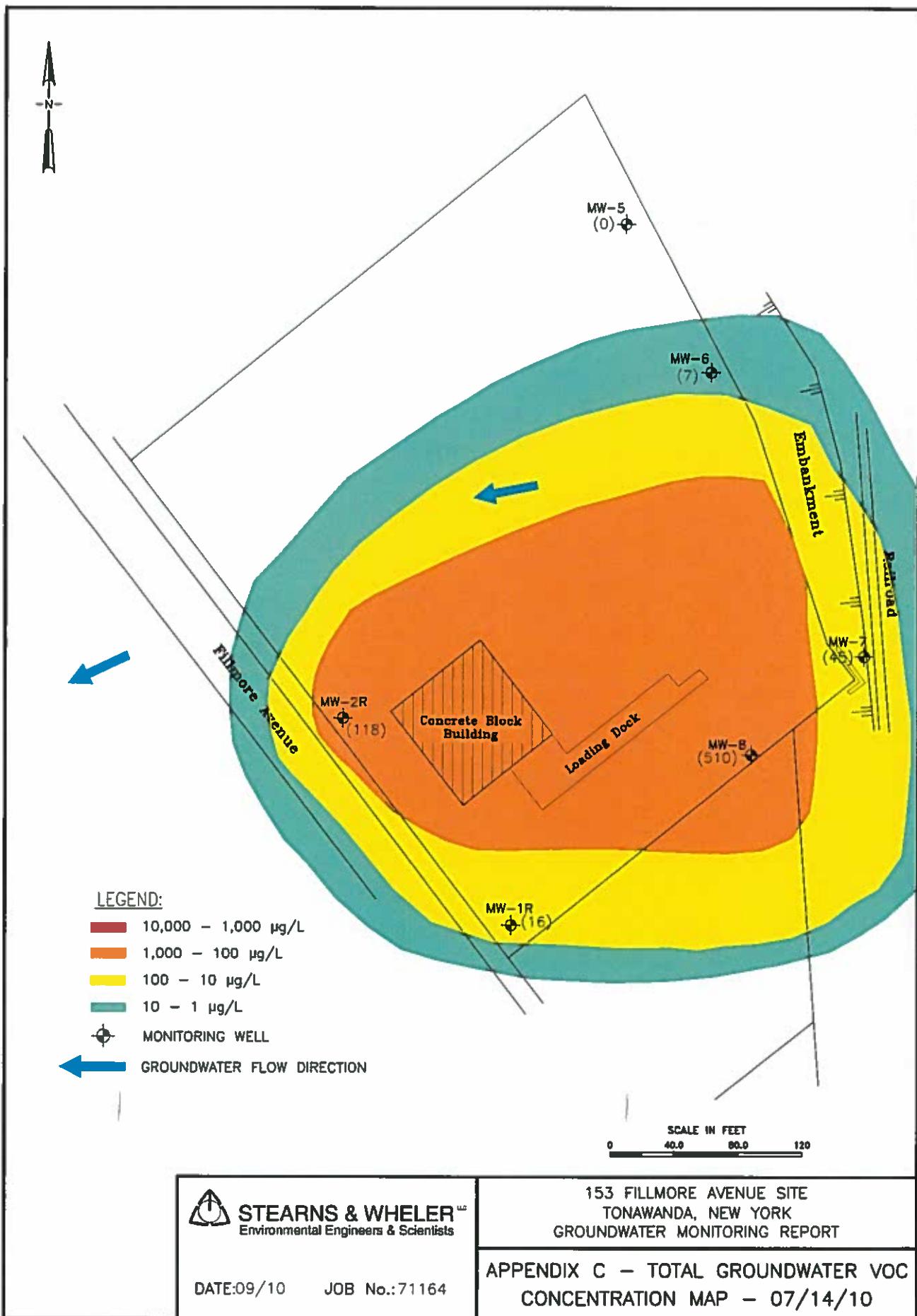


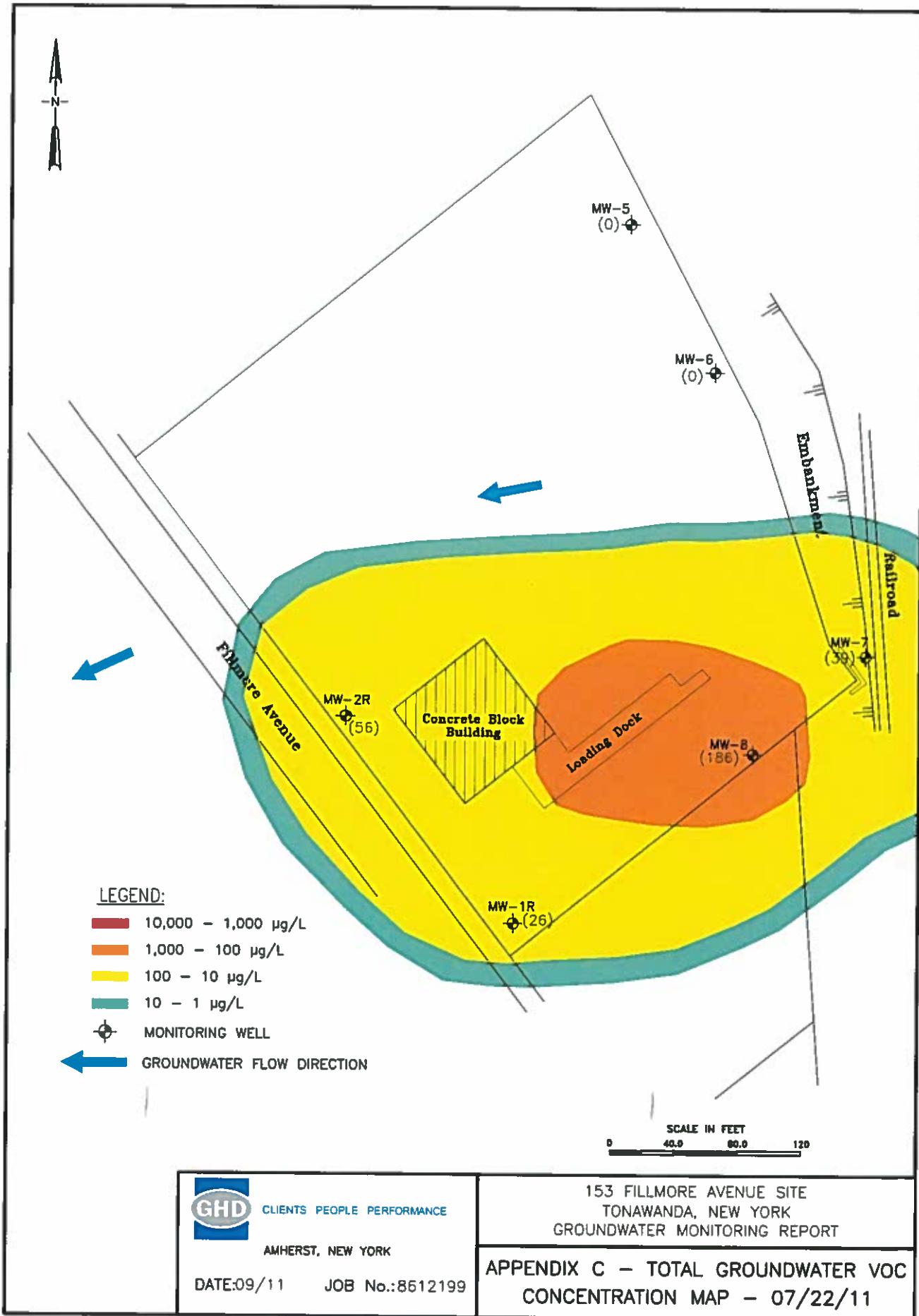
STEARNS & WHEELER
Environmental Engineers & Scientists

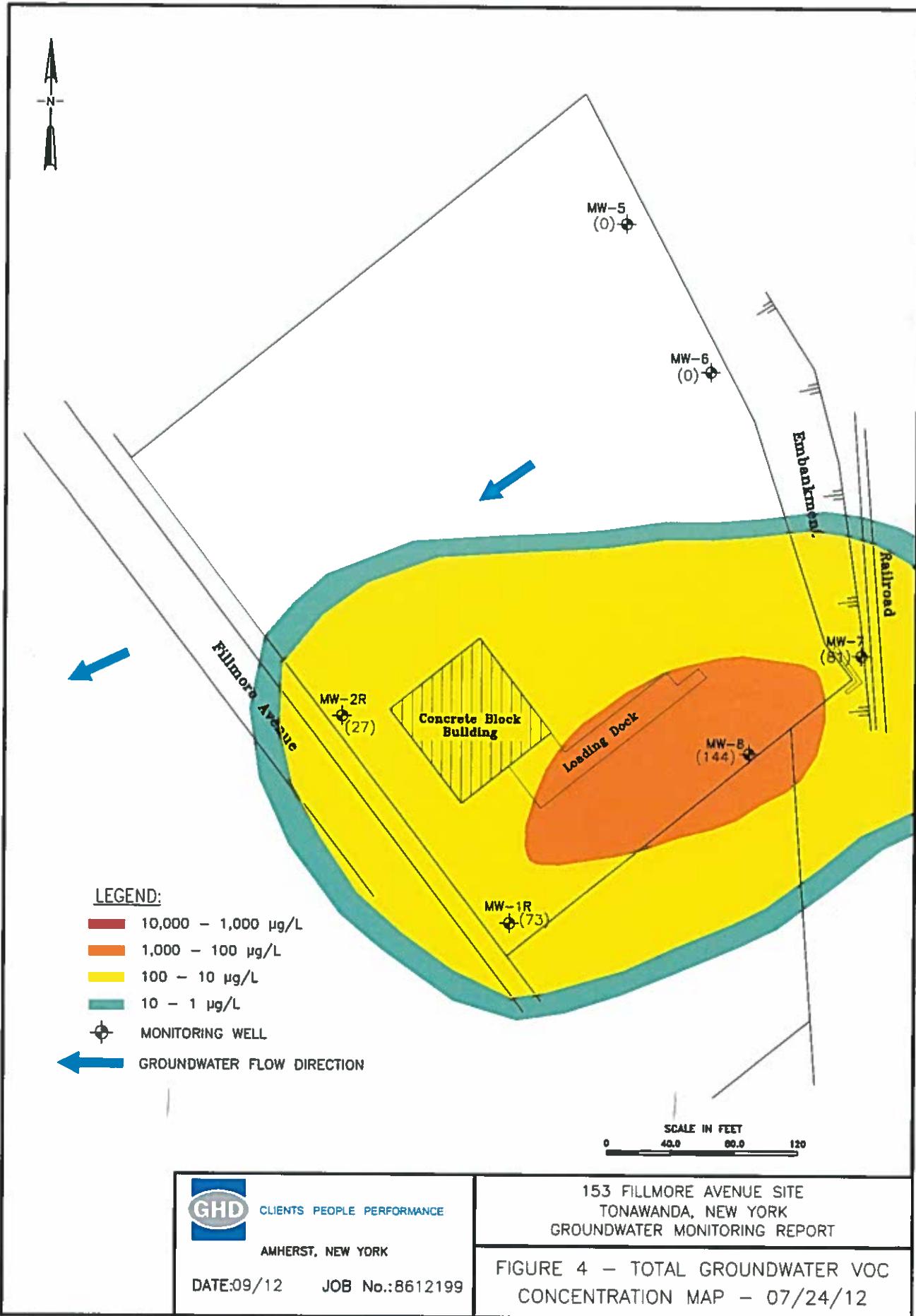
DATE: 09/10 JOB No.: 71164

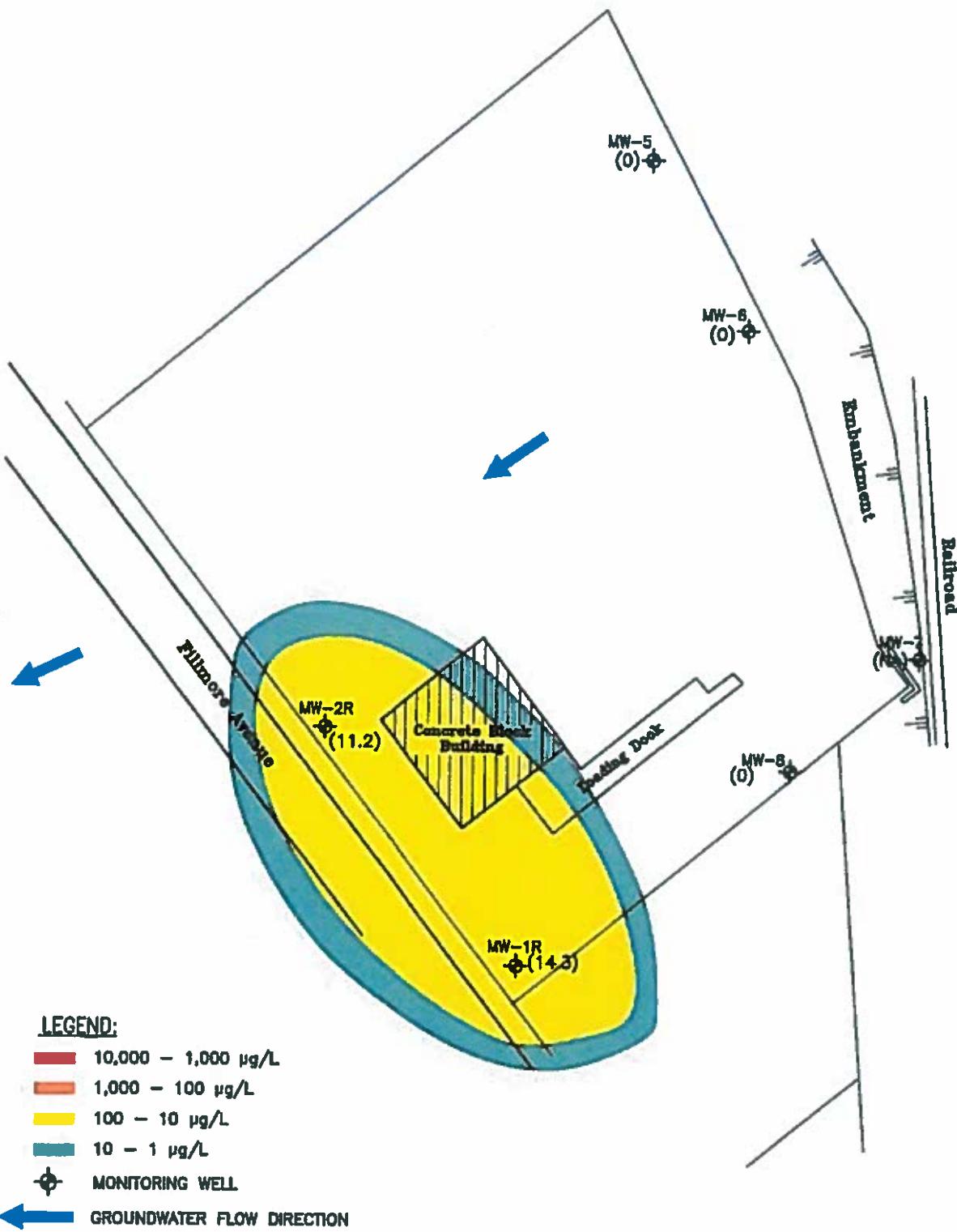
153 FILLMORE AVENUE SITE
TONAWANDA, NEW YORK
GROUNDWATER MONITORING REPORT

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



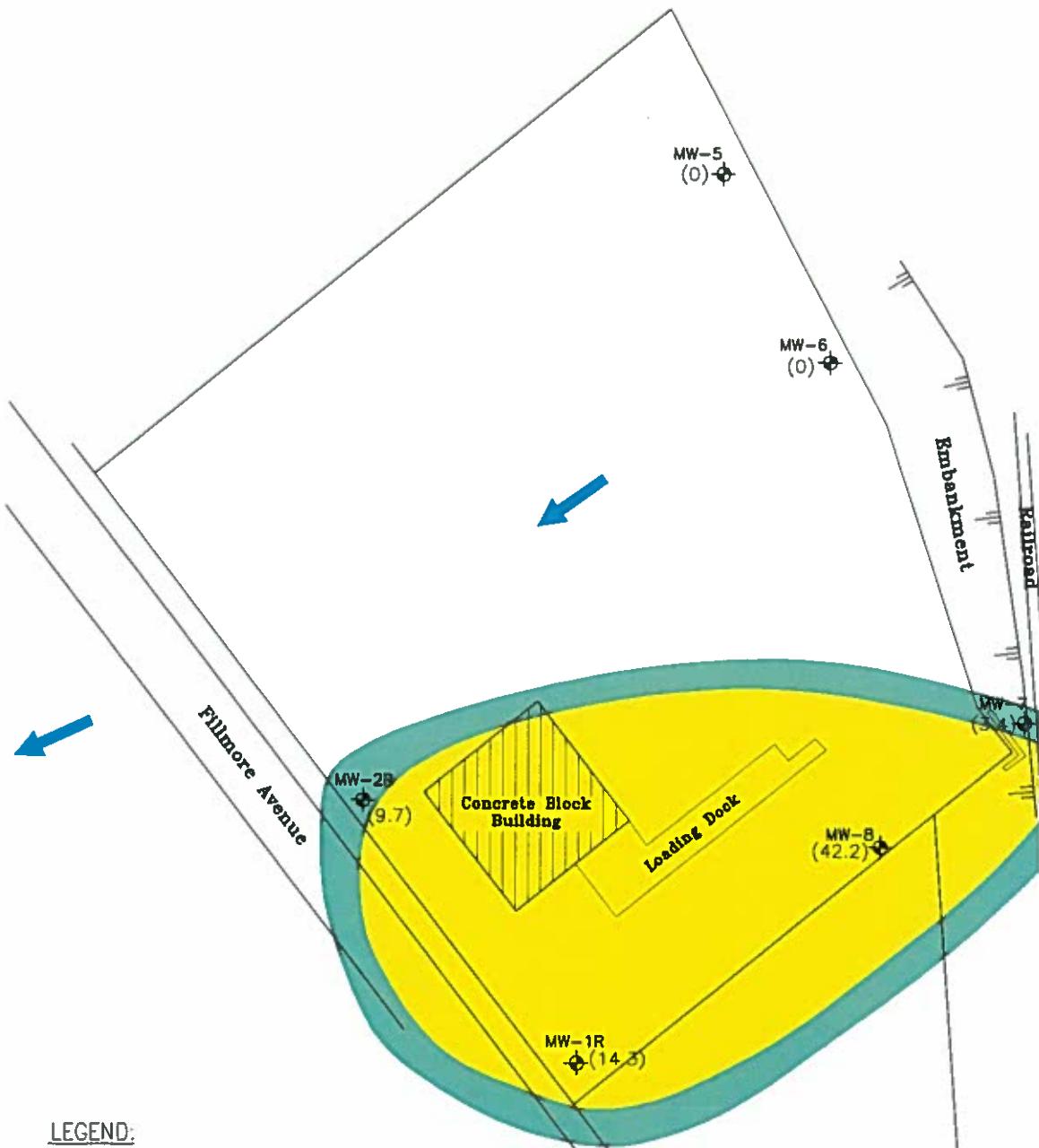






153 FILLMORE AVENUE SITE
TONAWANDA, NEW YORK
GROUNDWATER MONITORING REPORT
TOTAL GROUNDWATER VOC
CONCENTRATION MAP - 07/24/13

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



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



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

Job Number 85-12199
Revision A
Date 09 14

Figure 04

APPENDIX D

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#L778802

October 15, 2015

Reissue: October 30, 2015

Sampling date: 07/23/15

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

153 Fillmore Ave.

SDG#L778802

DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package for GHD, project located in the 153 Fillmore Ave., SDG#L778802, ESC Laboratory Sciences, submitted to Vali-Data of WNY, LLC on September 30, 2015 and the reissued report submitted on November 20, 2015. This DUSR has been prepared in general compliance with NYSDEC Analytical Services Protocol and USEPA National Functional Guidelines. The laboratory performed the analyses using USEPA methods, 8260B (Volatile Organics), 8270D (Semi-Volatile Organics), 6010C/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 Method Blanks, Laboratory Control Samples, Compound Quantitation 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.

There was no raw data recorded for some target analytes at the .25ppb level in the initial calibration performed on 6/19 due to limit settings. Those points were valid and used in the calculation of the RRF values. No further action is required.

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 except Methylene Chloride detected above the MDL, below the reporting limit in BLANK WG805793 and should be qualified as estimated. Associated samples in which this target analyte was detected above the MDL and below the reporting limit should be reported with the reporting limit and 'undetected'. Associated samples in which this target analyte was detected above the reporting limit should be qualified as estimated high.

FIELD DUPLICATE SAMPLE PRECISION

All criteria were met except Cyclohexane was detected above the MDL, below the reporting limit in MW-8 but not in MW-8DUP.

LABORATORY CONTROL SAMPLES

All criteria were met except the %Rec of Bromoform was outside QC limits high in WG804784LCS/SD and thus qualified as estimated. Bromoform was not detected in the samples, so no further action is required.

MS/MSD

All criteria were met.

COMPOUND QUANTITATION

All criteria were met except cis-1,2-Dichloroethene in MW-7 and trans-1,2-Dichloroethene in MW-8DUP were detected above the MDL, below the reporting limit and should be qualified as estimated.

INITIAL CALIBRATION

All criteria were met except the RRF of Trichloroethene was outside QC limits in the initial calibration performed on 7/1/15. ASP allows for up to two target analytes to be outside QC limits without further action.

CONTINUING CALIBRATION

All criteria were met except the %D of Bromoform was outside QC limits in continuing calibration file #0725_32.D. Bromoform should be qualified as estimated in the associated samples, blanks and spikes.

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 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.

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

This analysis was not performed on the field duplicate.

LABORATORY CONTROL SAMPLES

All criteria were met.

MS/MSD

All criteria were met.

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 0728_02.D, was outside ASP outer QC limits and should be qualified as estimated in all 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, MS/MSD, 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 further action is required.

CHAIN OF CUSTODY AND TRAFFIC REPORTS

All criteria were met.

HOLDING TIMES

All criteria were met.

BLANKS

All criteria were met except Al and K were detected above the MDL, below the reporting limit in Blank WG805260 and should be recorded as estimated. Associated samples in which these target analytes were detected above the MDL and below the reporting limit should be reported with the reporting limit and 'undetected'. Associated samples in which these target analytes were detected above the reporting limit should be qualified as estimated high.

Zn was detected above the reporting limit in CCB1935 run on 7/29/15. Al was detected above the reporting limit in CCB1159 run on 7/30/15. Sb was detected above the reporting limit in CCB2141 run on 7/31/15. Detects of these target analytes in the samples at or below the reporting limit should be recorded as undetected at the reporting limit. Detects of these target analytes in the samples between the reporting limit and the blank concentration should be qualified as undetected at the blank concentration. Detects of these target analytes in the samples above the blank concentration, should be qualified as estimated.

LABORATORY CONTROL SAMPLE

All criteria were met.

MS/MSD

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

FIELD DUPLICATE

These analyses were not performed on the field duplicate.

SERIAL DILUTION

All criteria were met except the %RPD of Mn was outside QC limits in MW-2SD. This target analyte should be qualified as estimated in MW-2, MW-2MS/MSD.

COMPOUND QUANTITATION

All criteria were met.

CALIBRATION

All criteria were met except the %Rec of Al was outside ASP QC limits, high in CCVLL1212 run on 7/30/15 and should be qualified as estimated high if detected in the samples, blanks and spikes.

The %Rec of Se was outside ASP QC limits, low in ICVLL0757 run on 7/29/15 and should be qualified as estimated in associated samples, blanks and spikes. The %Rec of Cd, K, Na, Se and V was outside ASP QC limits, low in CCVLL2212 run on 7/29/15 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

153 Fillmore Ave.
SDG#L778802

- Laboratory Control Samples
- MS/MSD
- 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.

FIELD DUPLICATE

This analysis was not performed on the field duplicate.

COMPOUND QUANTITATION

All criteria were met.

CALIBRATION

All criteria were met.

APPENDIX E

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		
Metals							
Arsenic	7440-38-2	16 ^f	16 ^f	16 ^f	16 ^f	13 ^f	16 ^f
Barium	7440-39-3	350 ^f	400	400	10,000 ^d	433	820
Beryllium	7440-41-7	14	72	590	2,700	10	47
Cadmium	7440-43-9	2.5 ^f	4.3	9.3	60	4	7.5
Chromium, hexavalent ^h	18540-29-9	22	110	400	800	1 ^e	19
Chromium, trivalent ^h	16065-83-1	36	180	1,500	6,800	41	NS
Copper	7440-50-8	270	270	270	10,000 ^d	50	1,720
Total Cyanide ^h		27	27	27	10,000 ^d	NS	40
Lead	7439-92-1	400	400	1,000	3,900	63 ^f	450
Manganese	7439-96-5	2,000 ^f	2,000 ^f	10,000 ^d	10,000 ^d	1600 ^f	2,000 ^f
Total Mercury		0.81 ^j	0.81 ^j	2.8 ^j	5.7 ⁱ	0.18 ^f	0.73
Nickel	7440-02-0	140	310	310	10,000 ^d	30	130
Selenium	7782-49-2	36	180	1,500	6,800	3.9 ^f	4 ^f
Silver	7440-22-4	36	180	1,500	6,800	2	8.3
Zinc	7440-66-6	2200	10,000 ^d	10,000 ^d	10,000 ^d	109 ^f	2,480
PCBs/Pesticides							
2,4,5-TP Acid (Silvex)	93-72-1	58	100 ^a	500 ^b	1,000 ^c	NS	3.8
4,4'-DDE	72-55-9	1.8	8.9	62	120	0.0033 ^c	17
4,4'-DDT	50-29-3	1.7	7.9	47	94	0.0033 ^c	136
4,4'-DDD	72-54-8	2.6	13	92	180	0.0033 ^c	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 ^g	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		
delta-BHC	319-86-8	100 ^a	100 ^a	500 ^b	1,000 ^c	0.04 ^g	0.25
Dibenzofuran	132-64-9	14	59	350	1,000 ^c	NS	210
Dieldrin	60-57-1	0.039	0.2	1.4	2.8	0.006	0.1
Endosulfan I	959-98-8	4.8 ⁱ	24 ⁱ	200 ⁱ	920 ⁱ	NS	102
Endosulfan II	33213-65-9	4.8 ⁱ	24 ⁱ	200 ⁱ	920 ⁱ	NS	102
Endosulfan sulfate	1031-07-8	4.8 ⁱ	24 ⁱ	200 ⁱ	920 ⁱ	NS	1,000 ^c
Endrin	72-20-8	2.2	11	89	410	0.014	0.06
Heptachlor	76-44-8	0.42	2.1	15	29	0.14	0.38
Lindane	58-89-9	0.28	1.3	9.2	23	6	0.1
Polychlorinated biphenyls	1336-36-3	1	1	1	25	1	3.2
Semivolatiles							
Acenaphthene	83-32-9	100 ^a	100 ^a	500 ^b	1,000 ^c	20	98
Acenaphthylene	208-96-8	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	107
Anthracene	120-12-7	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	1,000 ^c
Benz(a)anthracene	56-55-3	1 ^f	1 ^f	5.6	11	NS	1 ^f
Benzo(a)pyrene	50-32-8	1 ^f	1 ^f	1 ^f	1.1	2.6	22
Benzo(b)fluoranthene	205-99-2	1 ^f	1 ^f	5.6	11	NS	1.7
Benzo(g,h,i)perylene	191-24-2	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	1,000 ^c
Benzo(k)fluoranthene	207-08-9	1	3.9	56	110	NS	1.7
Chrysene	218-01-9	1 ^f	3.9	56	110	NS	1 ^f
Dibenz(a,h)anthracene	53-70-3	0.33 ^e	0.33 ^e	0.56	1.1	NS	1,000 ^c
Fluoranthene	206-44-0	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	1,000 ^c
Fluorene	86-73-7	100 ^a	100 ^a	500 ^b	1,000 ^c	30	386
Indeno(1,2,3-cd)pyrene	193-39-5	0.5 ^f	0.5 ^f	5.6	11	NS	8.2
m-Cresol	108-39-4	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	0.33 ^e
Naphthalene	91-20-3	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	12

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 ^a	100 ^a	500 ^b	1,000 ^c	NS	0.33 ^c
p-Cresol	106-44-5	34	100 ^a	500 ^b	1,000 ^c	NS	0.33 ^c
Pentachlorophenol	87-86-5	2.4	6.7	6.7	55	0.8 ^c	0.8 ^c
Phenanthrene	85-01-8	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	1,000 ^c
Phenol	108-95-2	100 ^a	100 ^a	500 ^b	1,000 ^c	30	0.33 ^c
Pyrene	129-00-0	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	1,000 ^c
Volatiles							
1,1,1-Trichloroethane	71-55-6	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	0.68
1,1-Dichloroethane	75-34-3	19	26	240	480	NS	0.27
1,1-Dichloroethene	75-35-4	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	0.33
1,2-Dichlorobenzene	95-50-1	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	1.1
1,2-Dichloroethane	107-06-2	2.3	3.1	30	60	10	0.02 ^f
cis-1,2-Dichloroethene	156-59-2	59	100 ^a	500 ^b	1,000 ^c	NS	0.25
trans-1,2-Dichloroethene	156-60-5	100 ^a	100 ^a	500 ^b	1,000 ^c	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 ^e	0.1 ^e
Acetone	67-64-1	100 ^a	100 ^b	500 ^b	1,000 ^c	2.2	0.05
Benzene	71-43-2	2.9	4.8	44	89	70	0.06
Butylbenzene	104-51-8	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	12
Carbon tetrachloride	56-23-5	1.4	2.4	22	44	NS	0.76
Chlorobenzene	108-90-7	100 ^a	100 ^a	500 ^b	1,000 ^c	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 ^c	1.2	6	12	NS	3.2
Methyl ethyl ketone	78-93-3	100 ^a	100 ^a	500 ^b	1,000 ^c	100 ^a	0.12

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		
Methyl tert-butyl ether	1634-04-4	62	100 ^a	500 ^b	1,000 ^c	NS	0.93
Methylene chloride	75-09-2	51	100 ^a	500 ^b	1,000 ^c	12	0.05
n-Propylbenzene	103-65-1	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	3.9
sec-Butylbenzene	135-98-8	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	11
tert-Butylbenzene	98-06-6	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	5.9
Tetrachloroethene	127-18-4	5.5	19	150	300	2	1.3
Toluene	108-88-3	100 ^a	100 ^a	500 ^b	1,000 ^c	36	0.7
Trichloroethene	79-01-6	10	21	200	400	2	0.47
1,2,4-Trimethylbenzene	95-63-6	47	52	190	380	NS	3.6
1,3,5- Trimethylbenzene	108-67-8	47	52	190	380	NS	8.4
Vinyl chloride	75-01-4	0.21	0.9	13	27	NS	0.02
Xylene (mixed)	1330-20-7	100 ^a	100 ^a	500 ^b	1,000 ^c	0.26	1.6

All soil cleanup objectives (SCOs) are in parts per million (ppm).

NS=Not specified. See Technical Support Document (TSD).

Footnotes

^a The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.

^b The SCOs for commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.

^c The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.

^d The SCOs for metals were capped at a maximum value of 10,000 ppm. See TSD section 9.3.

^e For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the SCO value.

^f For constituents where the calculated SCO was lower than the rural soil background concentration as determined by the Department and Department of Health rural soil survey, the rural soil background concentration is used as the Track 2 SCO value for this use of the site.

^g This SCO is derived from data on mixed isomers of BHC.

^h The SCO for this specific compound (or family of compounds) is considered to be met if the analysis for the total species of this contaminant is below the specific SCO.

ⁱ This SCO is for the sum of endosulfan I, endosulfan II, and endosulfan sulfate.

^j This SCO is the lower of the values for mercury (elemental) or mercury (inorganic salts). See TSD Table 5.6-1.