2016 Periodic Review Report
Groundwater Monitoring and Sampling Results
153 Fillmore Avenue Site
City of Tonawanda

December 2016

2016 PERIODIC REVIEW REPORT
GROUNDWATER MONITORING AND SAMPLING RESULTS

153 FILLMORE AVENUE SITE
CITY OF TONAWANDA

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SECTION 1 - SITE BACKGROUND

1.1 Site Location

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

1.2 Site History

City directories for the period between 1946 to 1957, list Tonawanda Roofing and Paint Company at 141 Fillmore Avenue (adjacent property immediately north of site) and National Manufacturing Corporation at 153 Fillmore under Roofing Materials and Supplies. This is consistent with reports from local workers in the area that roofing materials were produced at the National Manufacturing site and installed by Tonawanda Roofing and Paint. This is further supported by the presence of four large 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 2016 monitoring program at the 153 Fillmore Avenue Site in the City of Tonawanda consisted of one annual sampling event completed on July 28, 2016. 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 and 0.25 gallons was removed before the well went dry. 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. In accordance with the Site Management Plan prepared by NYSDEC in 2009, quality control samples including a trip blank and a field duplicate were collected during the sampling event. A matrix spike (MS) and matrix spike duplicate (MSD) were collected and a Data Usability Summary Report (DUSR) was prepared for previous sampling events. After further review of the Site Management Plan and discussions with the NYSDEC it was determined that the MS/MSD samples and a DUSR are not required.

Samples were delivered under a chain of custody to TestAmerica Laboratories, Inc. for analysis of TCL VOCs by USEPA Method 8260 and Target Analyte List (TAL) Metals by USEPA Method 200.7, with mercury analyzed under USEPA Method 245.2 with results reported using ASP Category A. Historically, the presence of Target Compound List (TCL) VOCs at monitoring well MW-5 has been not been detected. Therefore, the NYSDEC stated it was unnecessary to test for TCL VOCs at monitoring well MW-5. SVOCs were analyzed for during previous sampling events. After further review of the Site Management Plan and discussions with the NYSDEC it was determined that analyzing for SVOCs is not required.

SECTION 3 - GROUNDWATER MONITORING RESULTS

This section includes the results of the 2016 annual groundwater sampling event. Included are descriptions of site-specific hydrogeology, the identification and distribution of constitutes 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 28, 2016. 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 2016 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 2016 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 2015 test results. Volatile organic analytical test results are presented in Table 3.

Exceeding Groundwater Standards: The volatile organic analytical test results detected concentrations of vinyl chloride (MW-2 and MW-8) and benzene (MW-2 and MW-8) exceeding groundwater quality standards.

Vinyl chloride:

- The concentration of vinyl chloride deceased in groundwater sampled from monitoring well MW-1, which was below the groundwater quality standard.
- The concentration of vinyl chloride increased in groundwater sampled from monitoring well MW-2, which exceeded the groundwater quality standard.
- The concentration of vinyl chloride decreased to non-detectable results in groundwater sampled from monitoring wells MW-6 and MW-7
- The concentration of vinyl chloride decreased in groundwater sampled from monitoring well MW-8, but exceeded the groundwater quality standard.

Trans-1,2-dichloroethene:

- The concentration of trans-1,2-dichloroethene remained the same in groundwater sampled from monitoring well MW-8, which was below the groundwater quality standard.

Cis-1,2-dichloroethene:

- The concentration of cis-1,2-dichloroethene decreased in groundwater sampled from monitoring wells MW-1 and MW-8, which was below the groundwater quality standard.

- The concentration of cis-1,2-dichloroethene increased in groundwater sampled from monitoring well MW-2, which was below the groundwater quality standard.

Benzene:

- The concentration of benzene decreased in groundwater sampled from monitoring well MW-2, which exceeded the groundwater quality standard.

- The concentration of benzene remained the same in groundwater sampled from monitoring well MW-8, which exceeded the groundwater quality standard.

Methylene Chloride:

- The concentration of methylene chloride increased in groundwater sampled from monitoring well MW-7, was below the groundwater quality standard.

Acetone:

- The concentration of acetone increased in groundwater sampled from monitoring well MW-7, which was below the groundwater quality standard.

Methylcyclohexane:

- The concentration of methylcyclohexane increased in groundwater sampled from monitoring well MW-1.

Cyclohexane:

- The concentration of cyclohexane decreased to non-detectable results in groundwater sampled from monitoring well MW-8.

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 µg/l
- 2010 - 16.0 µg/l
- 2011 - 26.0 µg/l
- 2012 - 73.3 µg/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 µg/l
- 2010 - 16.0 µg/l
- 2011 - 26.0 µg/l
- 2012 - 73.3 µg/l
- 2013 - 14.3 µg/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 µg/l
- 2010 - 16.0 µg/l
- 2011 - 26.0 µg/l
- 2012 - 73.3 µg/l
- 2013 - 14.3 µg/l
- 2014 - 14.8 µg/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 µg/l
- 2010 - 134.0 µg/l
- 2011 - 82.0 µg/l
- 2012 - 99.9 µg/l
- 2013 - 25.8 µg/l
- 2014 - 26.9 µg/l
- 2015 - 21.9 µg/l

2016 Reporting - The total VOC plume decreased in size and increased 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 2016, 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 µg/l
- 2010 - 134.0 µg/l
- 2011 - 82.0 µg/l
- 2012 - 99.9 µg/l

- 2013 - 25.8 µg/l
- 2014 - 26.9 µg/l
- 2015 - 21.9 µg/l
- 2015 - 26.0 µg/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 wells MW-2 and MW-8 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 µg/l to 77.2 µg/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 77.2 µg/l to 68.8 µg/l as reported in 2015.
- **2016** - Total VOC concentrations in monitoring wells MW-1, MW-2, MW-7 and MW-8 increased from in 2015 68.8 µg/l to 106.6 µg/l as reported in 2016.

3.2.2 Semi-Volatile Organic Analytical Test Results

Semi-volatile organic compounds were not analyzed for in 2016, per the SMP and correspondence with NYSDEC. Historical SVOC test results are presented in Appendix D.

3.2.3 Inorganic Metals Analytical Test Results

Detected concentrations of inorganic metals in groundwater sampled in 2016 that exceeded groundwater quality standards and increased in concentrations when compared with 2015 analytical test results include the following: aluminum (MW-1, MW-2, MW-7), arsenic (MW-1 and MW-2); barium (MW-2); beryllium (MW-1, MW-2); cadmium (MW-1, MW-7); chromium (MW-1, MW-2); iron (MW-1, MW-2, MW-5, MW-7, MW-8); lead (MW-1, MW-2, MW-7); magnesium (MW-1, MW-2); manganese (MW-1, MW-2, MW-7); mercury (MW-2); nickel (MW-2); selenium (MW-1, MW-2); and zinc (MW-7) exceeding groundwater quality standards as presented in Table 4.

Aluminum:

- The concentration of aluminum increased in groundwater sampled from monitoring wells MW-1, MW-2 and MW-7, which exceeded the groundwater quality standard.
- The concentration of aluminum increased in groundwater sampled from monitoring wells MW-6 and MW-8, which was below the groundwater quality standard.
- The concentration of aluminum decreased in groundwater sampled from monitoring well MW-5, which was below the groundwater quality standard.

Antimony:

- The concentration of antimony decreased in groundwater sampled from all monitoring wells to non-detectable results.

Arsenic:

- The concentration of arsenic increased in groundwater sampled from monitoring wells MW-1 and MW-2, which exceeded the groundwater quality standard.

- The concentration of arsenic decreased in groundwater sampled from monitoring wells MW-5, MW-6, MW-7 and MW-8 to non-detectable results.

Barium:

- The concentration of barium increased in groundwater sampled from monitoring well MW-2, which exceeded the groundwater quality standard.

- The concentration of barium increased in groundwater sampled from monitoring wells MW-1, MW-6 and MW-7, which was below the groundwater quality standard.

- The concentration of barium decreased in groundwater sampled from monitoring wells MW-5 and MW-8, which was below the groundwater quality standard.

Beryllium:

- The concentration of beryllium increased in groundwater sampled from monitoring wells MW-1 and MW-2, which exceeded the groundwater quality standard.

- The concentration of beryllium increased in groundwater sampled from monitoring well MW-7, which was below the groundwater quality standard.

- The concentration of beryllium in groundwater sampled from all other wells was non-detectable.

Cadmium:

- The concentration of cadmium increased in groundwater sampled from monitoring wells MW-1 and MW-7, which exceeded the groundwater quality standard.

- The concentration of cadmium increased in groundwater sampled from monitoring wells MW-2 and MW-6, which was below the groundwater quality standard.

- The concentration of cadmium in groundwater sampled from monitoring well MW-5 decreased to non-detectable.

- The concentration of cadmium in groundwater sampled from monitoring well MW-8 remained non-detectable.

Chromium:

- The concentration of chromium increased in groundwater sampled from monitoring wells MW-1 and MW-2, which exceeded the groundwater quality standard.

- The concentration of chromium increased in groundwater sampled from monitoring wells MW-5, MW-6 and MW-7, which was below the groundwater quality standard.

- The concentration of chromium in groundwater sampled from monitoring well MW-8 remained non-detectable.

Copper:

- The concentration of copper increased in groundwater sampled from monitoring wells MW-1, MW-2, MW-6 and MW-7, which was below the groundwater quality standard.
- The concentration of copper decreased in groundwater sampled from monitoring well MW-5, which was below the groundwater quality standard.
- The concentration of copper in groundwater sampled from monitoring well MW-8 remained non-detectable.

Iron:

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

Lead:

- The concentration of lead increased in groundwater sampled from monitoring wells MW-1, MW-2 and MW-7, which exceeded the groundwater quality standard.
- The concentration of lead increased in groundwater sampled from monitoring well MW-6, which was below the groundwater quality standard.
- The concentration of lead decreased in groundwater sampled from monitoring wells MW-5 and MW-8, which was below the groundwater quality standard.

Magnesium:

- The concentration of magnesium increased in groundwater sampled from monitoring wells MW-1 and MW-2, which exceeded the groundwater quality standard.
- The concentration of magnesium increased in groundwater sampled from monitoring wells MW-6 and MW-7, which was below the groundwater quality standard.
- The concentration of magnesium decreased in groundwater sampled from monitoring wells MW-5 and MW-8, which was below the groundwater quality standard.

Manganese:

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

Mercury:

- The concentration of mercury increased in groundwater sampled from monitoring well MW-2, which was below the groundwater quality standard.
- The concentration of mercury increased in groundwater sampled from monitoring wells MW-1, MW-6 and MW-7, which was below the groundwater quality standard.

- The concentration of mercury in groundwater sampled from monitoring wells MW-5 and MW-8 was non-detectable.

Nickel:

- The concentration of nickel increased in groundwater sampled from monitoring well MW-2, which exceed the groundwater quality standard.
- The concentration of nickel increased in groundwater sampled from monitoring wells MW-1, MW-6 and MW-7, which was below the groundwater quality standard.
- The concentration of nickel decreased in groundwater sampled from monitoring well MW-5, which was below the groundwater quality standard.
- The concentration of nickel in groundwater sampled from monitoring well MW-8 remained non-detectable.

Selenium:

- The concentration of selenium increased in groundwater sampled from monitoring wells MW-1 and MW-2, which was below the groundwater quality standard.
- The concentration of selenium in groundwater sampled from monitoring wells MW-5, MW-6, MW-7 and MW-8 remained non-detectable.

Silver:

- The concentration of silver increased in groundwater sampled from monitoring well MW-2, which was below the groundwater quality standard.
- The concentration of silver in groundwater sampled from monitoring wells MW-1, MW-5, MW-6, MW-7 and MW-8 remained non-detectable.

Thallium:

- The concentration of thallium decreased to non-detectable in groundwater sampled from monitoring wells MW-1, MW-2 and MW-7.
- The concentration of thallium in groundwater sampled from monitoring wells MW-5, MW-6, and MW-8 remained non-detectable.

Zinc:

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

Quality Assurance/Quality Control Analytical Results

Groundwater samples were analyzed for VOCs by USEPA SW-846 Method 8260, and TAL Metals at TestAmerica Laboratories, Inc in Amherst, New York. The quality control samples include a field duplicate, method blank and a laboratory control sample analysis.

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 VOCs and SVOCs. 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 VOCs 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 SMP.

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 2016 Site Usage

No excavation took place on-site in 2016.

SECTION 5 - CONCLUSIONS

1. The volatile organic analytical 2016 test results detected concentrations of vinyl chloride (MW-2, MW-7, and MW-8) and benzene (MW-2 and MW-8) that exceeded groundwater quality standards.

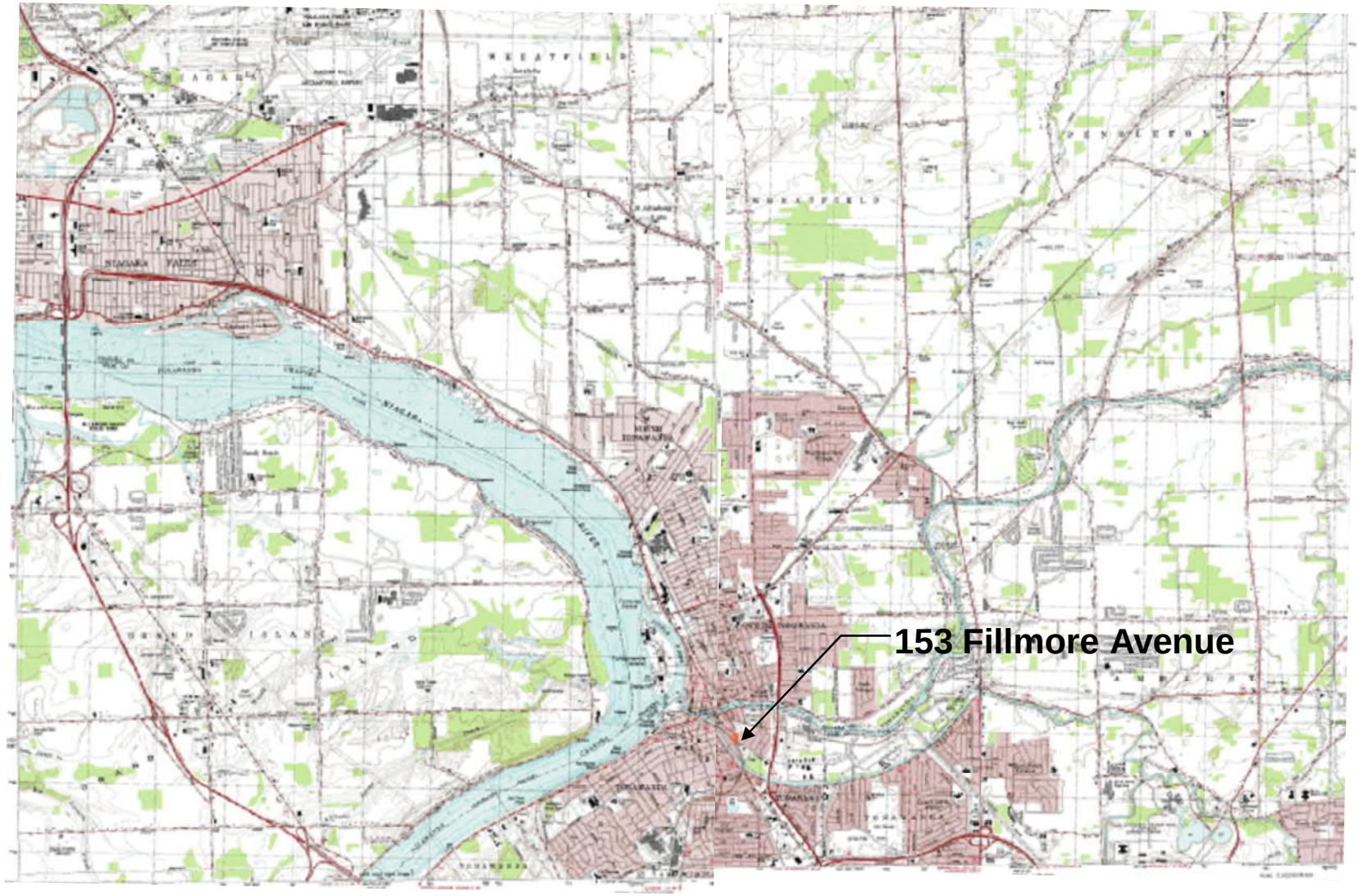
2. Detected concentrations of inorganic metals in groundwater sampled in 2016 that exceeded groundwater quality standards concentrations include the following: aluminum (MW-1, MW-2, MW-7), arsenic (MW-1 and MW-2); barium (MW-2); beryllium (MW-1, MW-2); cadmium (MW-1, MW-7); chromium (MW-1, MW-2); iron (MW-1, MW-2, MW-5, MW-6, MW-7, MW-8); lead (MW-1, MW-2, MW-7); magnesium (MW-1, MW-2); manganese (MW-1, MW-2, MW-6, MW-7, MW-8); mercury (MW-2); nickel (MW-2); selenium (MW-1, MW-2); and zinc (MW-7).

3. Based on 2016 analytical test results, the total VOC concentration plume appears to be migrating in a southwestward direction with groundwater flow. Total VOC concentrations increased in groundwater from monitoring wells MW-2 and MW-7. Total VOC concentrations decreased in groundwater from monitoring wells MW-1, MW-6 and MW-8.

4. Total VOC concentrations in all monitoring wells sampled and analyzed for increased from 68.8 µg/l in 2015 68.8 µg/l to 106.6 µg/l as reported in 2016.

5. Trend analysis of total VOC plume decreased in size and increased 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 2016, there is a trending decrease in total VOC concentrations from groundwater sampled from monitoring wells MW-1 and MW-2.

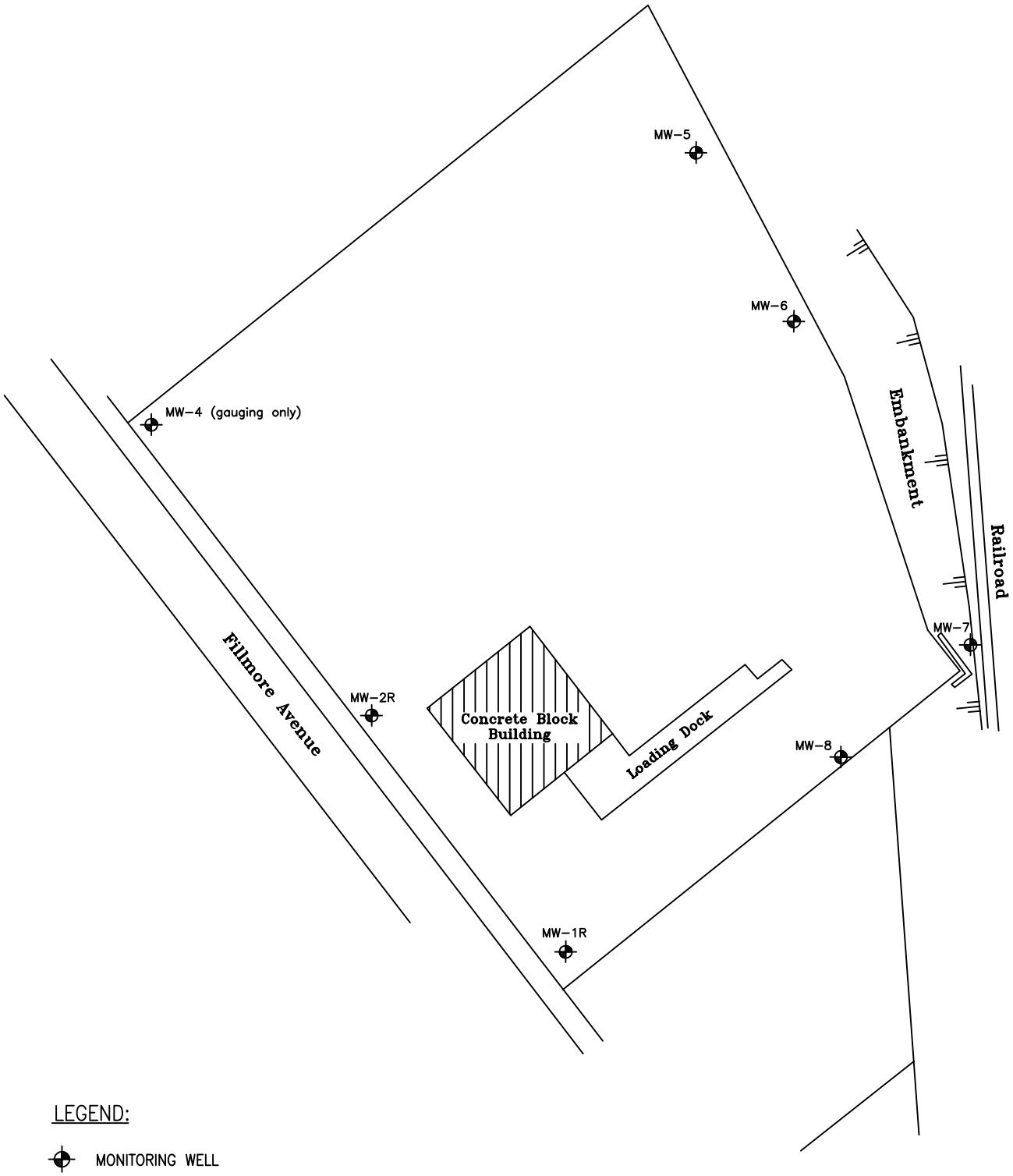
FIGURES



Scale 1:25,000

153 FILLMORE AVENUE
TONAWANDA, NEW YORK
GROUNDWATER MONITORING REPORT

FIGURE 1
SITE LOCATION MAP



LEGEND:

MONITORING WELL

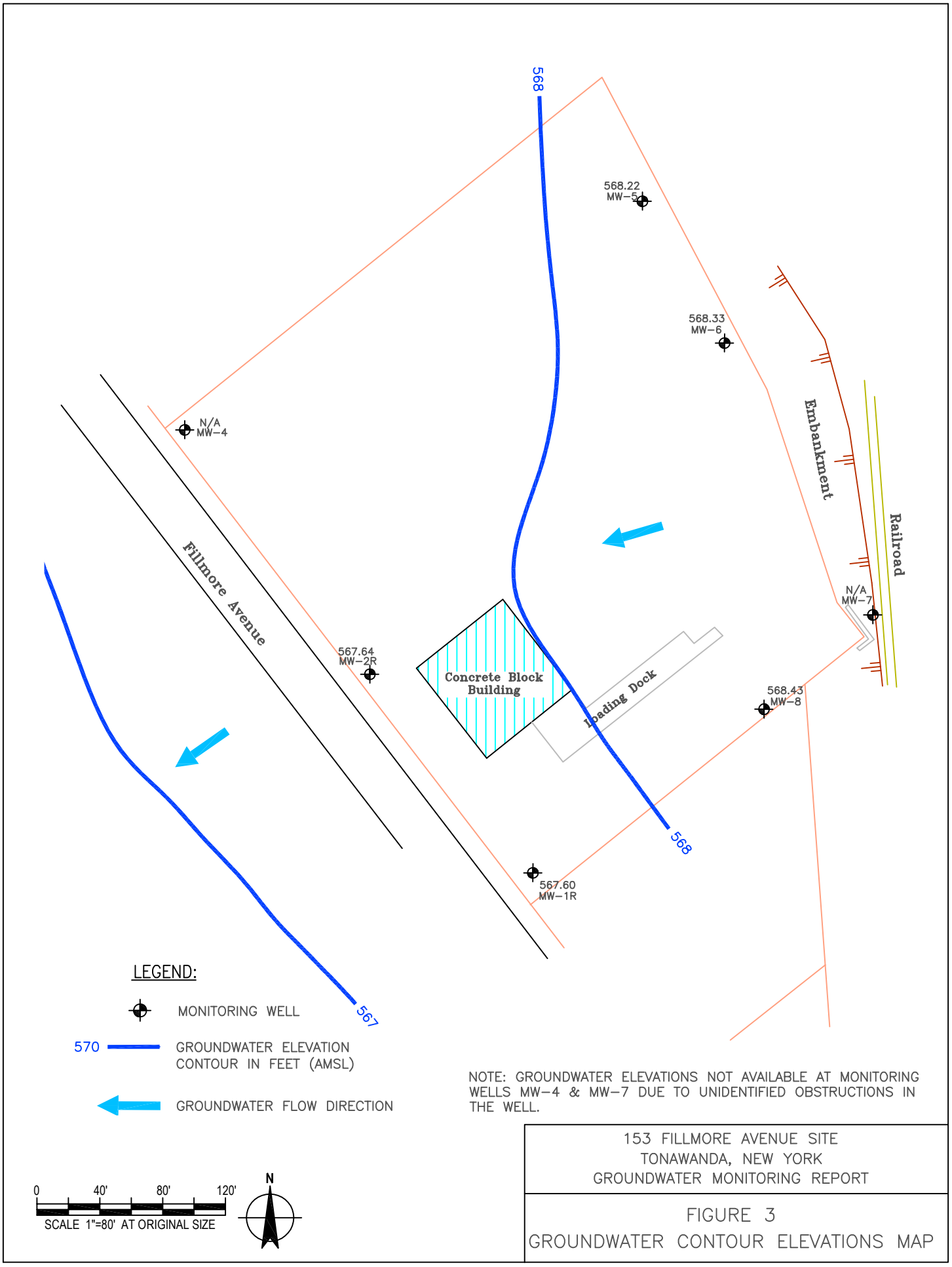
0 40' 80' 120'

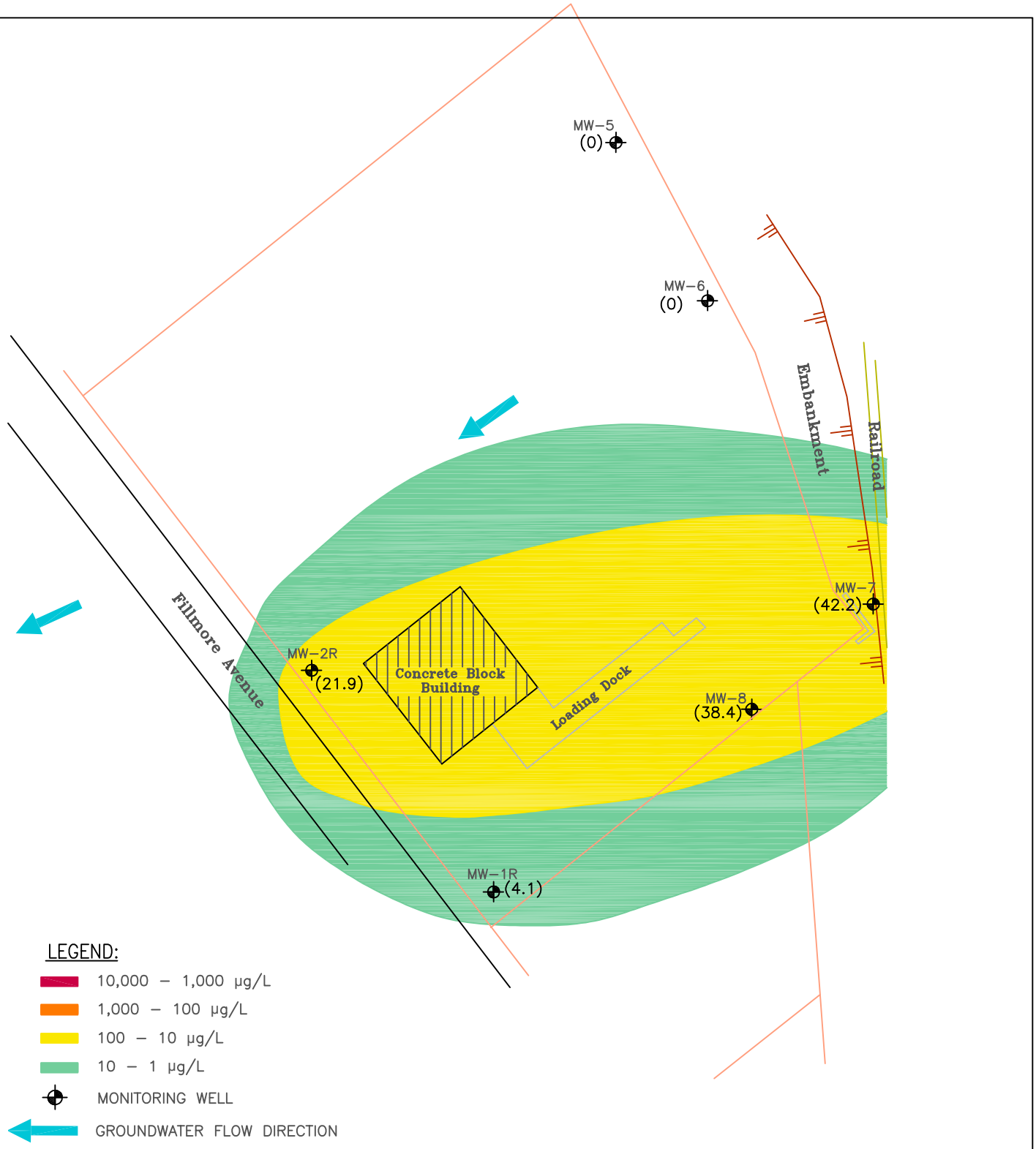
SCALE 1"=80' AT ORIGINAL SIZE

N

153 FILLMORE AVENUE SITE
TONAWANDA, NEW YORK
GROUNDWATER MONITORING REPORT

FIGURE 2
MONITORING WELL LOCATIONS


568
568.22
MW-5
568.33
MW-6
N/A
MW-4
Embankment
Railroad
Fillmore Avenue
N/A
MW-7
567.64
MW-2R
Concrete Block
Building
Loading Dock
568.43
MW-8
568
567.60
MW-1R
567
LEGEND:
MONITORING WELL
570
GROUNDWATER ELEVATION
CONTOUR IN FEET (AMSL)
GROUNDWATER FLOW DIRECTION
NOTE: GROUNDWATER ELEVATIONS NOT AVAILABLE AT MONITORING WELLS MW-4 & MW-7 DUE TO UNIDENTIFIED OBSTRUCTIONS IN THE WELL.
0
40'
80'
120'
SCALE 1"=80' AT ORIGINAL SIZE
N
153 FILLMORE AVENUE SITE
TONAWANDA, NEW YORK
GROUNDWATER MONITORING REPORT
FIGURE 3
GROUNDWATER CONTOUR ELEVATIONS MAP



153 FILLMORE AVENUE SITE
TONAWANDA, NEW YORK
GROUNDWATER MONITORING REPORT

FIGURE 4 – TOTAL GROUNDWATER VOC CONCENTRATION MAP – 07/28/16

TABLES

TABLE 1
153 Fillmore Avenue Site
City of Tonawanda

2016 Field Groundwater Parameters

Parameter	Monitoring Well Location					
	MW-1	**MW-2**	**MW-5**	**MW-6**	**MW-7**	**MW-8**
Temperature (°C)	23.63	19.15	22.18	19.73	NA	20.70
pH	7.70	7.24	7.45	7.56	NA	7.41
Conductivity (mS/cm)	0.439	0.744	0.762	0.643	NA	0.704
Dissolved Oxygen (mg/L)	8.33	13.44	7.65	6.82	NA	6.62
Turbidity (NTUs)[(1)]	NA	NA	22.9	325	NA	8
ORP (mV)	-70	-45	-45	-91	NA	-67

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

Property	Units	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14	07/23/15	07/28/16
Well Depth Top PVC	feet	13.8	13.8	13.8	13.8	13.8	13.8	13.8	13.8
Well Depth Elevation	feet	561.00	561.00	561.00	561.00	561.00	561.00	561.00	561.00
Depth to Static Water	feet	6.30	7.00	7.60	8.70	5.60	6.50	5.60	7.20
Height of Water	feet	7.50	6.80	6.20	5.10	8.20	7.30	8.20	6.60
Top PVC Elevation	feet	574.8	574.8	574.8	574.8	574.8	574.8	574.8	574.8
Static Water Level Elevation	feet	568.50	567.80	567.20	566.10	569.20	568.30	569.20	567.60
Well Casing Diameter	inch	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Water Volume	gallon	1.21	1.09	1.00	0.82	0.82	1.17	1.32	1.06
Water Purged	gallon	3.64	3.26	2.99	2.46	2.46	3.52	3.95	3.18
Purging Method	-	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer

TABLE 2B

Monitoring Well MW-2

Groundwater Monitoring Well Data

153 Fillmore Avenue Site

Property	Units	07/22/09	07/15/10	07/22/11	07/24/12	07/24/13	07/15/14	07/23/15	07/28/16
Well Depth Top PVC	feet	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
Well Depth Elevation	feet	561.69	561.69	561.69	561.69	561.69	561.69	561.69	561.69
Depth to Static Water	feet	5.90	6.30	6.40	7.70	4.10	5.90	5.55	7.55
Height of Water	feet	7.60	7.20	7.10	5.80	9.40	7.60	7.95	5.95
Top PVC Elevation	feet	575.19	575.19	575.19	575.19	575.19	575.19	575.19	575.19
Static Water Level Elevation	feet	569.29	568.89	568.79	567.49	571.09	569.29	569.64	567.64
Well Casing Diameter	inch	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Water Volume	gallon	1.22	1.15	1.14	0.93	0.93	1.22	1.27	0.95
Water Purged	gallon	3.67	3.46	3.41	2.78	2.78	3.65	3.82	2.85
Purging Method	-	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer	Bailer

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

Property	Units	10/17/01	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	07/28/16
Well Depth Top PVC	feet	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5	15.5
Well Depth Elevation	feet	562.82	562.82	562.82	562.82	562.82	562.82	562.82	562.82	562.82	562.82	562.82
Depth to Static Water	feet	8.41	9.40	6.90	8.50	8.30	8.80	10.80	4.70	7.90	6.50	10.10
Height of Water	feet	7.09	6.10	8.60	7.00	7.20	6.70	4.70	10.80	7.60	9.00	5.40
Top PVC Elevation	feet	578.32	578.32	578.32	578.32	578.32	578.32	578.32	578.32	578.32	578.32	578.32
Static Water Level Elevation	feet	569.91	568.92	571.42	569.82	570.02	569.52	567.52	573.62	570.42	571.82	568.22
Well Casing Diameter	inch	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Water Volume	gallon	0.64	0.55	0.77	1.90	0.65	0.60	0.42	0.42	0.68	0.81	0.49
Water Purged	gallon	1.91	1.65	1.00	1.50	1.50	1.81	1.27	1.27	2.00	1.00	0.50
Purging Method	-	-	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump

TABLE 2D
Monitoring Well MW-6
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	07/28/16
Well Depth Top PVC	feet	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3	17.3
Well Depth Elevation	feet	560.83	560.83	560.83	560.83	560.83	560.83	560.83	560.83	560.83	560.83	560.83
Depth to Static Water	feet	7.93	8.50	6.70	8.7	8.1	8.5	10.2	5.6	7.6	7.1	9.8
Height of Water	feet	9.37	8.80	10.60	8.60	9.20	8.80	7.10	11.70	9.70	10.20	7.50
Top PVC Elevation	feet	578.13	578.13	578.13	578.13	578.13	578.13	578.13	578.13	578.13	578.13	578.13
Static Water Level Elevation	feet	570.2	569.63	571.43	569.43	570.03	569.63	567.93	572.53	570.53	571.03	568.33
Well Casing Diameter	inch	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Water Volume	gallon	0.84	0.79	0.95	0.78	0.83	0.79	0.64	0.64	0.87	0.92	0.68
Water Purged	gallon	2.53	2.38	2.86	2.34	2.48	2.38	1.92	1.92	2.60	2.75	2.04
Purging Method	-	-	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump

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	07/28/16
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	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	562.76
Depth to Static Water	feet	4.86	16.50	14.70	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
Height of Water	feet	18.64	7.00	8.80	(1)	(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	586.26
Static Water Level Elevation	feet	581.4	569.76	571.56	(1)	(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	1.0
Water Volume	gallon	1.68	0.63	0.79	(1)	(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	0.25
Purging Method	-	-	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump

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

TABLE 2F
Monitoring Well MW-8
Groundwater Monitoring Well Data
153 Fillmore Avenue Site

Property	Units	10/17/01	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	07/28/16
Well Depth Top PVC	feet	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5	17.5
Well Depth Elevation	feet	560.93	560.93	560.93	560.93	560.93	560.93	560.93	560.93	560.93	560.93	560.93
Depth to Static Water	feet	8.16	8.50	6.90	7.8	8.4	8.9	10.6	5.1	7.9	7.1	10
Height of Water	feet	9.34	9.00	10.60	9.70	9.10	8.60	6.90	12.40	9.60	10.40	7.50
Top PVC Elevation	feet	578.43	578.43	578.43	578.43	578.43	578.43	578.43	578.43	578.43	578.43	578.43
Static Water Level Elevation	feet	570.27	569.93	571.53	570.63	570.03	569.53	567.83	573.33	570.53	571.33	568.43
Well Casing Diameter	inch	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Water Volume	gallon	0.84	0.81	0.95	0.87	0.82	0.77	0.62	0.62	0.86	0.94	0.68
Water Purged	gallon	2.52	2.43	3.00	2.62	2.46	2.32	1.86	1.86	2.60	2.82	2.04
Purging Method	-	-	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump	Peristalic Pump

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	07/28/16
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	µg/L	-	-	-	-	-	ND	ND	ND	ND
1,1-Dichloroethane	5.0	µg/L	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
1,2,4-Trichlorobenzene	5.0	µg/L	-	-	-	-	-	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	0.04	µg/L	-	-	-	-	-	ND	ND	ND	ND
1,2-Dibromoethane	NE	µg/L	-	-	-	-	-	ND	ND	ND	ND
1,2-Dichlorobenzene	3.0	µg/L	-	-	-	-	-	ND	ND	ND	ND
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0	µg/L	-	-	-	-	-	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	-	-	-	-	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	-	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	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
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NE	µg/L	-	ND	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**	**2.9**
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	NE	µg/L	-	-	-	-	-	-	ND	ND	ND
Dichlorodifluoromethane	5.0	µg/L	-	-	-	-	-	ND	ND	ND	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5.0	µg/L	-	-	-	-	-	ND	ND	ND	ND
Methyl acetate	NE	µg/L	-	-	-	-	-	-	ND	ND	ND
Methyl tert-butyl ether	10.0	µg/L	-	-	-	-	-	ND	ND	ND	ND
Methylcyclohexane	NE	µg/L	-	-	-	-	-	-	ND	ND	**0.26 J**
Methylene chloride	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	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	**2.3 J**	ND	**0.46J**	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5.0	µg/L	-	-	-	-	-	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	ND	ND	**3 J**	**3 J**	**16**	**1.3**	**1.3**	**1.1**	**0.96 J**
m,p-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, Total	5.0	µg/L	ND	ND	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	4.1
Total VOCs		mg/L	0.047	0.006	0.016	0.026	0.073	0.014	0.015	0.005	0.004

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	07/28/16
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	µg/L		-	-	-	-	ND	ND	ND	ND
1,1-Dichloroethane	5.0	µg/L	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
1,2,4-Trichlorobenzene	5.0	µg/L	-	-	-	-	-	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	0.04	µg/L	-	-	-	-	-	ND	ND	ND	ND
1,2-Dibromoethane	NE	µg/L	-	-	-	-	-	ND	ND	ND	ND
1,2-Dichlorobenzene	3.0	µg/L	-	-	-	-	-	ND	ND	ND	ND
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0	µg/L	-	-	-	-	-	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	-	-	-	-	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	-	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50.0	µg/L	ND	ND	ND	**11**	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**	**3.4**
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	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
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND	**0.36J**	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NE	µg/L	-	ND	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**	**1.7**
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	NE	µg/L	-	-	-	-	-	-	**1.4**	**1.2**	**2.8**
Dichlorodifluoromethane	5.0	µg/L	-	-	-	-	-	ND	ND	ND	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5.0	µg/L	-	-	-	-	-	ND	ND	ND	ND
Methyl acetate	NE	µg/L	-	-	-	-	-	-	ND	ND	ND
Methyl tert-butyl ether	10.0	µg/L	-	-	-	-	-	ND	ND	ND	ND
Methylcyclohexane	NE	µg/L	-	-	-	-	-	-	**0.63J**	ND	ND
Methylene chloride	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	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	**4 J**	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5.0	µg/L	-	-	-	-	-	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	ND	**82**	**64**	**28**	**21**	**7.8**	**6.5**	**9.8**	**14.0**
m,p-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, Total	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		µg/L	0	92.7	118.0	56.0	26.6	11.5	12.1	16.7	21.9
Total VOCs		mg/L	0.000	0.093	0.118	0.056	0.027	0.012	0.012	0.017	0.022

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-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	07/28/16
1,1,1-Trichloroethane	5.0	µg/L	-	ND	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	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND	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	ND
1,2,4-Trichlorobenzene	5.0	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	0.04	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
1,2-Dibromoethane	NE	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
1,2-Dichlorobenzene	3.0	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
1,2-Dichloroethane	0.6	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	ND
1,3-Dichlorobenzene	3.0	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	-	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	1.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	50.0	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	ND
Bromomethane	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
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	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	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	ND	ND	**240**	**51**	**2 J**	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	NE	µg/L	-	-	-	-	-	-	-	-	ND	ND	ND
Dichlorodifluoromethane	5.0	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5.0	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
Methyl acetate	NE	µg/L	-	-	-	-	-	-	-	-	ND	ND	ND
Methyl tert-butyl ether	10.0	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
Methylcyclohexane	NE	µg/L	-	-	-	-	-	-	-	-	ND	ND	ND
Methylene chloride	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	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	ND	ND	**3 J**	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	**2 J**	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5.0	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	ND	ND	**99**	**42**	**5**	ND	ND	ND	ND	**0.3**	ND
m,p-Xylene	5.0	µg/L	**5**	ND	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	ND
Xylenes, Total	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total VOCs		µg/L	5.0	0	339.0	98.0	7.1	0	0	0	0	0.3	0.0
Total VOCs		mg/L	0.005	0.000	0.339	0.098	0.007	0.000	0.000	0.000	0.000	0.000	0.000

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06/98 Class GA.
Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.
NE = NYSDEC TOGS 1.1.1 water quality standard not established.
* Dilution factor of 5 used
ND - Not detected for at or above reporting limit
J - Analyte detected estimated value below quantitation limits
- = The analyte was not sampled for.

TABLE 3D
Monitoring Well MW-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	07/28/16
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	µg/L	-	-	-	-	-	-	-	*NA	ND	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
1,1-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
1,2,4-Trichlorobenzene	5.0	µg/L	-	-	-	-	-	-	-	*NA	ND	ND	ND
1,2-Dibromo-3-Chloropropane	0.04	µg/L	-	-	-	-	-	-	-	*NA	ND	ND	ND
1,2-Dibromoethane	NE	µg/L	-	-	-	-	-	-	-	*NA	ND	ND	ND
1,2-Dichlorobenzene	3.0	µg/L	-	-	-	-	-	-	-	*NA	ND	ND	ND
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
1,3-Dichlorobenzene	3.0	µg/L	-	-	-	-	-	-	-	*NA	ND	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	-	-	-	-	-	-	*NA	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Acetone	50.0	µg/L	ND	ND	ND	ND	ND	**27**	**29**	*NA	ND	ND	**40**
Benzene	1.0	µg/L	**36**	ND	ND	**1 J**	ND	ND	ND	*NA	**0.72J**	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	**150**	**270**	ND	**14**	**45**	**9.4**	**29**	*NA	**2.0**	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Cyclohexane	NE	µg/L	-	-	-	-	-	-	-	*NA	ND	ND	ND
Dichlorodifluoromethane	5.0	µg/L	-	-	-	-	-	-	-	*NA	ND	ND	ND
Ethylbenzene	5.0	µg/L	**690**	ND	ND	**2 J**	ND	ND	ND	*NA	**0.9J**	ND	ND
Isopropylbenzene	5.0	µg/L	-	-	-	-	-	-	-	*NA	ND	ND	ND
Methyl acetate	NE	µg/L	-	-	-	-	-	-	-	*NA	ND	ND	ND
Methyl tert-butyl ether	10.0	µg/L	-	-	-	-	-	-	-	*NA	ND	ND	ND
Methylcyclohexane	NE	µg/L	-	-	-	-	-	-	-	*NA	ND	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	**2.2 J**
Styrene	5.0	µg/L	**16**	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Tetrachloroethene	5.0	µg/L	ND	**10 J**	ND	ND	ND	ND	**2.5 J**	*NA	ND	ND	ND
Toluene	5.0	µg/L	**660**	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	**10 J**	ND	ND	ND	ND	ND	*NA	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Trichloroethene	5.0	µg/L	**19**	**10 J**	ND	**5.2**	ND	**3 J**	**3.9 J**	*NA	**1.4**	ND	ND
Trichlorofluoromethane	5.0	µg/L	-	-	-	-	-	-	-	*NA	**ND**	ND	ND
Vinyl chloride	2.0	µg/L	**10**	**40 J**	ND	**2 J**	ND	ND	**17**	*NA	ND	**2.3**	ND
m,p-Xylene	5.0	µg/L	**660**	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
o-Xylene	5.0	µg/L	**440**	ND	ND	ND	ND	ND	ND	*NA	**1.4J**	ND	ND
Xylenes, Total	5.0	µg/L	**ND**	ND	ND	ND	ND	ND	ND	*NA	ND	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	42.2
Total VOCs		mg/L	2.681	0.340	0.000	0.024	0.045	0.039	0.081	0.000	0.006	0.002	0.042

1. NYSDEC TOGS (1.1.1) Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, 06/98 Class GA.
Bolded concentrations indicated the analyte was detected. Bolded and shaded concentrations indicate exceedance of TOGS 1.1.1 criteria.
NE = NYSDEC TOGS 1.1.1 water quality standard not established.
* Dilution factor of 5 used
ND - Not detected for at or above reporting limit
J - Analyte detected estimated value below quantitation limits
- = The analyte was not sampled for.
*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 3E
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	07/28/16
1,1,1-Trichloroethane	5.0	µg/L	-	ND	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	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND	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	ND
1,2,4-Trichlorobenzene	5.0	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	0.04	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
1,2-Dibromoethane	NE	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
1,2-Dichlorobenzene	3.0	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
1,2-Dichloroethane	0.6	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	ND
1,3-Dichlorobenzene	3.0	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	-	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acetone	50.0	µg/L	ND	ND	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**	**2.6**
Bromodichloromethane	50.0	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	ND
Bromomethane	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
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	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	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NE	µg/L	-	ND	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**	**2.8**
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cyclohexane	NE	µg/L	-	-	-	-	-	-	-	-	**0.86J**	**0.43**	ND
Dichlorodifluoromethane	5.0	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5.0	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
Methyl acetate	NE	µg/L	-	-	-	-	-	-	-	-	ND	ND	ND
Methyl tert-butyl ether	10.0	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
Methylcyclohexane	NE	µg/L	-	-	-	-	-	-	-	-	**0.79J**	ND	ND
Methylene chloride	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	ND
Tetrachloroethene	5.0	µg/L	ND	ND	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	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**	**1.0**
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5.0	µg/L	-	-	-	-	-	-	-	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	**54**	**190**	**160**	**190**	**240**	**120**	**110**	ND	**30**	**35**	**32**
m,p-Xylene	5.0	µg/L	**6**	ND	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	ND
Xylenes, Total	5.0	µg/L	ND	ND	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	43.9	44.3	38.4
Total VOCs		mg/L	0.102	0.367	0.410	0.580	0.510	0.186	0.144	0.000	0.044	0.044	0.038

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. 77.20
* 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
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	07/28/16
Aluminum	2,000	µg/L	-	**4,760**	**48,000**	**37,300**	**215,000**	**170,000**	**62,000**	**22,000**	**81,500**
Antimony	6	µg/L	-	ND	ND	ND	ND	**3.1**	**1.4**	**3.0**	ND
Arsenic	50	µg/L	**11**	ND	**23**	**36**	**184**	**150**	**22**	**320**	**550**
Barium	2,000	µg/L	**301**	**265**	**590**	**545**	**1,920**	**1,400**	**840**	**540**	**850**
Beryllium	3	µg/L	-	ND	ND	ND	**7.62**	**7.50**	**5.40**	ND	**4.30**
Cadmium	10	µg/L	ND	ND	**10.4**	ND	**151**	ND	**28**	**10**	**16**
Calcium	NE	µg/L	-	**188,000**	**635,000**	**400,000**	**1,130,000**	**830,000**	**540,000**	**240,000**	**293,000**
Chromium	50	µg/L	ND	ND	**67.7**	**58.2**	**287**	**310**	**100**	**35**	**120**
Cobalt	NE	µg/L	-	ND	**49**	**35.5**	**160**	**200**	**77**	**28**	**67**
Copper	1,000	µg/L	-	**16.6**	**77.7**	**89.5**	**437**	**570**	**220**	**88**	**200**
Iron	600	µg/L	-	**22,200**	**112,000**	**81,800**	**311,000**	**420,000**	**210,000**	**170,000**	**276,000 ^**
Lead	50	µg/L	**7**	**3.78**	**80**	**62**	**518**	**200**	**38**	**54**	**140**
Magnesium	35,000	µg/L	-	**35,800**	**127,000**	**61,400**	**226,000**	**210,000**	**130,000**	**44,000**	**78,200**
Manganese	600	µg/L	-	**2,250**	**7,410**	**5,100**	**9,570**	**16,000**	**9,300**	**4,200**	**4,500 B**
Mercury	0.7	µg/L	ND	ND	**0.22**	ND	**0.52**	**0.54**	**0.23**	**0.058 J**	**0.17 J**
Nickel	200	µg/L	-	ND	**121**	**78.2**	**436**	**410**	**150**	**65**	**160**
Potassium	NE	µg/L	-	**4,650**	**12,600**	**12,400**	**51,100**	**26,000**	**16,000**	**7,400**	**20,600**
Selenium	10	µg/L	-	ND	**3.9**	ND	ND	ND	ND	ND	**31**
Silver	50	µg/L	-	ND	ND	ND	ND	ND	**7.2 J**	ND	ND
Sodium	NE	µg/L	-	**79,500**	**71,300**	**81,000**	**54,000**	**45,000**	**77,000**	**78,000**	**48,400**
Thallium	0.5	µg/L	-	ND	ND	ND	ND	**2.6**	ND	**0.78 J**	ND
Vanadium	NE	µg/L	-	ND	**102**	**87**	**343**	**360**	**130**	**55**	**170**
Zinc	5,000	µg/L	-	**28.1**	**402**	**307**	**1,310**	**1,500**	**920**	**350**	**800**

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 - Compound was found in the blank and sample.
^ - Instrument related QC is outside acceptance limits.
- = The analyte was not sampled for.

TABLE 4B
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	07/28/16
Aluminum	2,000	µg/L	-	**3,250**	**98,500**	**35,400**	**265,000**	**34,000**	**34,000**	**31,000**	**187,000**
Antimony	6	µg/L	-	ND	ND	ND	ND	**1.5**	**0.84 J**	**2.3 J**	ND
Arsenic	50	µg/L	**5**	ND	**17**	**32**	**297**	**44**	**16**	**100**	**160**
Barium	2,000	µg/L	**73**	**261**	**2,330**	**724**	**3,890**	**1,000**	**880**	**730**	**2,100**
Beryllium	3	µg/L	-	ND	**5**	ND	**8.35**	ND	**1.4 J**	ND	**7.9**
Cadmium	10	µg/L	ND	ND	**20**	**5.32**	**233**	**10**	ND	ND	**7.4**
Calcium	NE	µg/L	-	**213,000**	**1,240,000**	**417,000**	**2,550,000**	**460,000**	**370,000**	**51,000**	**954,000**
Chromium	50	µg/L	ND	ND	**146**	**56.2**	**336**	**52**	**62**	**51**	**280**
Cobalt	NE	µg/L	-	ND	**90**	**30.6**	**190**	**32**	**32**	**31**	**150**
Copper	1,000	µg/L	-	**29.1**	**611**	**199**	**1,510**	**360**	**220**	**160**	**740**
Iron	600	µg/L	-	**11,300**	**165,000**	**71,700**	**393,000**	**83,000**	**110,000**	**130,000**	**323,000 ^**
Lead	50	µg/L	**2**	**13.1**	**410**	**140**	**1,150**	**180**	**40**	**110**	**490**
Magnesium	35,000	µg/L	-	**53,400**	**315,000**	**119,000**	**706,000**	**200,000**	**160,000**	**160,000**	**592,000**
Manganese	600	µg/L	-	**490**	**5,250**	**2,110**	**8,930**	**2,100**	**1,600**	**1,400**	**5,300 B**
Mercury	0.7	µg/L	ND	ND	**2.8**	**0.542**	**2.04**	**0.67**	**0.21**	**0.12 J**	**1.0**
Nickel	200	µg/L	-	ND	**222**	**71.6**	**534**	**89**	**87**	**84**	**380**
Potassium	NE	µg/L	-	**3,580**	**20,900**	**11,000**	**554,000**	**8,500**	**8,100**	**7,200**	**51,100**
Selenium	10	µg/L	-	ND	**5.6**	ND	ND	**32**	**11 J**	ND	**35**
Silver	50	µg/L	-	ND	ND	ND	ND	ND	**6.1 J**	ND	**2.2 J**
Sodium	NE	µg/L	-	**56,900**	**60,500**	**58,700**	**514,000**	**30,000**	**44,000**	**55,000**	**38,500**
Thallium	0.5	µg/L	-	ND	ND	ND	ND	**1.1**	ND	**0.86 J**	ND
Vanadium	NE	µg/L	-	ND	**153**	**76**	**356**	**73**	**64**	**72**	**390**
Zinc	5,000	µg/L	-	**79.8**	**2,060**	**606**	**4,100**	**1,200**	**760**	**630**	**2,500**

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 - Compound was found in the blank and sample.
^ - Instrument related QC is outside acceptance limits.
- = The analyte was not sampled for.

TABLE 4C
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	07/28/16
Aluminum	2,000	µg/L	-	**1,440**	**5,740**	**6,990**	**2,640**	**1,480**	**161**	**140**	**120**	**920**	**390**
Antimony	6	µg/L	-	ND	ND	ND	ND	ND	ND	**2.3**	**0.98 J**	**2.3**	ND
Arsenic	50	µg/L	**11**	ND	ND	ND	ND	ND	ND	**1.6**	**0.86 J**	**1.3**	ND
Barium	2,000	µg/L	**2,390**	**160**	**666**	**522**	**176**	**239**	**172**	**110**	**110**	**180**	**130**
Beryllium	3	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	10	µg/L	**22**	ND	**7**	ND	ND	ND	ND	ND	**0.72 J**	**3.7**	ND
Calcium	NE	µg/L	-	**164,000**	**163,000**	**193,000**	**173,000**	**159,000**	**140,000**	**130,000**	**190,000**	**190,000**	**147,000**
Chromium	50	µg/L	ND	ND	**13.9**	**22.1**	ND	ND	ND	ND	ND	ND	**1.6 J**
Cobalt	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	1,000	µg/L	-	**20.8**	**45.9**	**79.1**	**12.9**	**22**	ND	ND	**6.8 J**	**18**	**2.7 J**
Iron	600	µg/L	-	**2,880**	**12,400**	**17,200**	**7,090**	**4,970**	**3,450**	**860**	**2,100**	**3,000**	**3,800 ^**
Lead	50	µg/L	**580**	**64.5**	**231**	**527**	**170**	**91**	ND	**4.8**	**13**	**82**	**25**
Magnesium	35,000	µg/L	-	**31,700**	**38,500**	**59,600**	**39,800**	**34,600**	**31,400**	**24,000**	**35,000**	**35,000**	**31,200**
Manganese	600	µg/L	-	**530**	**509**	**591**	**569**	**437**	**225**	**190**	**480**	**260**	**220 B**
Mercury	0.7	µg/L	ND	ND	ND	ND	ND	ND	**0.689**	ND	ND	**0.08**	ND
Nickel	200	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	**13**	**9.7 J**
Potassium	NE	µg/L	-	ND	**4,270**	**2,030**	ND	ND	ND	**1,200**	**680 J**	**1,300**	**1,700**
Selenium	10	µg/L	-	**8.1**	ND	ND	ND	ND	**47.7**	ND	**22.0**	ND	ND
Silver	50	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	NE	µg/L	-	**24,200**	**18,400**	**17,200**	**20,100**	**19,000**	**11,000**	**19,000**	**25,000**	**32,000**	**15,900**
Thallium	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	5,000	µg/L	-	**1,690**	**2,310**	**1,670**	**2,740**	**984**	**165**	**550**	**340**	**920**	**300**

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 - Compound was found in the blank and sample.
^ - Instrument related QC is outside acceptance limits.
- = The analyte was not sampled for.

TABLE 4D
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	07/28/16
Aluminum	2,000	µg/L	-	**148**	**1,630**	**843**	**941**	**202**	ND	**120**	**180**	**980**	**1,600**
Antimony	6	µg/L	-	ND	ND	ND	ND	ND	ND	ND	**0.84 J**	**0.58**	ND
Arsenic	50	µg/L	ND	ND	ND	ND	ND	ND	ND	**1.0**	**1.1**	**1.7**	ND
Barium	2,000	µg/L	**1,660**	**234**	**242**	**230**	**213**	**191**	**207**	**180**	**180**	**190**	**220**
Beryllium	3	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	10	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.97 J**
Calcium	NE	µg/L	-	**156,000**	**132,000**	**146,000**	**137,000**	**130,000**	**149,000**	**140,000**	**140,000**	**170,000**	**149,000**
Chromium	50	µg/L	**22**	ND	ND	ND	ND	ND	ND	**11**	ND	ND	**4**
Cobalt	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	**0.87 J**
Copper	1,000	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	**5.5 J**
Iron	600	µg/L	-	**7,270**	**10,700**	**8,050**	**9,530**	**7,090**	**6,220**	**9,800**	**8,000**	**9,600**	**8,000 ^**
Lead	50	µg/L	**84**	ND	**5.91**	**3.82**	**9.5**	ND	ND	**1.7**	**3.8**	**9.7**	**16.0**
Magnesium	35,000	µg/L	-	**27,900**	**24,300**	**27,900**	**24,600**	**24,800**	**29,100**	**27,000**	**29,000**	**30,000**	**30,600**
Manganese	600	µg/L	-	**1,200**	**2,720**	**1,690**	**1,860**	**1,480**	**1,080**	**2,500**	**1,700**	**1,800**	**1,100 B**
Mercury	0.7	µg/L	**0.2**	ND	ND	ND	ND	ND	ND	ND	ND	**0.06**	**0.13 J**
Nickel	200	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2.1 J**
Potassium	NE	µg/L	-	**2,190**	**3,190**	**3,260**	ND	ND	ND	**3,100**	**2,900**	**3,500**	**4,200**
Selenium	10	µg/L	-	**13.5**	ND	ND	ND	ND	ND	ND	**23.0**	ND	ND
Silver	50	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	NE	µg/L	-	**21,600**	**21,600**	**20,600**	**16,900**	**16,000**	**14,700**	**14,000**	**12,000**	**4,200**	**29,500**
Thallium	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	**2.7 J**
Zinc	5,000	µg/L	-	**63.2**	**47.6**	**29.4**	**39.7**	**51.6**	**18.7**	ND	**40 J**	**120**	**180**

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 - Compound was found in the blank and sample.
^ - Instrument related QC is outside acceptance limits.
- = The analyte was not sampled for.

TABLE 4E
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	07/28/16
Aluminum	2,000	µg/L	-	**3,390**	**22,700**	**4,050**	**2,120**	**5,360**	**4,970**	*NA	**1,300**	**1,700**	**7,300**
Antimony	6	µg/L	-	ND	ND	ND	ND	ND	**35.5**	*NA	**3.2**	**4.2**	ND
Arsenic	50	µg/L	**6.0**	ND	ND	ND	**5.7**	ND	**115**	*NA	**3.3**	**2.1**	ND
Barium	2,000	µg/L	**163**	**76.2**	**173**	**96**	**64**	**84.4**	**102**	*NA	**72**	**56**	**74**
Beryllium	3	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	**0.35 J**
Cadmium	10	µg/L	ND	**11.7**	**40.2**	ND	ND	**15.7**	**50.3**	*NA	**2.2 J**	**12**	**58**
Calcium	NE	µg/L	-	**145,000**	**299,000**	**166,000**	**135,000**	**185,000**	**149,000**	*NA	**160,000**	**180,000**	**165,000**
Chromium	50	µg/L	ND	**7.3**	**36.6**	ND	ND	**10.8**	**10.9**	*NA	**1.9 J**	ND	**15**
Cobalt	NE	µg/L	-	ND	**30.0**	ND	ND	ND	ND	*NA	**8.6 J**	**16.0**	**22**
Copper	1,000	µg/L	-	**106**	**293**	**162**	**63**	**134**	**250**	*NA	**40**	**67**	**330**
Iron	600	µg/L	-	**11,200**	**38,000**	**15,200**	**9,950**	**17,000**	**13,500**	*NA	**10,000**	**6,200**	**14,500 ^**
Lead	50	µg/L	**36**	**96.6**	**451**	**231**	**120**	**180**	**329**	*NA	**82**	**100**	**450**
Magnesium	35,000	µg/L	-	**38,100**	**60,500**	**30,600**	**29,500**	**43,500**	**30,700**	*NA	**27,000**	**24,000**	**27,500**
Manganese	600	µg/L	-	**942**	**2,210**	**1,380**	**508**	**1,440**	**849**	*NA	**1,200**	**1,300**	**1,600 B**
Mercury	0.7	µg/L	ND	ND	**0.21**	ND	ND	ND	**0.54**	*NA	ND	**0.08**	**0.16 J**
Nickel	200	µg/L	-	ND	**112**	**36.8**	ND	**36.2**	**32.7**	*NA	**21**	**37**	**57**
Potassium	NE	µg/L	-	**12,500**	**15,000**	**13,900**	**9,940**	**11,100**	**11,100**	*NA	**7,100**	**7,100**	**8,300**
Selenium	10	µg/L	-	**17.1**	ND	ND	ND	ND	**119**	*NA	**14 J**	ND	ND
Silver	50	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND	ND
Sodium	NE	µg/L	-	**72,900**	**34,500**	**88,600**	**72,100**	**65,100**	**58,600**	*NA	**39,000**	**31,000**	**35,600**
Thallium	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	**0.2**	ND
Vanadium	NE	µg/L	-	ND	**46.0**	ND	ND	ND	ND	*NA	**3 J**	**ND**	**15**
Zinc	5,000	µg/L	-	**2,540**	**21,000**	**7,010**	**2,470**	**6,270**	**7,080**	*NA	**3,500**	**9,200**	**17,800**

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.
B - Compound was found in the blank and sample.
^ - Instrument related QC is outside acceptance limits.
*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
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	07/28/16
Aluminum	2,000	µg/L	-	ND	**1,420**	**722**	**199**	ND	ND	**130**	**46 J**	ND	**83 J**
Antimony	6	µg/L	-	ND	ND	ND	ND	ND	ND	**6.0**	**0.61 J**	**0.67**	ND
Arsenic	50	µg/L	**14.0**	ND	ND	ND	ND	ND	ND	**22.0**	**1.7**	**2.0**	ND
Barium	2,000	µg/L	**880**	**172**	**175**	**125**	**133**	**107**	**110**	**180**	**120**	**140**	**110**
Beryllium	3	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	10	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	NE	µg/L	-	**157,000**	**149,000**	**141,000**	**144,000**	**141,000**	**147,000**	**140,000**	**160,000**	**230,000**	**160,000**
Chromium	50	µg/L	**15**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Copper	1,000	µg/L	-	**10.4**	**15.0**	ND	ND	ND	ND	**23.0**	ND	ND	ND
Iron	600	µg/L	-	**3,230**	**4,640**	**3,120**	**2,870**	**3,090**	**3,650**	**8,600**	**4,100**	**5,300**	**1,900 ^**
Lead	50	µg/L	**270**	ND	**15.4**	**5.4**	**11.0**	ND	**16.6**	**98.0**	**5.4**	**9.2**	**6.6 J**
Magnesium	35,000	µg/L	-	**28,700**	**27,100**	**28,100**	**25,300**	**26,200**	**28,300**	**19,000**	**34,000**	**43,000**	**31,800**
Manganese	600	µg/L	-	**802**	**891**	**618**	**665**	**817**	**819**	**1,500**	**820**	**1,400**	**700 B**
Mercury	0.7	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	200	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Potassium	NE	µg/L	-	**1,780**	**4,060**	**3,080**	ND	ND	ND	**6,800**	**2,700**	**4,400**	**3,800**
Selenium	10	µg/L	-	**9.5**	ND	ND	ND	ND	**24.1**	ND	**19 J**	ND	ND
Silver	50	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	NE	µg/L	-	**30,100**	**24,000**	**22,600**	**22,600**	**22,700**	**19,800**	**15,000**	**19,000**	**52,000**	**44,000**
Thallium	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	**1.1**	ND	ND	ND
Vanadium	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Zinc	5,000	µg/L	-	**189**	**630**	**250**	**375**	**33**	**43.3**	**240**	**80**	**100**	**36**

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 - Compound was found in the blank and sample.
^ - Instrument related QC is outside acceptance limits.
- = The analyte was not sampled for.

APPENDICES

APPENDIX A

Groundwater Field Sampling Records

GROUNDWATER FIELD SAMPLING RECORD

SITE 153 Fillmore Avenue

DATE 07/28/16

Samplers: Brian Doyle
Jason LaMonaco

SAMPLE ID MW-01

Depth of well (from top of casing).....	13.83 ft	EL 560.97
Initial static water level (from top of casing)....	7.2 ft	EL 567.60
Top of PVC Casing Elevation	574.80	

Evacuation Method:

Peristaltic		Centrifugal		1 in. casing:		ft. of water x .09 =	gallons
Airlift		Pos. Displ.		2 in. casing:	6.6	ft. of water x .16 =	1.06 gallons
Bailer	X	>>> No. of bails		3 in. casing:		ft. of water x .36 =	gallons

Well Volume Calculation

Volume of water removed 3.18 gals.

> 3 volumes:	**YES**	no
dry:	yes	**NO**

Field Tests:

Temp:	23.63	C
pH	7.7	
Conductivity	0.439	mS/cm
DO	8.33	mg/L
Turbidity	NA	NTUs
Oxidation Reduction Potential (ORP)	-70	mV

Sampling: Time: 3:00 PM

Sampling Method:

Peristaltic Pump	
Disposable Bailer	X
Disposable Tubing	

Observations:

Weather/Temperature: Partly Cloudy, 85 ° F

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

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

GROUNDWATER FIELD SAMPLING RECORD

SITE 153 Fillmore Avenue DATE 07/28/16

Sampler: Brian Doyle
Jason LaMonaco

SAMPLE ID MW-02

Depth of well (from top of casing)..... 13.5 ft EL 561.69
Initial static water level (from top of casing).... 7.55 ft EL 567.64
Top of PVC Casing Elevation 575.19

Evacuation Method:

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

Volume of water removed 2.86 gals.

> 3 volumes: **YES** no
dry: yes **NO**

Well Volume Calculation

1 in. casing: ____ ft. of water x .09 = ____ gallons
2 in. casing: 6.0 ft. of water x .16 = 0.95 gallons
3 in. casing: ____ ft. of water x .36 = ____ gallons

Field Tests:

Temp:	19.15	C
pH	7.24	
Conductivity	0.744	mS/cm
DO	13.44	mg/L
Turbidity	NA	NTUs
Oxidation Reduction Potential (ORP)	-45	mV

Sampling: Time: 3:30 PM

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

Observations:

Weather/Temperature: Partly Cloudy, 85 ° 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.

GROUNDWATER FIELD SAMPLING RECORD

SITE 153 Fillmore Avenue DATE 07/28/16

Sampler: Brian Doyle
Jason LaMonaco

SAMPLE ID MW-05

Depth of well (from top of casing)..... 15.5 ft EL 562.82
Initial static water level (from top of casing).... 10.1 ft EL 568.22
Top of PVC Casing Elevation 578.32

Evacuation Method:

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

Well Volume Calculation

1 in. casing: 5.4 ft. of water x .09 = 0.49 gallons
2 in. casing: ft. of water x .16 = gallons
3 in. casing: ft. of water x .36 = gallons

Volume of water removed 0.50 gals.

> 3 volumes: yes **NO**
dry: **YES** no

Field Tests:

Temp:	22.18	C
pH	7.45	
Conductivity	0.762	mS/cm
DO	7.65	mg/L
Turbidity	22.9	NTUs
Oxidation Reduction Potential (ORP)	-45	mV

Sampling: Time: 11:00 AM

Sampling Method:

Peristaltic Pump	X
Disposable Bailer	
Disposable Tubing	X

Observations:

Weather/Temperature: Partly Cloudy, 85 ° F

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

Comments:

GROUNDWATER FIELD SAMPLING RECORD

SITE 153 Fillmore Avenue DATE 07/28/16

Sampler: Brian Doyle
Jason LaMonaco

SAMPLE ID MW-06; FD

Depth of well (from top of casing)..... 17.3 ft EL 560.83
Initial static water level (from top of casing).... 9.8 ft EL 568.38
Top of PVC Casing Elevation 578.13

Evacuation Method:

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

Well Volume Calculation

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

Volume of water removed 2.04 gals.

> 3 volumes: **YES** no
dry: yes **NO**

Field Tests:

Temp:	19.73	C
pH	7.56	
Conductivity	0.643	mS/cm
DO	6.82	mg/L
Turbidity	325	NTUs
Oxidation Reduction Potential (ORP)	-91.0	mV

Sampling: Time: 11:30 AM

Sampling Method:

Peristaltic Pump	X
Disposable Bailer	
Disposable Tubing	X

Observations:

Weather/Temperature: Partly Cloudy, 85 ° F

Physical Appearance and Odor of Sample: Initially brown then clear with slight oil residue. No odor.

Comments:

GROUNDWATER FIELD SAMPLING RECORD

SITE 153 Fillmore Avenue DATE 07/28/16

Sampler: Brian Doyle SAMPLE ID MW-07
Jason LaMonaco

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

Evacuation Method:

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

Well Volume Calculation

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

Volume of water removed 0.25 gals.

> 3 volumes: yes no

dry: yes no

Field Tests:

Temp:	NA	C
pH	NA	
Conductivity	NA	mS/cm
DO	NA	mg/L
Turbidity	NA	NTUs
Oxidation Reduction Potential (ORP)	NA	mV

Sampling: Time: 12:45 PM

Sampling Method:

Peristaltic Pump	X
Disposable Bailer	
Disposable Tubing	X

Observations:

Weather/Temperature: Partly Cloudy, 85 ° F

Physical Appearance and Odor of Sample: Clear, no odor

Comments: Approximately 0.25 gallons of water removed before well went dry.
Water quality parameter meter unable to record due to minimal amount of water removed from well.
There is an obstruction in the well at a depth of 8.8 feet in which the water level indicator could proceed further down the well.

GROUNDWATER FIELD SAMPLING RECORD

SITE 153 Fillmore Avenue DATE 07/28/16

Sampler: Brian Doyle
Jason LaMonaco

SAMPLE ID MW-08

Depth of well (from top of casing)..... 17.5 ft EL 560.93
Initial static water level (from top of casing).... 10.0 ft EL 568.43
Top of PVC Casing Elevation 578.43

Evacuation Method:

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

Well Volume Calculation

1 in. casing: 7.5 ft. of water x .09 = 0.68 gallons
2 in. casing: ft. of water x .16 = gallons
3 in. casing: ft. of water x .36 = gallons

Volume of water removed 2.03 gals.

> 3 volumes: **YES** no
dry: yes **NO**

Field Tests:

Temp:	20.7	C
pH	7.41	
Conductivity	0.704	mS/cm
DO	6.62	mg/L
Turbidity	8	NTUs
Oxidation Reduction Potential (ORP)	-67	mV

Sampling: Time: 12:00 PM

Sampling Method:

Peristaltic Pump	X
Disposable Bailer	
Disposable Tubing	X

Observations:

Weather/Temperature: Partly Cloudy, 85 ° F

Physical Appearance and Odor of Sample: Clear with some sediment from bottom of well, some odor

Comments:

APPENDIX B

Laboratory Analytical Results

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-103816-1
Client Project/Site: 153 Fillmore Avenue Groundwater Analysis

For:
City of Tonawanda
200 Niagara Street
Tonawanda, New York 14150

Attn: Brian Doyle

Authorized for release by:
8/8/2016 12:00:39 PM
Rebecca Jones, Project Management Assistant I
rebecca.jones@testamericainc.com

Designee for

Melissa Deyo, Project Manager I
(716)504-9874
melissa.deyo@testamericainc.com

Table of Contents

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: City of Tonawanda
Project/Site: 153 Fillmore Avenue Groundwater Analysis

TestAmerica Job ID: 480-103816-1

Job ID: 480-103816-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-103816-1

Receipt
The samples were received on 7/28/2016 3:45 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.4º C.

Receipt Exceptions

COC requested 8260, however no volume was provided: MW-5 (480-103816-3).

GC/MS VOA
Method(s) 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: MW-7 (480-103816-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: MW-1 (480-103816-1). The sample was analyzed within 7 days per EPA recommendation.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-314166 recovered outside acceptance criteria, low biased, for 2-Hexanone and 4-Methyl-2-pentanone (MIBK). A reporting limit (RL) standard was analyzed, and the target analytes were detected. Since the associated samples were non-detect for these analytes, the data have been reported. The following samples are impacted: MW-1 (480-103816-1), MW-2 (480-103816-2), MW-6 (480-103816-4), MW-7 (480-103816-5), MW-8 (480-103816-6), FD@MW-6 (480-103816-7) and TRIP BLANK (480-103816-8) .

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010C: The low level continuing calibration verification (CCVL 480-313783/16 and 480-3137838/26) recovered above the upper control limit for Total Iron. The samples MW-1 (480-103816-1), MW-2 (480-103816-2), MW-5 (480-103816-3), (LCS 480-313521/2-A), (MB 480-313521/1-A) and (480-103816-A-3-B PDS) associated with this CCVL were either ND or less than the reporting limit (RL) for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples was not performed.

Method(s) 6010C: The low level continuing calibration verification (CCVL 480-3137838/26) recovered above the upper control limit for Total Iron. The samples MW-6 (480-103816-4), MW-7 (480-103816-5), MW-8 (480-103816-6), FD@MW-6 (480-103816-7), (480-103816-A-3-C MS) and (480-103816-A-3-D MSD) associated with this CCVL were either ND or less than the reporting limit (RL) for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCVL; therefore, re-analysis of samples was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: City of Tonawanda
Project/Site: 153 Fillmore Avenue Groundwater Analysis

TestAmerica Job ID: 480-103816-1

Client Sample ID: MW-1 — Lab Sample ID: 480-103816-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.9		1.0	0.81	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.29	J	1.0	0.16	ug/L	1		8260C	Total/NA
Vinyl chloride	0.96	J	1.0	0.90	ug/L	1		8260C	Total/NA
Aluminum	81.5		0.20	0.060	mg/L	1		6010C	Total/NA
Arsenic	0.55		0.015	0.0056	mg/L	1		6010C	Total/NA
Barium	0.85		0.0020	0.00070	mg/L	1		6010C	Total/NA
Beryllium	0.0043		0.0020	0.00030	mg/L	1		6010C	Total/NA
Cadmium	0.016		0.0020	0.00050	mg/L	1		6010C	Total/NA
Calcium	293		0.50	0.10	mg/L	1		6010C	Total/NA
Chromium	0.12		0.0040	0.0010	mg/L	1		6010C	Total/NA
Cobalt	0.067		0.0040	0.00063	mg/L	1		6010C	Total/NA
Copper	0.20		0.010	0.0016	mg/L	1		6010C	Total/NA
Iron	276	^	0.050	0.019	mg/L	1		6010C	Total/NA
Lead	0.14		0.010	0.0030	mg/L	1		6010C	Total/NA
Magnesium	78.2		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	4.5	B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Nickel	0.16		0.010	0.0013	mg/L	1		6010C	Total/NA
Potassium	20.6		0.50	0.10	mg/L	1		6010C	Total/NA
Selenium	0.031		0.025	0.0087	mg/L	1		6010C	Total/NA
Sodium	48.4		1.0	0.32	mg/L	1		6010C	Total/NA
Vanadium	0.17		0.0050	0.0015	mg/L	1		6010C	Total/NA
Zinc	0.80		0.010	0.0015	mg/L	1		6010C	Total/NA
Mercury	0.00017	J	0.00020	0.00012	mg/L	1		7470A	Total/NA

Client Sample ID: MW-2 — Lab Sample ID: 480-103816-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	3.4		1.0	0.41	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	1.7		1.0	0.81	ug/L	1		8260C	Total/NA
Cyclohexane	2.8		1.0	0.18	ug/L	1		8260C	Total/NA
Vinyl chloride	14		1.0	0.90	ug/L	1		8260C	Total/NA
Aluminum	187		0.20	0.060	mg/L	1		6010C	Total/NA
Arsenic	0.16		0.015	0.0056	mg/L	1		6010C	Total/NA
Barium	2.1		0.0020	0.00070	mg/L	1		6010C	Total/NA
Beryllium	0.0079		0.0020	0.00030	mg/L	1		6010C	Total/NA
Cadmium	0.0074		0.0020	0.00050	mg/L	1		6010C	Total/NA
Calcium	954		0.50	0.10	mg/L	1		6010C	Total/NA
Chromium	0.28		0.0040	0.0010	mg/L	1		6010C	Total/NA
Cobalt	0.15		0.0040	0.00063	mg/L	1		6010C	Total/NA
Copper	0.74		0.010	0.0016	mg/L	1		6010C	Total/NA
Iron	323	^	0.050	0.019	mg/L	1		6010C	Total/NA
Lead	0.49		0.010	0.0030	mg/L	1		6010C	Total/NA
Magnesium	592		1.0	0.22	mg/L	5		6010C	Total/NA
Manganese	5.3	B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Nickel	0.38		0.010	0.0013	mg/L	1		6010C	Total/NA
Potassium	51.1		0.50	0.10	mg/L	1		6010C	Total/NA
Selenium	0.035		0.025	0.0087	mg/L	1		6010C	Total/NA
Silver	0.0022	J	0.0060	0.0017	mg/L	1		6010C	Total/NA
Sodium	38.5		1.0	0.32	mg/L	1		6010C	Total/NA
Vanadium	0.39		0.0050	0.0015	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: City of Tonawanda
Project/Site: 153 Fillmore Avenue Groundwater Analysis

TestAmerica Job ID: 480-103816-1

Client Sample ID: MW-2 (Continued)

Lab Sample ID: 480-103816-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Zinc	2.5		0.010	0.0015	mg/L	1		6010C	Total/NA
Mercury	0.0010		0.00020	0.00012	mg/L	1		7470A	Total/NA

Client Sample ID: MW-5

Lab Sample ID: 480-103816-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	0.39		0.20	0.060	mg/L	1		6010C	Total/NA
Barium	0.13		0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	147		0.50	0.10	mg/L	1		6010C	Total/NA
Chromium	0.0016	J	0.0040	0.0010	mg/L	1		6010C	Total/NA
Copper	0.0027	J	0.010	0.0016	mg/L	1		6010C	Total/NA
Iron	3.8	^	0.050	0.019	mg/L	1		6010C	Total/NA
Lead	0.025		0.010	0.0030	mg/L	1		6010C	Total/NA
Magnesium	31.2		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.22	B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Nickel	0.0097	J	0.010	0.0013	mg/L	1		6010C	Total/NA
Potassium	1.7		0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	15.9		1.0	0.32	mg/L	1		6010C	Total/NA
Zinc	0.30		0.010	0.0015	mg/L	1		6010C	Total/NA

Client Sample ID: MW-6

Lab Sample ID: 480-103816-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	1.6		0.20	0.060	mg/L	1		6010C	Total/NA
Barium	0.22		0.0020	0.00070	mg/L	1		6010C	Total/NA
Cadmium	0.00097	J	0.0020	0.00050	mg/L	1		6010C	Total/NA
Calcium	149		0.50	0.10	mg/L	1		6010C	Total/NA
Chromium	0.0040		0.0040	0.0010	mg/L	1		6010C	Total/NA
Cobalt	0.00087	J	0.0040	0.00063	mg/L	1		6010C	Total/NA
Copper	0.0055	J	0.010	0.0016	mg/L	1		6010C	Total/NA
Iron	8.0	^	0.050	0.019	mg/L	1		6010C	Total/NA
Lead	0.016		0.010	0.0030	mg/L	1		6010C	Total/NA
Magnesium	30.6		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	1.1	B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Nickel	0.0021	J	0.010	0.0013	mg/L	1		6010C	Total/NA
Potassium	4.2		0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	29.5		1.0	0.32	mg/L	1		6010C	Total/NA
Vanadium	0.0027	J	0.0050	0.0015	mg/L	1		6010C	Total/NA
Zinc	0.18		0.010	0.0015	mg/L	1		6010C	Total/NA
Mercury	0.00013	J	0.00020	0.00012	mg/L	1		7470A	Total/NA

Client Sample ID: MW-7

Lab Sample ID: 480-103816-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	40		40	12	ug/L	4		8260C	Total/NA
Methylene Chloride	2.2	J	4.0	1.8	ug/L	4		8260C	Total/NA
Aluminum	7.3		0.20	0.060	mg/L	1		6010C	Total/NA
Barium	0.074		0.0020	0.00070	mg/L	1		6010C	Total/NA
Beryllium	0.00035	J	0.0020	0.00030	mg/L	1		6010C	Total/NA
Cadmium	0.058		0.0020	0.00050	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: City of Tonawanda
Project/Site: 153 Fillmore Avenue Groundwater Analysis

TestAmerica Job ID: 480-103816-1

Client Sample ID: MW-7 (Continued) — Lab Sample ID: 480-103816-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	165		0.50	0.10	mg/L	1		6010C	Total/NA
Chromium	0.015		0.0040	0.0010	mg/L	1		6010C	Total/NA
Cobalt	0.022		0.0040	0.00063	mg/L	1		6010C	Total/NA
Copper	0.33		0.010	0.0016	mg/L	1		6010C	Total/NA
Iron	14.5	^	0.050	0.019	mg/L	1		6010C	Total/NA
Lead	0.45		0.010	0.0030	mg/L	1		6010C	Total/NA
Magnesium	27.5		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	1.6	B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Nickel	0.057		0.010	0.0013	mg/L	1		6010C	Total/NA
Potassium	8.3		0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	35.6		1.0	0.32	mg/L	1		6010C	Total/NA
Vanadium	0.015		0.0050	0.0015	mg/L	1		6010C	Total/NA
Zinc	17.8		0.010	0.0015	mg/L	1		6010C	Total/NA
Mercury	0.00016	J	0.00020	0.00012	mg/L	1		7470A	Total/NA

Client Sample ID: MW-8 — Lab Sample ID: 480-103816-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzene	2.6		1.0	0.41	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	2.8		1.0	0.81	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	1.0		1.0	0.90	ug/L	1		8260C	Total/NA
Vinyl chloride	32		1.0	0.90	ug/L	1		8260C	Total/NA
Aluminum	0.083	J	0.20	0.060	mg/L	1		6010C	Total/NA
Barium	0.11		0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	160		0.50	0.10	mg/L	1		6010C	Total/NA
Iron	1.9	^	0.050	0.019	mg/L	1		6010C	Total/NA
Lead	0.0066	J	0.010	0.0030	mg/L	1		6010C	Total/NA
Magnesium	31.8		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.70	B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Potassium	3.8		0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	44.0		1.0	0.32	mg/L	1		6010C	Total/NA
Zinc	0.036		0.010	0.0015	mg/L	1		6010C	Total/NA

Client Sample ID: FD@MW-6 — Lab Sample ID: 480-103816-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Aluminum	0.45		0.20	0.060	mg/L	1		6010C	Total/NA
Barium	0.22		0.0020	0.00070	mg/L	1		6010C	Total/NA
Calcium	143		0.50	0.10	mg/L	1		6010C	Total/NA
Chromium	0.0014	J	0.0040	0.0010	mg/L	1		6010C	Total/NA
Copper	0.0020	J	0.010	0.0016	mg/L	1		6010C	Total/NA
Iron	6.6	^	0.050	0.019	mg/L	1		6010C	Total/NA
Lead	0.0054	J	0.010	0.0030	mg/L	1		6010C	Total/NA
Magnesium	29.1		0.20	0.043	mg/L	1		6010C	Total/NA
Manganese	0.85	B	0.0030	0.00040	mg/L	1		6010C	Total/NA
Potassium	4.2		0.50	0.10	mg/L	1		6010C	Total/NA
Sodium	32.1		1.0	0.32	mg/L	1		6010C	Total/NA
Zinc	0.11		0.010	0.0015	mg/L	1		6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: City of Tonawanda
Project/Site: 153 Fillmore Avenue Groundwater Analysis

TestAmerica Job ID: 480-103816-1

Client Sample ID: TRIP BLANK **Lab Sample ID: 480-103816-8**

No Detections.

This Detection Summary does not include radiochemical test results.

Client: City of Tonawanda
Project/Site: 153 Fillmore Avenue Groundwater Analysis

TestAmerica Job ID: 480-103816-1

Client Sample ID: MW-1
Date Collected: 07/28/16 15:00
Date Received: 07/28/16 15:45

Lab Sample ID: 480-103816-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/03/16 15:02	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/03/16 15:02	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/03/16 15:02	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/03/16 15:02	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/03/16 15:02	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/03/16 15:02	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/03/16 15:02	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/03/16 15:02	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/03/16 15:02	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/03/16 15:02	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/03/16 15:02	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/03/16 15:02	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/03/16 15:02	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/03/16 15:02	1
2-Hexanone	ND		5.0	1.2	ug/L			08/03/16 15:02	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/03/16 15:02	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/03/16 15:02	1
Acetone	ND		10	3.0	ug/L			08/03/16 15:02	1
Benzene	ND		1.0	0.41	ug/L			08/03/16 15:02	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/03/16 15:02	1
Bromoform	ND		1.0	0.26	ug/L			08/03/16 15:02	1
Bromomethane	ND		1.0	0.69	ug/L			08/03/16 15:02	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/03/16 15:02	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/03/16 15:02	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/03/16 15:02	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/03/16 15:02	1
Chloroethane	ND		1.0	0.32	ug/L			08/03/16 15:02	1
Chloroform	ND		1.0	0.34	ug/L			08/03/16 15:02	1
Chloromethane	ND		1.0	0.35	ug/L			08/03/16 15:02	1
cis-1,2-Dichloroethene	**2.9**		1.0	0.81	ug/L			08/03/16 15:02	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/03/16 15:02	1
Cyclohexane	ND		1.0	0.18	ug/L			08/03/16 15:02	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/03/16 15:02	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/03/16 15:02	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/03/16 15:02	1
Methyl acetate	ND		2.5	1.3	ug/L			08/03/16 15:02	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/03/16 15:02	1
Methylcyclohexane	**0.29**	**J**	1.0	0.16	ug/L			08/03/16 15:02	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/03/16 15:02	1
Styrene	ND		1.0	0.73	ug/L			08/03/16 15:02	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/03/16 15:02	1
Toluene	ND		1.0	0.51	ug/L			08/03/16 15:02	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/03/16 15:02	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/03/16 15:02	1
Trichloroethene	ND		1.0	0.46	ug/L			08/03/16 15:02	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/03/16 15:02	1
Vinyl chloride	**0.96**	**J**	1.0	0.90	ug/L			08/03/16 15:02	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/03/16 15:02	1

Client Sample ID: MW-1
Lab Sample ID: 480-103816-1

Date Collected: 07/28/16 15:00
Matrix: Water
Date Received: 07/28/16 15:45

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*08/03/16 15:02*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*08/03/16 15:02*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*08/03/16 15:02*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*08/03/16 15:02*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**81.5**		0.20	0.060	mg/L		07/29/16 08:50	07/29/16 23:57	1
Antimony	ND		0.020	0.0068	mg/L		07/29/16 08:50	07/29/16 23:57	1
Arsenic	**0.55**		0.015	0.0056	mg/L		07/29/16 08:50	07/29/16 23:57	1
Barium	**0.85**		0.0020	0.00070	mg/L		07/29/16 08:50	07/29/16 23:57	1
Beryllium	**0.0043**		0.0020	0.00030	mg/L		07/29/16 08:50	07/29/16 23:57	1
Cadmium	**0.016**		0.0020	0.00050	mg/L		07/29/16 08:50	07/29/16 23:57	1
Calcium	**293**		0.50	0.10	mg/L		07/29/16 08:50	07/29/16 23:57	1
Chromium	**0.12**		0.0040	0.0010	mg/L		07/29/16 08:50	07/29/16 23:57	1
Cobalt	**0.067**		0.0040	0.00063	mg/L		07/29/16 08:50	07/29/16 23:57	1
Copper	**0.20**		0.010	0.0016	mg/L		07/29/16 08:50	07/29/16 23:57	1
Iron	**276**	^	0.050	0.019	mg/L		07/29/16 08:50	07/29/16 23:57	1
Lead	**0.14**		0.010	0.0030	mg/L		07/29/16 08:50	07/29/16 23:57	1
Magnesium	**78.2**		0.20	0.043	mg/L		07/29/16 08:50	07/29/16 23:57	1
Manganese	**4.5**	B	0.0030	0.00040	mg/L		07/29/16 08:50	07/29/16 23:57	1
Nickel	**0.16**		0.010	0.0013	mg/L		07/29/16 08:50	07/29/16 23:57	1
Potassium	**20.6**		0.50	0.10	mg/L		07/29/16 08:50	07/29/16 23:57	1
Selenium	**0.031**		0.025	0.0087	mg/L		07/29/16 08:50	07/29/16 23:57	1
Silver	ND		0.0060	0.0017	mg/L		07/29/16 08:50	07/29/16 23:57	1
Sodium	**48.4**		1.0	0.32	mg/L		07/29/16 08:50	07/29/16 23:57	1
Thallium	ND		0.020	0.010	mg/L		07/29/16 08:50	07/29/16 23:57	1
Vanadium	**0.17**		0.0050	0.0015	mg/L		07/29/16 08:50	07/29/16 23:57	1
Zinc	**0.80**		0.010	0.0015	mg/L		08/04/16 12:26	08/05/16 11:24	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00017**	J	0.00020	0.00012	mg/L		07/29/16 07:30	07/29/16 13:15	1

Client Sample ID: MW-2
Lab Sample ID: 480-103816-2

Date Collected: 07/28/16 15:30
Matrix: Water
Date Received: 07/28/16 15:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/03/16 15:28	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/03/16 15:28	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/03/16 15:28	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/03/16 15:28	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/03/16 15:28	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/03/16 15:28	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/03/16 15:28	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/03/16 15:28	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/03/16 15:28	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/03/16 15:28	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/03/16 15:28	1

Client Sample ID: MW-2
Date Collected: 07/28/16 15:30
Date Received: 07/28/16 15:45

Lab Sample ID: 480-103816-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/03/16 15:28	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/03/16 15:28	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/03/16 15:28	1
2-Hexanone	ND		5.0	1.2	ug/L			08/03/16 15:28	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/03/16 15:28	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/03/16 15:28	1
Acetone	ND		10	3.0	ug/L			08/03/16 15:28	1
Benzene	**3.4**		1.0	0.41	ug/L			08/03/16 15:28	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/03/16 15:28	1
Bromoform	ND		1.0	0.26	ug/L			08/03/16 15:28	1
Bromomethane	ND		1.0	0.69	ug/L			08/03/16 15:28	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/03/16 15:28	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/03/16 15:28	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/03/16 15:28	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/03/16 15:28	1
Chloroethane	ND		1.0	0.32	ug/L			08/03/16 15:28	1
Chloroform	ND		1.0	0.34	ug/L			08/03/16 15:28	1
Chloromethane	ND		1.0	0.35	ug/L			08/03/16 15:28	1
cis-1,2-Dichloroethene	**1.7**		1.0	0.81	ug/L			08/03/16 15:28	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/03/16 15:28	1
Cyclohexane	**2.8**		1.0	0.18	ug/L			08/03/16 15:28	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/03/16 15:28	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/03/16 15:28	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/03/16 15:28	1
Methyl acetate	ND		2.5	1.3	ug/L			08/03/16 15:28	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/03/16 15:28	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/03/16 15:28	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/03/16 15:28	1
Styrene	ND		1.0	0.73	ug/L			08/03/16 15:28	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/03/16 15:28	1
Toluene	ND		1.0	0.51	ug/L			08/03/16 15:28	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/03/16 15:28	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/03/16 15:28	1
Trichloroethene	ND		1.0	0.46	ug/L			08/03/16 15:28	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/03/16 15:28	1
Vinyl chloride	**14**		1.0	0.90	ug/L			08/03/16 15:28	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/03/16 15:28	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*08/03/16 15:28*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*08/03/16 15:28*	*1*
4-Bromofluorobenzene (Surr)	*107*		*73 - 120*		*08/03/16 15:28*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*08/03/16 15:28*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**187**		0.20	0.060	mg/L		07/29/16 08:50	07/30/16 00:01	1
Antimony	ND		0.020	0.0068	mg/L		07/29/16 08:50	07/30/16 00:01	1
Arsenic	**0.16**		0.015	0.0056	mg/L		07/29/16 08:50	07/30/16 00:01	1
Barium	**2.1**		0.0020	0.00070	mg/L		07/29/16 08:50	07/30/16 00:01	1

Client Sample ID: MW-2

Lab Sample ID: 480-103816-2

Date Collected: 07/28/16 15:30

Matrix: Water

Date Received: 07/28/16 15:45

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	0.0079		0.0020	0.00030	mg/L		07/29/16 08:50	07/30/16 00:01	1
Cadmium	0.0074		0.0020	0.00050	mg/L		07/29/16 08:50	07/30/16 00:01	1
Calcium	954		0.50	0.10	mg/L		07/29/16 08:50	07/30/16 00:01	1
Chromium	0.28		0.0040	0.0010	mg/L		07/29/16 08:50	07/30/16 00:01	1
Cobalt	0.15		0.0040	0.00063	mg/L		07/29/16 08:50	07/30/16 00:01	1
Copper	0.74		0.010	0.0016	mg/L		07/29/16 08:50	07/30/16 00:01	1
Iron	323	^	0.050	0.019	mg/L		07/29/16 08:50	07/30/16 00:01	1
Lead	0.49		0.010	0.0030	mg/L		07/29/16 08:50	07/30/16 00:01	1
Magnesium	592		1.0	0.22	mg/L		07/29/16 08:50	08/04/16 15:54	5
Manganese	5.3	B	0.0030	0.00040	mg/L		07/29/16 08:50	07/30/16 00:01	1
Nickel	0.38		0.010	0.0013	mg/L		07/29/16 08:50	07/30/16 00:01	1
Potassium	51.1		0.50	0.10	mg/L		07/29/16 08:50	07/30/16 00:01	1
Selenium	0.035		0.025	0.0087	mg/L		07/29/16 08:50	07/30/16 00:01	1
Silver	0.0022	J	0.0060	0.0017	mg/L		07/29/16 08:50	07/30/16 00:01	1
Sodium	38.5		1.0	0.32	mg/L		07/29/16 08:50	07/30/16 00:01	1
Thallium	ND		0.020	0.010	mg/L		07/29/16 08:50	07/30/16 00:01	1
Vanadium	0.39		0.0050	0.0015	mg/L		07/29/16 08:50	07/30/16 00:01	1
Zinc	2.5		0.010	0.0015	mg/L		08/04/16 12:26	08/05/16 11:27	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0010		0.00020	0.00012	mg/L		07/29/16 07:30	07/29/16 13:17	1

Client Sample ID: MW-5

Lab Sample ID: 480-103816-3

Date Collected: 07/28/16 11:00

Matrix: Water

Date Received: 07/28/16 15:45

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	0.39		0.20	0.060	mg/L		07/29/16 08:50	07/30/16 00:04	1
Antimony	ND		0.020	0.0068	mg/L		07/29/16 08:50	07/30/16 00:04	1
Arsenic	ND		0.015	0.0056	mg/L		07/29/16 08:50	07/30/16 00:04	1
Barium	0.13		0.0020	0.00070	mg/L		07/29/16 08:50	07/30/16 00:04	1
Beryllium	ND		0.0020	0.00030	mg/L		07/29/16 08:50	07/30/16 00:04	1
Cadmium	ND		0.0020	0.00050	mg/L		07/29/16 08:50	07/30/16 00:04	1
Calcium	147		0.50	0.10	mg/L		07/29/16 08:50	07/30/16 00:04	1
Chromium	0.0016	J	0.0040	0.0010	mg/L		07/29/16 08:50	07/30/16 00:04	1
Cobalt	ND		0.0040	0.00063	mg/L		07/29/16 08:50	07/30/16 00:04	1
Copper	0.0027	J	0.010	0.0016	mg/L		07/29/16 08:50	07/30/16 00:04	1
Iron	3.8	^	0.050	0.019	mg/L		07/29/16 08:50	07/30/16 00:04	1
Lead	0.025		0.010	0.0030	mg/L		07/29/16 08:50	07/30/16 00:04	1
Magnesium	31.2		0.20	0.043	mg/L		07/29/16 08:50	07/30/16 00:04	1
Manganese	0.22	B	0.0030	0.00040	mg/L		07/29/16 08:50	07/30/16 00:04	1
Nickel	0.0097	J	0.010	0.0013	mg/L		07/29/16 08:50	07/30/16 00:04	1
Potassium	1.7		0.50	0.10	mg/L		07/29/16 08:50	07/30/16 00:04	1
Selenium	ND		0.025	0.0087	mg/L		07/29/16 08:50	07/30/16 00:04	1
Silver	ND		0.0060	0.0017	mg/L		07/29/16 08:50	07/30/16 00:04	1
Sodium	15.9		1.0	0.32	mg/L		07/29/16 08:50	07/30/16 00:04	1
Thallium	ND		0.020	0.010	mg/L		07/29/16 08:50	07/30/16 00:04	1
Vanadium	ND		0.0050	0.0015	mg/L		07/29/16 08:50	07/30/16 00:04	1

Client Sample ID: MW-5
Lab Sample ID: 480-103816-3
Date Collected: 07/28/16 11:00
Matrix: Water
Date Received: 07/28/16 15:45

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	0.30		0.010	0.0015	mg/L		08/03/16 09:15	08/03/16 19:36	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		07/29/16 07:30	07/29/16 13:19	1

Client Sample ID: MW-6
Lab Sample ID: 480-103816-4
Date Collected: 07/28/16 11:30
Matrix: Water
Date Received: 07/28/16 15:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/03/16 15:55	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/03/16 15:55	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/03/16 15:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/03/16 15:55	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/03/16 15:55	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/03/16 15:55	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/03/16 15:55	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/03/16 15:55	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/03/16 15:55	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/03/16 15:55	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/03/16 15:55	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/03/16 15:55	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/03/16 15:55	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/03/16 15:55	1
2-Hexanone	ND		5.0	1.2	ug/L			08/03/16 15:55	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/03/16 15:55	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/03/16 15:55	1
Acetone	ND		10	3.0	ug/L			08/03/16 15:55	1
Benzene	ND		1.0	0.41	ug/L			08/03/16 15:55	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/03/16 15:55	1
Bromoform	ND		1.0	0.26	ug/L			08/03/16 15:55	1
Bromomethane	ND		1.0	0.69	ug/L			08/03/16 15:55	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/03/16 15:55	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/03/16 15:55	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/03/16 15:55	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/03/16 15:55	1
Chloroethane	ND		1.0	0.32	ug/L			08/03/16 15:55	1
Chloroform	ND		1.0	0.34	ug/L			08/03/16 15:55	1
Chloromethane	ND		1.0	0.35	ug/L			08/03/16 15:55	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/03/16 15:55	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/03/16 15:55	1
Cyclohexane	ND		1.0	0.18	ug/L			08/03/16 15:55	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/03/16 15:55	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/03/16 15:55	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/03/16 15:55	1
Methyl acetate	ND		2.5	1.3	ug/L			08/03/16 15:55	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/03/16 15:55	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/03/16 15:55	1

Client: City of Tonawanda
Project/Site: 153 Fillmore Avenue Groundwater Analysis

TestAmerica Job ID: 480-103816-1

Client Sample ID: MW-6
Date Collected: 07/28/16 11:30
Date Received: 07/28/16 15:45

Lab Sample ID: 480-103816-4
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Methylene Chloride	ND		1.0	0.44	ug/L			08/03/16 15:55	1
Styrene	ND		1.0	0.73	ug/L			08/03/16 15:55	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/03/16 15:55	1
Toluene	ND		1.0	0.51	ug/L			08/03/16 15:55	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/03/16 15:55	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/03/16 15:55	1
Trichloroethene	ND		1.0	0.46	ug/L			08/03/16 15:55	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/03/16 15:55	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/03/16 15:55	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/03/16 15:55	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*08/03/16 15:55*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*08/03/16 15:55*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*08/03/16 15:55*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*08/03/16 15:55*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**1.6**		0.20	0.060	mg/L		07/29/16 08:50	07/30/16 00:30	1
Antimony	ND		0.020	0.0068	mg/L		07/29/16 08:50	07/30/16 00:30	1
Arsenic	ND		0.015	0.0056	mg/L		07/29/16 08:50	07/30/16 00:30	1
Barium	**0.22**		0.0020	0.00070	mg/L		07/29/16 08:50	07/30/16 00:30	1
Beryllium	ND		0.0020	0.00030	mg/L		07/29/16 08:50	07/30/16 00:30	1
Cadmium	**0.00097**	**J**	0.0020	0.00050	mg/L		07/29/16 08:50	07/30/16 00:30	1
Calcium	**149**		0.50	0.10	mg/L		07/29/16 08:50	07/30/16 00:30	1
Chromium	**0.0040**		0.0040	0.0010	mg/L		07/29/16 08:50	07/30/16 00:30	1
Cobalt	**0.00087**	**J**	0.0040	0.00063	mg/L		07/29/16 08:50	07/30/16 00:30	1
Copper	**0.0055**	**J**	0.010	0.0016	mg/L		07/29/16 08:50	07/30/16 00:30	1
Iron	**8.0**	**^**	0.050	0.019	mg/L		07/29/16 08:50	07/30/16 00:30	1
Lead	**0.016**		0.010	0.0030	mg/L		07/29/16 08:50	07/30/16 00:30	1
Magnesium	**30.6**		0.20	0.043	mg/L		07/29/16 08:50	07/30/16 00:30	1
Manganese	**1.1**	**B**	0.0030	0.00040	mg/L		07/29/16 08:50	07/30/16 00:30	1
Nickel	**0.0021**	**J**	0.010	0.0013	mg/L		07/29/16 08:50	07/30/16 00:30	1
Potassium	**4.2**		0.50	0.10	mg/L		07/29/16 08:50	07/30/16 00:30	1
Selenium	ND		0.025	0.0087	mg/L		07/29/16 08:50	07/30/16 00:30	1
Silver	ND		0.0060	0.0017	mg/L		07/29/16 08:50	07/30/16 00:30	1
Sodium	**29.5**		1.0	0.32	mg/L		07/29/16 08:50	07/30/16 00:30	1
Thallium	ND		0.020	0.010	mg/L		07/29/16 08:50	07/30/16 00:30	1
Vanadium	**0.0027**	**J**	0.0050	0.0015	mg/L		07/29/16 08:50	07/30/16 00:30	1
Zinc	**0.18**		0.010	0.0015	mg/L		08/03/16 09:15	08/03/16 19:40	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00013**	**J**	0.00020	0.00012	mg/L		07/29/16 07:30	07/29/16 13:21	1

Client: City of Tonawanda
Project/Site: 153 Fillmore Avenue Groundwater Analysis

TestAmerica Job ID: 480-103816-1

Client Sample ID: MW-7
Date Collected: 07/28/16 12:45
Date Received: 07/28/16 15:45

Lab Sample ID: 480-103816-5
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			08/03/16 16:22	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			08/03/16 16:22	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			08/03/16 16:22	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			08/03/16 16:22	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			08/03/16 16:22	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			08/03/16 16:22	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			08/03/16 16:22	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			08/03/16 16:22	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			08/03/16 16:22	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			08/03/16 16:22	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			08/03/16 16:22	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			08/03/16 16:22	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			08/03/16 16:22	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			08/03/16 16:22	4
2-Hexanone	ND		20	5.0	ug/L			08/03/16 16:22	4
2-Butanone (MEK)	ND		40	5.3	ug/L			08/03/16 16:22	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			08/03/16 16:22	4
Acetone	**40**		40	12	ug/L			08/03/16 16:22	4
Benzene	ND		4.0	1.6	ug/L			08/03/16 16:22	4
Bromodichloromethane	ND		4.0	1.6	ug/L			08/03/16 16:22	4
Bromoform	ND		4.0	1.0	ug/L			08/03/16 16:22	4
Bromomethane	ND		4.0	2.8	ug/L			08/03/16 16:22	4
Carbon disulfide	ND		4.0	0.76	ug/L			08/03/16 16:22	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			08/03/16 16:22	4
Chlorobenzene	ND		4.0	3.0	ug/L			08/03/16 16:22	4
Dibromochloromethane	ND		4.0	1.3	ug/L			08/03/16 16:22	4
Chloroethane	ND		4.0	1.3	ug/L			08/03/16 16:22	4
Chloroform	ND		4.0	1.4	ug/L			08/03/16 16:22	4
Chloromethane	ND		4.0	1.4	ug/L			08/03/16 16:22	4
cis-1,2-Dichloroethene	ND		4.0	3.2	ug/L			08/03/16 16:22	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			08/03/16 16:22	4
Cyclohexane	ND		4.0	0.72	ug/L			08/03/16 16:22	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			08/03/16 16:22	4
Ethylbenzene	ND		4.0	3.0	ug/L			08/03/16 16:22	4
Isopropylbenzene	ND		4.0	3.2	ug/L			08/03/16 16:22	4
Methyl acetate	ND		10	5.2	ug/L			08/03/16 16:22	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			08/03/16 16:22	4
Methylcyclohexane	ND		4.0	0.64	ug/L			08/03/16 16:22	4
Methylene Chloride	**2.2**	**J**	4.0	1.8	ug/L			08/03/16 16:22	4
Styrene	ND		4.0	2.9	ug/L			08/03/16 16:22	4
Tetrachloroethene	ND		4.0	1.4	ug/L			08/03/16 16:22	4
Toluene	ND		4.0	2.0	ug/L			08/03/16 16:22	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			08/03/16 16:22	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			08/03/16 16:22	4
Trichloroethene	ND		4.0	1.8	ug/L			08/03/16 16:22	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			08/03/16 16:22	4
Vinyl chloride	ND		4.0	3.6	ug/L			08/03/16 16:22	4
Xylenes, Total	ND		8.0	2.6	ug/L			08/03/16 16:22	4

Client Sample ID: MW-7

Lab Sample ID: 480-103816-5

Date Collected: 07/28/16 12:45

Matrix: Water

Date Received: 07/28/16 15:45

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*08/03/16 16:22*	*4*
Toluene-d8 (Surr)	*95*		*80 - 120*		*08/03/16 16:22*	*4*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*08/03/16 16:22*	*4*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*08/03/16 16:22*	*4*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**7.3**		0.20	0.060	mg/L		07/29/16 08:50	07/30/16 00:34	1
Antimony	ND		0.020	0.0068	mg/L		07/29/16 08:50	07/30/16 00:34	1
Arsenic	ND		0.015	0.0056	mg/L		07/29/16 08:50	07/30/16 00:34	1
Barium	**0.074**		0.0020	0.00070	mg/L		07/29/16 08:50	07/30/16 00:34	1
Beryllium	**0.00035**	**J**	0.0020	0.00030	mg/L		07/29/16 08:50	07/30/16 00:34	1
Cadmium	**0.058**		0.0020	0.00050	mg/L		07/29/16 08:50	07/30/16 00:34	1
Calcium	**165**		0.50	0.10	mg/L		07/29/16 08:50	07/30/16 00:34	1
Chromium	**0.015**		0.0040	0.0010	mg/L		07/29/16 08:50	07/30/16 00:34	1
Cobalt	**0.022**		0.0040	0.00063	mg/L		07/29/16 08:50	07/30/16 00:34	1
Copper	**0.33**		0.010	0.0016	mg/L		07/29/16 08:50	07/30/16 00:34	1
Iron	**14.5**	**^**	0.050	0.019	mg/L		07/29/16 08:50	07/30/16 00:34	1
Lead	**0.45**		0.010	0.0030	mg/L		07/29/16 08:50	07/30/16 00:34	1
Magnesium	**27.5**		0.20	0.043	mg/L		07/29/16 08:50	07/30/16 00:34	1
Manganese	**1.6**	**B**	0.0030	0.00040	mg/L		07/29/16 08:50	07/30/16 00:34	1
Nickel	**0.057**		0.010	0.0013	mg/L		07/29/16 08:50	07/30/16 00:34	1
Potassium	**8.3**		0.50	0.10	mg/L		07/29/16 08:50	07/30/16 00:34	1
Selenium	ND		0.025	0.0087	mg/L		07/29/16 08:50	07/30/16 00:34	1
Silver	ND		0.0060	0.0017	mg/L		07/29/16 08:50	07/30/16 00:34	1
Sodium	**35.6**		1.0	0.32	mg/L		07/29/16 08:50	07/30/16 00:34	1
Thallium	ND		0.020	0.010	mg/L		07/29/16 08:50	07/30/16 00:34	1
Vanadium	**0.015**		0.0050	0.0015	mg/L		07/29/16 08:50	07/30/16 00:34	1
Zinc	**17.8**		0.010	0.0015	mg/L		08/03/16 09:15	08/04/16 21:39	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.00016**	**J**	0.00020	0.00012	mg/L		07/29/16 07:30	07/29/16 13:22	1

Client Sample ID: MW-8

Lab Sample ID: 480-103816-6

Date Collected: 07/28/16 12:00

Matrix: Water

Date Received: 07/28/16 15:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/03/16 16:49	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/03/16 16:49	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/03/16 16:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/03/16 16:49	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/03/16 16:49	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/03/16 16:49	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/03/16 16:49	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/03/16 16:49	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/03/16 16:49	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/03/16 16:49	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/03/16 16:49	1

Client Sample ID: MW-8
Date Collected: 07/28/16 12:00
Date Received: 07/28/16 15:45

Lab Sample ID: 480-103816-6
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/03/16 16:49	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/03/16 16:49	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/03/16 16:49	1
2-Hexanone	ND		5.0	1.2	ug/L			08/03/16 16:49	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/03/16 16:49	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/03/16 16:49	1
Acetone	ND		10	3.0	ug/L			08/03/16 16:49	1
Benzene	**2.6**		1.0	0.41	ug/L			08/03/16 16:49	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/03/16 16:49	1
Bromoform	ND		1.0	0.26	ug/L			08/03/16 16:49	1
Bromomethane	ND		1.0	0.69	ug/L			08/03/16 16:49	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/03/16 16:49	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/03/16 16:49	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/03/16 16:49	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/03/16 16:49	1
Chloroethane	ND		1.0	0.32	ug/L			08/03/16 16:49	1
Chloroform	ND		1.0	0.34	ug/L			08/03/16 16:49	1
Chloromethane	ND		1.0	0.35	ug/L			08/03/16 16:49	1
cis-1,2-Dichloroethene	**2.8**		1.0	0.81	ug/L			08/03/16 16:49	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/03/16 16:49	1
Cyclohexane	ND		1.0	0.18	ug/L			08/03/16 16:49	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/03/16 16:49	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/03/16 16:49	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/03/16 16:49	1
Methyl acetate	ND		2.5	1.3	ug/L			08/03/16 16:49	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/03/16 16:49	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/03/16 16:49	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/03/16 16:49	1
Styrene	ND		1.0	0.73	ug/L			08/03/16 16:49	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/03/16 16:49	1
Toluene	ND		1.0	0.51	ug/L			08/03/16 16:49	1
trans-1,2-Dichloroethene	**1.0**		1.0	0.90	ug/L			08/03/16 16:49	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/03/16 16:49	1
Trichloroethene	ND		1.0	0.46	ug/L			08/03/16 16:49	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/03/16 16:49	1
Vinyl chloride	**32**		1.0	0.90	ug/L			08/03/16 16:49	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/03/16 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*08/03/16 16:49*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*08/03/16 16:49*	*1*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*08/03/16 16:49*	*1*
Dibromofluoromethane (Surr)	*103*		*75 - 123*		*08/03/16 16:49*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.083**	**J**	0.20	0.060	mg/L		07/29/16 08:50	07/30/16 00:37	1
Antimony	ND		0.020	0.0068	mg/L		07/29/16 08:50	07/30/16 00:37	1
Arsenic	ND		0.015	0.0056	mg/L		07/29/16 08:50	07/30/16 00:37	1
Barium	**0.11**		0.0020	0.00070	mg/L		07/29/16 08:50	07/30/16 00:37	1

Client Sample ID: MW-8

Lab Sample ID: 480-103816-6

Date Collected: 07/28/16 12:00

Matrix: Water

Date Received: 07/28/16 15:45

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	ND		0.0020	0.00030	mg/L		07/29/16 08:50	07/30/16 00:37	1
Cadmium	ND		0.0020	0.00050	mg/L		07/29/16 08:50	07/30/16 00:37	1
Calcium	**160**		0.50	0.10	mg/L		07/29/16 08:50	07/30/16 00:37	1
Chromium	ND		0.0040	0.0010	mg/L		07/29/16 08:50	07/30/16 00:37	1
Cobalt	ND		0.0040	0.00063	mg/L		07/29/16 08:50	07/30/16 00:37	1
Copper	ND		0.010	0.0016	mg/L		07/29/16 08:50	07/30/16 00:37	1
Iron	**1.9**	**^**	0.050	0.019	mg/L		07/29/16 08:50	07/30/16 00:37	1
Lead	**0.0066**	**J**	0.010	0.0030	mg/L		07/29/16 08:50	07/30/16 00:37	1
Magnesium	**31.8**		0.20	0.043	mg/L		07/29/16 08:50	07/30/16 00:37	1
Manganese	**0.70**	**B**	0.0030	0.00040	mg/L		07/29/16 08:50	07/30/16 00:37	1
Nickel	ND		0.010	0.0013	mg/L		07/29/16 08:50	07/30/16 00:37	1
Potassium	**3.8**		0.50	0.10	mg/L		07/29/16 08:50	07/30/16 00:37	1
Selenium	ND		0.025	0.0087	mg/L		07/29/16 08:50	07/30/16 00:37	1
Silver	ND		0.0060	0.0017	mg/L		07/29/16 08:50	07/30/16 00:37	1
Sodium	**44.0**		1.0	0.32	mg/L		07/29/16 08:50	07/30/16 00:37	1
Thallium	ND		0.020	0.010	mg/L		07/29/16 08:50	07/30/16 00:37	1
Vanadium	ND		0.0050	0.0015	mg/L		07/29/16 08:50	07/30/16 00:37	1
Zinc	**0.036**		0.010	0.0015	mg/L		08/03/16 09:15	08/04/16 21:42	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		07/29/16 07:30	07/29/16 13:28	1

Client Sample ID: FD@MW-6

Lab Sample ID: 480-103816-7

Date Collected: 07/28/16 11:30

Matrix: Water

Date Received: 07/28/16 15:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/03/16 17:16	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/03/16 17:16	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/03/16 17:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/03/16 17:16	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/03/16 17:16	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/03/16 17:16	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/03/16 17:16	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/03/16 17:16	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/03/16 17:16	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/03/16 17:16	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/03/16 17:16	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/03/16 17:16	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/03/16 17:16	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/03/16 17:16	1
2-Hexanone	ND		5.0	1.2	ug/L			08/03/16 17:16	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/03/16 17:16	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/03/16 17:16	1
Acetone	ND		10	3.0	ug/L			08/03/16 17:16	1
Benzene	ND		1.0	0.41	ug/L			08/03/16 17:16	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/03/16 17:16	1
Bromoform	ND		1.0	0.26	ug/L			08/03/16 17:16	1

Client: City of Tonawanda
Project/Site: 153 Fillmore Avenue Groundwater Analysis

TestAmerica Job ID: 480-103816-1

Client Sample ID: FD@MW-6
Date Collected: 07/28/16 11:30
Date Received: 07/28/16 15:45

Lab Sample ID: 480-103816-7
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bromomethane	ND		1.0	0.69	ug/L			08/03/16 17:16	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/03/16 17:16	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/03/16 17:16	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/03/16 17:16	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/03/16 17:16	1
Chloroethane	ND		1.0	0.32	ug/L			08/03/16 17:16	1
Chloroform	ND		1.0	0.34	ug/L			08/03/16 17:16	1
Chloromethane	ND		1.0	0.35	ug/L			08/03/16 17:16	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/03/16 17:16	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/03/16 17:16	1
Cyclohexane	ND		1.0	0.18	ug/L			08/03/16 17:16	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/03/16 17:16	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/03/16 17:16	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/03/16 17:16	1
Methyl acetate	ND		2.5	1.3	ug/L			08/03/16 17:16	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/03/16 17:16	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/03/16 17:16	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/03/16 17:16	1
Styrene	ND		1.0	0.73	ug/L			08/03/16 17:16	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/03/16 17:16	1
Toluene	ND		1.0	0.51	ug/L			08/03/16 17:16	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/03/16 17:16	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/03/16 17:16	1
Trichloroethene	ND		1.0	0.46	ug/L			08/03/16 17:16	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/03/16 17:16	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/03/16 17:16	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/03/16 17:16	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*08/03/16 17:16*	*1*
Toluene-d8 (Surr)	*94*		*80 - 120*		*08/03/16 17:16*	*1*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*		*08/03/16 17:16*	*1*
Dibromofluoromethane (Surr)	*101*		*75 - 123*		*08/03/16 17:16*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	**0.45**		0.20	0.060	mg/L		07/29/16 08:50	07/30/16 00:40	1
Antimony	ND		0.020	0.0068	mg/L		07/29/16 08:50	07/30/16 00:40	1
Arsenic	ND		0.015	0.0056	mg/L		07/29/16 08:50	07/30/16 00:40	1
Barium	**0.22**		0.0020	0.00070	mg/L		07/29/16 08:50	07/30/16 00:40	1
Beryllium	ND		0.0020	0.00030	mg/L		07/29/16 08:50	07/30/16 00:40	1
Cadmium	ND		0.0020	0.00050	mg/L		07/29/16 08:50	07/30/16 00:40	1
Calcium	**143**		0.50	0.10	mg/L		07/29/16 08:50	07/30/16 00:40	1
Chromium	**0.0014**	**J**	0.0040	0.0010	mg/L		07/29/16 08:50	07/30/16 00:40	1
Cobalt	ND		0.0040	0.00063	mg/L		07/29/16 08:50	07/30/16 00:40	1
Copper	**0.0020**	**J**	0.010	0.0016	mg/L		07/29/16 08:50	07/30/16 00:40	1
Iron	**6.6**	**^**	0.050	0.019	mg/L		07/29/16 08:50	07/30/16 00:40	1
Lead	**0.0054**	**J**	0.010	0.0030	mg/L		07/29/16 08:50	07/30/16 00:40	1
Magnesium	**29.1**		0.20	0.043	mg/L		07/29/16 08:50	07/30/16 00:40	1
Manganese	**0.85**	**B**	0.0030	0.00040	mg/L		07/29/16 08:50	07/30/16 00:40	1

Client Sample ID: FD@MW-6

Lab Sample ID: 480-103816-7
Date Collected: 07/28/16 11:30
Matrix: Water
Date Received: 07/28/16 15:45

Method: 6010C - Metals (ICP) (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Nickel	ND		0.010	0.0013	mg/L		07/29/16 08:50	07/30/16 00:40	1
Potassium	**4.2**		0.50	0.10	mg/L		07/29/16 08:50	07/30/16 00:40	1
Selenium	ND		0.025	0.0087	mg/L		07/29/16 08:50	07/30/16 00:40	1
Silver	ND		0.0060	0.0017	mg/L		07/29/16 08:50	07/30/16 00:40	1
Sodium	**32.1**		1.0	0.32	mg/L		07/29/16 08:50	07/30/16 00:40	1
Thallium	ND		0.020	0.010	mg/L		07/29/16 08:50	07/30/16 00:40	1
Vanadium	ND		0.0050	0.0015	mg/L		07/29/16 08:50	07/30/16 00:40	1
Zinc	**0.11**		0.010	0.0015	mg/L		08/03/16 09:15	08/04/16 21:56	1

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		07/29/16 07:30	07/29/16 13:30	1

Client Sample ID: TRIP BLANK

Lab Sample ID: 480-103816-8
Date Collected: 07/28/16 00:00
Matrix: Water
Date Received: 07/28/16 15:45

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/03/16 17:42	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/03/16 17:42	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/03/16 17:42	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/03/16 17:42	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/03/16 17:42	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/03/16 17:42	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/03/16 17:42	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/03/16 17:42	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/03/16 17:42	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/03/16 17:42	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/03/16 17:42	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/03/16 17:42	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/03/16 17:42	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/03/16 17:42	1
2-Hexanone	ND		5.0	1.2	ug/L			08/03/16 17:42	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/03/16 17:42	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/03/16 17:42	1
Acetone	ND		10	3.0	ug/L			08/03/16 17:42	1
Benzene	ND		1.0	0.41	ug/L			08/03/16 17:42	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/03/16 17:42	1
Bromoform	ND		1.0	0.26	ug/L			08/03/16 17:42	1
Bromomethane	ND		1.0	0.69	ug/L			08/03/16 17:42	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/03/16 17:42	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/03/16 17:42	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/03/16 17:42	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/03/16 17:42	1
Chloroethane	ND		1.0	0.32	ug/L			08/03/16 17:42	1
Chloroform	ND		1.0	0.34	ug/L			08/03/16 17:42	1
Chloromethane	ND		1.0	0.35	ug/L			08/03/16 17:42	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/03/16 17:42	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/03/16 17:42	1

Client: City of Tonawanda
Project/Site: 153 Fillmore Avenue Groundwater Analysis

TestAmerica Job ID: 480-103816-1

Client Sample ID: TRIP BLANK
Date Collected: 07/28/16 00:00
Date Received: 07/28/16 15:45

Lab Sample ID: 480-103816-8
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyclohexane	ND		1.0	0.18	ug/L			08/03/16 17:42	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/03/16 17:42	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/03/16 17:42	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/03/16 17:42	1
Methyl acetate	ND		2.5	1.3	ug/L			08/03/16 17:42	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/03/16 17:42	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/03/16 17:42	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/03/16 17:42	1
Styrene	ND		1.0	0.73	ug/L			08/03/16 17:42	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/03/16 17:42	1
Toluene	ND		1.0	0.51	ug/L			08/03/16 17:42	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/03/16 17:42	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/03/16 17:42	1
Trichloroethene	ND		1.0	0.46	ug/L			08/03/16 17:42	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/03/16 17:42	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/03/16 17:42	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/03/16 17:42	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*08/03/16 17:42*	*1*
Toluene-d8 (Surr)	*93*		*80 - 120*		*08/03/16 17:42*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*08/03/16 17:42*	*1*
Dibromofluoromethane (Surr)	*105*		*75 - 123*		*08/03/16 17:42*	*1*

Surrogate Summary

Client: City of Tonawanda
Project/Site: 153 Fillmore Avenue Groundwater Analysis

TestAmerica Job ID: 480-103816-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(77-120)	(80-120)	(73-120)	(75-123)
480-103816-1	MW-1	104	94	104	103
480-103816-2	MW-2	103	97	107	101
480-103816-4	MW-6	106	94	104	102
480-103816-5	MW-7	106	95	105	103
480-103816-6	MW-8	105	95	105	103
480-103816-7	FD@MW-6	104	94	103	101
480-103816-8	TRIP BLANK	106	93	104	105
LCS 480-314166/5	Lab Control Sample	105	94	105	103
MB 480-314166/7	Method Blank	104	95	105	102

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Client: City of Tonawanda
Project/Site: 153 Fillmore Avenue Groundwater Analysis

TestAmerica Job ID: 480-103816-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-314166/7
Matrix: Water
Analysis Batch: 314166

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			08/03/16 10:59	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			08/03/16 10:59	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			08/03/16 10:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			08/03/16 10:59	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			08/03/16 10:59	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			08/03/16 10:59	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			08/03/16 10:59	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			08/03/16 10:59	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			08/03/16 10:59	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			08/03/16 10:59	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			08/03/16 10:59	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			08/03/16 10:59	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			08/03/16 10:59	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			08/03/16 10:59	1
2-Hexanone	ND		5.0	1.2	ug/L			08/03/16 10:59	1
2-Butanone (MEK)	ND		10	1.3	ug/L			08/03/16 10:59	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			08/03/16 10:59	1
Acetone	ND		10	3.0	ug/L			08/03/16 10:59	1
Benzene	ND		1.0	0.41	ug/L			08/03/16 10:59	1
Bromodichloromethane	ND		1.0	0.39	ug/L			08/03/16 10:59	1
Bromoform	ND		1.0	0.26	ug/L			08/03/16 10:59	1
Bromomethane	ND		1.0	0.69	ug/L			08/03/16 10:59	1
Carbon disulfide	ND		1.0	0.19	ug/L			08/03/16 10:59	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			08/03/16 10:59	1
Chlorobenzene	ND		1.0	0.75	ug/L			08/03/16 10:59	1
Dibromochloromethane	ND		1.0	0.32	ug/L			08/03/16 10:59	1
Chloroethane	ND		1.0	0.32	ug/L			08/03/16 10:59	1
Chloroform	ND		1.0	0.34	ug/L			08/03/16 10:59	1
Chloromethane	ND		1.0	0.35	ug/L			08/03/16 10:59	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			08/03/16 10:59	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			08/03/16 10:59	1
Cyclohexane	ND		1.0	0.18	ug/L			08/03/16 10:59	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			08/03/16 10:59	1
Ethylbenzene	ND		1.0	0.74	ug/L			08/03/16 10:59	1
Isopropylbenzene	ND		1.0	0.79	ug/L			08/03/16 10:59	1
Methyl acetate	ND		2.5	1.3	ug/L			08/03/16 10:59	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			08/03/16 10:59	1
Methylcyclohexane	ND		1.0	0.16	ug/L			08/03/16 10:59	1
Methylene Chloride	ND		1.0	0.44	ug/L			08/03/16 10:59	1
Styrene	ND		1.0	0.73	ug/L			08/03/16 10:59	1
Tetrachloroethene	ND		1.0	0.36	ug/L			08/03/16 10:59	1
Toluene	ND		1.0	0.51	ug/L			08/03/16 10:59	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			08/03/16 10:59	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			08/03/16 10:59	1
Trichloroethene	ND		1.0	0.46	ug/L			08/03/16 10:59	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			08/03/16 10:59	1
Vinyl chloride	ND		1.0	0.90	ug/L			08/03/16 10:59	1
Xylenes, Total	ND		2.0	0.66	ug/L			08/03/16 10:59	1

Client: City of Tonawanda
Project/Site: 153 Fillmore Avenue Groundwater Analysis

TestAmerica Job ID: 480-103816-1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*08/03/16 10:59*	*1*
Toluene-d8 (Surr)	*95*		*80 - 120*		*08/03/16 10:59*	*1*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*08/03/16 10:59*	*1*
Dibromofluoromethane (Surr)	*102*		*75 - 123*		*08/03/16 10:59*	*1*

Lab Sample ID: LCS 480-314166/5
Matrix: Water
Analysis Batch: 314166

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	26.6		ug/L		107	73 - 126
1,1,2,2-Tetrachloroethane	25.0	21.0		ug/L		84	76 - 120
1,1,2-Trichloroethane	25.0	23.2		ug/L		93	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	29.4		ug/L		118	61 - 148
1,1-Dichloroethane	25.0	25.7		ug/L		103	77 - 120
1,1-Dichloroethene	25.0	24.8		ug/L		99	66 - 127
1,2,4-Trichlorobenzene	25.0	22.8		ug/L		91	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	17.3		ug/L		69	56 - 134
1,2-Dibromoethane	25.0	23.0		ug/L		92	77 - 120
1,2-Dichlorobenzene	25.0	25.2		ug/L		101	80 - 124
1,2-Dichloroethane	25.0	25.9		ug/L		104	75 - 120
1,2-Dichloropropane	25.0	25.8		ug/L		103	76 - 120
1,3-Dichlorobenzene	25.0	25.1		ug/L		100	77 - 120
1,4-Dichlorobenzene	25.0	24.7		ug/L		99	80 - 120
2-Hexanone	125	101		ug/L		81	65 - 127
2-Butanone (MEK)	125	107		ug/L		85	57 - 140
4-Methyl-2-pentanone (MIBK)	125	102		ug/L		82	71 - 125
Acetone	125	112		ug/L		90	56 - 142
Benzene	25.0	25.5		ug/L		102	71 - 124
Bromodichloromethane	25.0	23.9		ug/L		96	80 - 122
Bromoform	25.0	18.2		ug/L		73	61 - 132
Bromomethane	25.0	23.8		ug/L		95	55 - 144
Carbon disulfide	25.0	25.8		ug/L		103	59 - 134
Carbon tetrachloride	25.0	26.1		ug/L		104	72 - 134
Chlorobenzene	25.0	25.3		ug/L		101	80 - 120
Dibromochloromethane	25.0	21.1		ug/L		85	75 - 125
Chloroethane	25.0	24.9		ug/L		100	69 - 136
Chloroform	25.0	25.6		ug/L		102	73 - 127
Chloromethane	25.0	26.8		ug/L		107	68 - 124
cis-1,2-Dichloroethene	25.0	26.7		ug/L		107	74 - 124
cis-1,3-Dichloropropene	25.0	25.0		ug/L		100	74 - 124
Cyclohexane	25.0	26.3		ug/L		105	59 - 135
Dichlorodifluoromethane	25.0	30.8		ug/L		123	59 - 135
Ethylbenzene	25.0	24.4		ug/L		97	77 - 123
Isopropylbenzene	25.0	24.4		ug/L		98	77 - 122
Methyl acetate	125	100		ug/L		80	74 - 133
Methyl tert-butyl ether	25.0	23.8		ug/L		95	77 - 120
Methylcyclohexane	25.0	27.6		ug/L		110	68 - 134
Methylene Chloride	25.0	26.2		ug/L		105	75 - 124
Styrene	25.0	24.5		ug/L		98	80 - 120
Tetrachloroethene	25.0	26.0		ug/L		104	74 - 122
Toluene	25.0	23.8		ug/L		95	80 - 122
trans-1,2-Dichloroethene	25.0	26.0		ug/L		104	73 - 127

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

Lab Sample ID: LCS 480-314166/5
Matrix: Water
Analysis Batch: 314166

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Trichloroethene	25.0	26.2		ug/L		105	74 - 123
Trichlorofluoromethane	25.0	28.1		ug/L		112	62 - 150
Vinyl chloride	25.0	27.1		ug/L		108	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*
Toluene-d8 (Surr)	*94*		*80 - 120*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*
Dibromofluoromethane (Surr)	*103*		*75 - 123*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-313521/1-A
Matrix: Water
Analysis Batch: 313783

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 313521

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		0.20	0.060	mg/L		07/29/16 08:50	07/29/16 23:51	1
Antimony	ND		0.020	0.0068	mg/L		07/29/16 08:50	07/29/16 23:51	1
Arsenic	ND		0.015	0.0056	mg/L		07/29/16 08:50	07/29/16 23:51	1
Barium	ND		0.0020	0.00070	mg/L		07/29/16 08:50	07/29/16 23:51	1
Beryllium	ND		0.0020	0.00030	mg/L		07/29/16 08:50	07/29/16 23:51	1
Cadmium	ND		0.0020	0.00050	mg/L		07/29/16 08:50	07/29/16 23:51	1
Calcium	ND		0.50	0.10	mg/L		07/29/16 08:50	07/29/16 23:51	1
Chromium	ND		0.0040	0.0010	mg/L		07/29/16 08:50	07/29/16 23:51	1
Cobalt	ND		0.0040	0.00063	mg/L		07/29/16 08:50	07/29/16 23:51	1
Copper	ND		0.010	0.0016	mg/L		07/29/16 08:50	07/29/16 23:51	1
Iron	ND	^	0.050	0.019	mg/L		07/29/16 08:50	07/29/16 23:51	1
Lead	ND		0.010	0.0030	mg/L		07/29/16 08:50	07/29/16 23:51	1
Magnesium	ND		0.20	0.043	mg/L		07/29/16 08:50	07/29/16 23:51	1
Manganese	0.00105	J	0.0030	0.00040	mg/L		07/29/16 08:50	07/29/16 23:51	1
Nickel	ND		0.010	0.0013	mg/L		07/29/16 08:50	07/29/16 23:51	1
Potassium	ND		0.50	0.10	mg/L		07/29/16 08:50	07/29/16 23:51	1
Selenium	ND		0.025	0.0087	mg/L		07/29/16 08:50	07/29/16 23:51	1
Silver	ND		0.0060	0.0017	mg/L		07/29/16 08:50	07/29/16 23:51	1
Sodium	ND		1.0	0.32	mg/L		07/29/16 08:50	07/29/16 23:51	1
Thallium	ND		0.020	0.010	mg/L		07/29/16 08:50	07/29/16 23:51	1
Vanadium	ND		0.0050	0.0015	mg/L		07/29/16 08:50	07/29/16 23:51	1
Zinc	ND		0.010	0.0015	mg/L		07/29/16 08:50	07/29/16 23:51	1

Lab Sample ID: LCS 480-313521/2-A
Matrix: Water
Analysis Batch: 313783

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 313521

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	10.0	9.90		mg/L		99	80 - 120
Antimony	0.200	0.197		mg/L		99	80 - 120
Arsenic	0.200	0.201		mg/L		101	80 - 120

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCS 480-313521/2-A
Matrix: Water
Analysis Batch: 313783

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 313521

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	0.200	0.199		mg/L		100	80 - 120
Beryllium	0.200	0.205		mg/L		103	80 - 120
Cadmium	0.200	0.204		mg/L		102	80 - 120
Calcium	10.0	10.02		mg/L		100	80 - 120
Chromium	0.200	0.210		mg/L		105	80 - 120
Cobalt	0.200	0.196		mg/L		98	80 - 120
Copper	0.200	0.212		mg/L		106	80 - 120
Iron	10.0	10.33	^	mg/L		103	80 - 120
Lead	0.200	0.205		mg/L		103	80 - 120
Magnesium	10.0	10.43		mg/L		104	80 - 120
Manganese	0.200	0.214		mg/L		107	80 - 120
Nickel	0.200	0.193		mg/L		97	80 - 120
Potassium	10.0	10.58		mg/L		106	80 - 120
Selenium	0.200	0.196		mg/L		98	80 - 120
Silver	0.0500	0.0516		mg/L		103	80 - 120
Sodium	10.0	10.24		mg/L		102	80 - 120
Thallium	0.200	0.201		mg/L		100	80 - 120
Vanadium	0.200	0.205		mg/L		102	80 - 120

Lab Sample ID: 480-103816-3 MS
Matrix: Water
Analysis Batch: 313783

Client Sample ID: MW-5
Prep Type: Total/NA
Prep Batch: 313521

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Aluminum	0.39		10.0	10.22		mg/L		98	75 - 125
Antimony	ND		0.200	0.194		mg/L		97	75 - 125
Arsenic	ND		0.200	0.200		mg/L		100	75 - 125
Barium	0.13		0.200	0.322		mg/L		97	75 - 125
Beryllium	ND		0.200	0.206		mg/L		103	75 - 125
Cadmium	ND		0.200	0.203		mg/L		102	75 - 125
Calcium	147		10.0	155.0	4	mg/L		77	75 - 125
Chromium	0.0016	J	0.200	0.206		mg/L		102	75 - 125
Cobalt	ND		0.200	0.197		mg/L		99	75 - 125
Copper	0.0027	J	0.200	0.213		mg/L		105	75 - 125
Iron	3.8	^	10.0	13.69	^	mg/L		99	75 - 125
Lead	0.025		0.200	0.234		mg/L		105	75 - 125
Magnesium	31.2		10.0	40.91		mg/L		97	75 - 125
Manganese	0.22	B	0.200	0.416		mg/L		99	75 - 125
Nickel	0.0097	J	0.200	0.203		mg/L		96	75 - 125
Potassium	1.7		10.0	12.38		mg/L		106	75 - 125
Selenium	ND		0.200	0.192		mg/L		96	75 - 125
Silver	ND		0.0500	0.0507		mg/L		101	75 - 125
Sodium	15.9		10.0	25.91		mg/L		100	75 - 125
Thallium	ND		0.200	0.201		mg/L		100	75 - 125
Vanadium	ND		0.200	0.204		mg/L		102	75 - 125

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: 480-103816-3 MSD — **Client Sample ID: MW-5**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 313783 — **Prep Batch: 313521**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Aluminum	0.39		10.0	10.35		mg/L		100	75 - 125	1	20
Antimony	ND		0.200	0.198		mg/L		99	75 - 125	2	20
Arsenic	ND		0.200	0.203		mg/L		102	75 - 125	2	20
Barium	0.13		0.200	0.327		mg/L		99	75 - 125	2	20
Beryllium	ND		0.200	0.209		mg/L		104	75 - 125	2	20
Cadmium	ND		0.200	0.205		mg/L		103	75 - 125	1	20
Calcium	147		10.0	158.6	4	mg/L		113	75 - 125	2	20
Chromium	0.0016	J	0.200	0.208		mg/L		103	75 - 125	1	20
Cobalt	ND		0.200	0.201		mg/L		100	75 - 125	2	20
Copper	0.0027	J	0.200	0.217		mg/L		107	75 - 125	2	20
Iron	3.8	^	10.0	13.87	^	mg/L		101	75 - 125	1	20
Lead	0.025		0.200	0.236		mg/L		105	75 - 125	1	20
Magnesium	31.2		10.0	41.54		mg/L		103	75 - 125	2	20
Manganese	0.22	B	0.200	0.423		mg/L		102	75 - 125	2	20
Nickel	0.0097	J	0.200	0.206		mg/L		98	75 - 125	2	20
Potassium	1.7		10.0	12.44		mg/L		107	75 - 125	1	20
Selenium	ND		0.200	0.201		mg/L		100	75 - 125	4	20
Silver	ND		0.0500	0.0517		mg/L		103	75 - 125	2	20
Sodium	15.9		10.0	26.46		mg/L		106	75 - 125	2	20
Thallium	ND		0.200	0.204		mg/L		102	75 - 125	1	20
Vanadium	ND		0.200	0.207		mg/L		104	75 - 125	1	20

Lab Sample ID: MB 480-314147/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 314411 — **Prep Batch: 314147**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.010	0.0015	mg/L		08/03/16 09:15	08/03/16 18:16	1

Lab Sample ID: LCS 480-314147/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 314411 — **Prep Batch: 314147**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	0.200	0.202		mg/L		101	80 - 120

Lab Sample ID: MB 480-314451/1-A — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 314705 — **Prep Batch: 314451**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Zinc	ND		0.010	0.0015	mg/L		08/04/16 12:26	08/05/16 10:12	1

Lab Sample ID: LCS 480-314451/2-A — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 314705 — **Prep Batch: 314451**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Zinc	0.200	0.204		mg/L		102	80 - 120

Client: City of Tonawanda
Project/Site: 153 Fillmore Avenue Groundwater Analysis

TestAmerica Job ID: 480-103816-1

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 480-313508/1-A
Matrix: Water
Analysis Batch: 313614

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 313508

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.00012	mg/L		07/29/16 07:30	07/29/16 13:12	1

Lab Sample ID: LCS 480-313508/2-A
Matrix: Water
Analysis Batch: 313614

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 313508

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00667	0.00687		mg/L		103	80 - 120

GC/MS VOA

Analysis Batch: 314166

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-103816-1	MW-1	Total/NA	Water	8260C	
480-103816-2	MW-2	Total/NA	Water	8260C	
480-103816-4	MW-6	Total/NA	Water	8260C	
480-103816-5	MW-7	Total/NA	Water	8260C	
480-103816-6	MW-8	Total/NA	Water	8260C	
480-103816-7	FD@MW-6	Total/NA	Water	8260C	
480-103816-8	TRIP BLANK	Total/NA	Water	8260C	
MB 480-314166/7	Method Blank	Total/NA	Water	8260C	
LCS 480-314166/5	Lab Control Sample	Total/NA	Water	8260C	

Metals

Prep Batch: 313508

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-103816-1	MW-1	Total/NA	Water	7470A	
480-103816-2	MW-2	Total/NA	Water	7470A	
480-103816-3	MW-5	Total/NA	Water	7470A	
480-103816-4	MW-6	Total/NA	Water	7470A	
480-103816-5	MW-7	Total/NA	Water	7470A	
480-103816-6	MW-8	Total/NA	Water	7470A	
480-103816-7	FD@MW-6	Total/NA	Water	7470A	
MB 480-313508/1-A	Method Blank	Total/NA	Water	7470A	
LCS 480-313508/2-A	Lab Control Sample	Total/NA	Water	7470A	

Prep Batch: 313521

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-103816-1	MW-1	Total/NA	Water	3005A	
480-103816-2	MW-2	Total/NA	Water	3005A	
480-103816-3	MW-5	Total/NA	Water	3005A	
480-103816-4	MW-6	Total/NA	Water	3005A	
480-103816-5	MW-7	Total/NA	Water	3005A	
480-103816-6	MW-8	Total/NA	Water	3005A	
480-103816-7	FD@MW-6	Total/NA	Water	3005A	
MB 480-313521/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-313521/2-A	Lab Control Sample	Total/NA	Water	3005A	
480-103816-3 MS	MW-5	Total/NA	Water	3005A	
480-103816-3 MSD	MW-5	Total/NA	Water	3005A	

Analysis Batch: 313614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-103816-1	MW-1	Total/NA	Water	7470A	313508
480-103816-2	MW-2	Total/NA	Water	7470A	313508
480-103816-3	MW-5	Total/NA	Water	7470A	313508
480-103816-4	MW-6	Total/NA	Water	7470A	313508
480-103816-5	MW-7	Total/NA	Water	7470A	313508
480-103816-6	MW-8	Total/NA	Water	7470A	313508
480-103816-7	FD@MW-6	Total/NA	Water	7470A	313508
MB 480-313508/1-A	Method Blank	Total/NA	Water	7470A	313508
LCS 480-313508/2-A	Lab Control Sample	Total/NA	Water	7470A	313508

Metals (Continued)

Analysis Batch: 313783

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-103816-1	MW-1	Total/NA	Water	6010C	313521
480-103816-2	MW-2	Total/NA	Water	6010C	313521
480-103816-3	MW-5	Total/NA	Water	6010C	313521
480-103816-4	MW-6	Total/NA	Water	6010C	313521
480-103816-5	MW-7	Total/NA	Water	6010C	313521
480-103816-6	MW-8	Total/NA	Water	6010C	313521
480-103816-7	FD@MW-6	Total/NA	Water	6010C	313521
MB 480-313521/1-A	Method Blank	Total/NA	Water	6010C	313521
LCS 480-313521/2-A	Lab Control Sample	Total/NA	Water	6010C	313521
480-103816-3 MS	MW-5	Total/NA	Water	6010C	313521
480-103816-3 MSD	MW-5	Total/NA	Water	6010C	313521

Prep Batch: 314147

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-103816-3	MW-5	Total/NA	Water	3005A	
480-103816-4	MW-6	Total/NA	Water	3005A	
480-103816-5	MW-7	Total/NA	Water	3005A	
480-103816-6	MW-8	Total/NA	Water	3005A	
480-103816-7	FD@MW-6	Total/NA	Water	3005A	
MB 480-314147/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-314147/2-A	Lab Control Sample	Total/NA	Water	3005A	

Analysis Batch: 314411

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-103816-3	MW-5	Total/NA	Water	6010C	314147
480-103816-4	MW-6	Total/NA	Water	6010C	314147
MB 480-314147/1-A	Method Blank	Total/NA	Water	6010C	314147
LCS 480-314147/2-A	Lab Control Sample	Total/NA	Water	6010C	314147

Prep Batch: 314451

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-103816-1	MW-1	Total/NA	Water	3005A	
480-103816-2	MW-2	Total/NA	Water	3005A	
MB 480-314451/1-A	Method Blank	Total/NA	Water	3005A	
LCS 480-314451/2-A	Lab Control Sample	Total/NA	Water	3005A	

Analysis Batch: 314625

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-103816-5	MW-7	Total/NA	Water	6010C	314147
480-103816-6	MW-8	Total/NA	Water	6010C	314147
480-103816-7	FD@MW-6	Total/NA	Water	6010C	314147

Analysis Batch: 314628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-103816-2	MW-2	Total/NA	Water	6010C	313521

Analysis Batch: 314705

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-103816-1	MW-1	Total/NA	Water	6010C	314451
480-103816-2	MW-2	Total/NA	Water	6010C	314451
MB 480-314451/1-A	Method Blank	Total/NA	Water	6010C	314451

Metals (Continued)

Analysis Batch: 314705 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-314451/2-A	Lab Control Sample	Total/NA	Water	6010C	314451

Lab Chronicle

Client: City of Tonawanda
Project/Site: 153 Fillmore Avenue Groundwater Analysis

TestAmerica Job ID: 480-103816-1

Client Sample ID: MW-1

Lab Sample ID: 480-103816-1

Date Collected: 07/28/16 15:00
Matrix: Water
Date Received: 07/28/16 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	314166	08/03/16 15:02	GVF	TAL BUF
Total/NA	Prep	3005A			314451	08/04/16 12:26	BAE	TAL BUF
Total/NA	Analysis	6010C		1	314705	08/05/16 11:24	AMH	TAL BUF
Total/NA	Prep	3005A			313521	07/29/16 08:50	JRK	TAL BUF
Total/NA	Analysis	6010C		1	313783	07/29/16 23:57	SLB	TAL BUF
Total/NA	Prep	7470A			313508	07/29/16 07:30	JRK	TAL BUF
Total/NA	Analysis	7470A		1	313614	07/29/16 13:15	JRK	TAL BUF

Client Sample ID: MW-2

Lab Sample ID: 480-103816-2

Date Collected: 07/28/16 15:30
Matrix: Water
Date Received: 07/28/16 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	314166	08/03/16 15:28	GVF	TAL BUF
Total/NA	Prep	3005A			314451	08/04/16 12:26	BAE	TAL BUF
Total/NA	Analysis	6010C		1	314705	08/05/16 11:27	AMH	TAL BUF
Total/NA	Prep	3005A			313521	07/29/16 08:50	JRK	TAL BUF
Total/NA	Analysis	6010C		1	313783	07/30/16 00:01	SLB	TAL BUF
Total/NA	Prep	3005A			313521	07/29/16 08:50	JRK	TAL BUF
Total/NA	Analysis	6010C		5	314628	08/04/16 15:54	AMH	TAL BUF
Total/NA	Prep	7470A			313508	07/29/16 07:30	JRK	TAL BUF
Total/NA	Analysis	7470A		1	313614	07/29/16 13:17	JRK	TAL BUF

Client Sample ID: MW-5

Lab Sample ID: 480-103816-3

Date Collected: 07/28/16 11:00
Matrix: Water
Date Received: 07/28/16 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			313521	07/29/16 08:50	JRK	TAL BUF
Total/NA	Analysis	6010C		1	313783	07/30/16 00:04	SLB	TAL BUF
Total/NA	Prep	3005A			314147	08/03/16 09:15	RMZ	TAL BUF
Total/NA	Analysis	6010C		1	314411	08/03/16 19:36	AMH	TAL BUF
Total/NA	Prep	7470A			313508	07/29/16 07:30	JRK	TAL BUF
Total/NA	Analysis	7470A		1	313614	07/29/16 13:19	JRK	TAL BUF

Client Sample ID: MW-6

Lab Sample ID: 480-103816-4

Date Collected: 07/28/16 11:30
Matrix: Water
Date Received: 07/28/16 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	314166	08/03/16 15:55	GVF	TAL BUF
Total/NA	Prep	3005A			313521	07/29/16 08:50	JRK	TAL BUF
Total/NA	Analysis	6010C		1	313783	07/30/16 00:30	SLB	TAL BUF

Lab Chronicle

Client: City of Tonawanda
TestAmerica Job ID: 480-103816-1
Project/Site: 153 Fillmore Avenue Groundwater Analysis

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3005A			314147	08/03/16 09:15	RMZ	TAL BUF
Total/NA	Analysis	6010C		1	314411	08/03/16 19:40	AMH	TAL BUF
Total/NA	Prep	7470A			313508	07/29/16 07:30	JRK	TAL BUF
Total/NA	Analysis	7470A		1	313614	07/29/16 13:21	JRK	TAL BUF

Client Sample ID: MW-7
Lab Sample ID: 480-103816-5
Date Collected: 07/28/16 12:45
Matrix: Water
Date Received: 07/28/16 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	314166	08/03/16 16:22	GVF	TAL BUF
Total/NA	Prep	3005A			313521	07/29/16 08:50	JRK	TAL BUF
Total/NA	Analysis	6010C		1	313783	07/30/16 00:34	SLB	TAL BUF
Total/NA	Prep	3005A			314147	08/03/16 09:15	RMZ	TAL BUF
Total/NA	Analysis	6010C		1	314625	08/04/16 21:39	AMH	TAL BUF
Total/NA	Prep	7470A			313508	07/29/16 07:30	JRK	TAL BUF
Total/NA	Analysis	7470A		1	313614	07/29/16 13:22	JRK	TAL BUF

Client Sample ID: MW-8
Lab Sample ID: 480-103816-6
Date Collected: 07/28/16 12:00
Matrix: Water
Date Received: 07/28/16 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	314166	08/03/16 16:49	GVF	TAL BUF
Total/NA	Prep	3005A			313521	07/29/16 08:50	JRK	TAL BUF
Total/NA	Analysis	6010C		1	313783	07/30/16 00:37	SLB	TAL BUF
Total/NA	Prep	3005A			314147	08/03/16 09:15	RMZ	TAL BUF
Total/NA	Analysis	6010C		1	314625	08/04/16 21:42	AMH	TAL BUF
Total/NA	Prep	7470A			313508	07/29/16 07:30	JRK	TAL BUF
Total/NA	Analysis	7470A		1	313614	07/29/16 13:28	JRK	TAL BUF

Client Sample ID: FD@MW-6
Lab Sample ID: 480-103816-7
Date Collected: 07/28/16 11:30
Matrix: Water
Date Received: 07/28/16 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	314166	08/03/16 17:16	GVF	TAL BUF
Total/NA	Prep	3005A			313521	07/29/16 08:50	JRK	TAL BUF
Total/NA	Analysis	6010C		1	313783	07/30/16 00:40	SLB	TAL BUF
Total/NA	Prep	3005A			314147	08/03/16 09:15	RMZ	TAL BUF
Total/NA	Analysis	6010C		1	314625	08/04/16 21:56	AMH	TAL BUF
Total/NA	Prep	7470A			313508	07/29/16 07:30	JRK	TAL BUF
Total/NA	Analysis	7470A		1	313614	07/29/16 13:30	JRK	TAL BUF

Lab Chronicle

Client: City of Tonawanda
Project/Site: 153 Fillmore Avenue Groundwater Analysis

TestAmerica Job ID: 480-103816-1

Client Sample ID: TRIP BLANK
Date Collected: 07/28/16 00:00
Date Received: 07/28/16 15:45

Lab Sample ID: 480-103816-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	314166	08/03/16 17:42	GVF	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Certification Summary

Client: City of Tonawanda
Project/Site: 153 Fillmore Avenue Groundwater Analysis

TestAmerica Job ID: 480-103816-1

Laboratory: TestAmerica Buffalo

The certifications listed below are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-17

Method Summary

Client: City of Tonawanda
Project/Site: 153 Fillmore Avenue Groundwater Analysis

TestAmerica Job ID: 480-103816-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7470A	Mercury (CVAA)	SW846	TAL BUF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: City of Tonawanda
Project/Site: 153 Fillmore Avenue Groundwater Analysis

TestAmerica Job ID: 480-103816-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-103816-1	MW-1	Water	07/28/16 15:00	07/28/16 15:45
480-103816-2	MW-2	Water	07/28/16 15:30	07/28/16 15:45
480-103816-3	MW-5	Water	07/28/16 11:00	07/28/16 15:45
480-103816-4	MW-6	Water	07/28/16 11:30	07/28/16 15:45
480-103816-5	MW-7	Water	07/28/16 12:45	07/28/16 15:45
480-103816-6	MW-8	Water	07/28/16 12:00	07/28/16 15:45
480-103816-7	FD@MW-6	Water	07/28/16 11:30	07/28/16 15:45
480-103816-8	TRIP BLANK	Water	07/28/16 00:00	07/28/16 15:45

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica

480-103816 COC

Client Information	Sampler: Brian Doyle	Lab PM: Deyo, Melissa L	Carrier Tracking No(s):	COC No: 480-85307-20881.1
Client Contact: Brian Doyle	Phone: (716) 695-8624	E-Mail: melissa.deyo@testamericainc.com		Page: Page 1 of 2
Company: City of Tonawanda		Analysis Requested		Job #:
Address: 200 Niagara Street	Due Date Requested:			Preservation Codes:
City: Tonawanda	TAT Requested (days):			A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: NY, 14150				
Phone: (716) 695-8624	PO #: Purchase Order not required			Other:
Email: assistantengineer@ci.tonawanda.ny.us	WO #:			
Project Name: 153 Fillmore Avenue Groundwater Analysis	Project #: 48014369			
Site:	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8260C - TCL Volatiles	6010C, 7470A	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	D		
MW-1	7/28/16	15:00	G	Water			X	X		
MW-2	7/28/16	15:30	G	Water			X	X		
MW-5	7/28/16	11:00	G	Water			X	X		
MW-6	7/28/16	11:30	G	Water			X	X		
MW-7	7/28/16	12:45	G	Water			X	X		
MW-8	7/28/16	12:00	G	Water			X	X		
FD @ MW-6	7/28/16	11:30	G	Water			X	X		
Trip Blank				Water			X	X		
				Water						
				Water						
				Water						

Possible Hazard Identification
☒ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements: Level II QA/QC Report

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Brian P Doyle	7/28/16 15:45	City of Tonawanda	Unknown	7/28/16 1545	TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: △ Yes △ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 3.4 #1

Login Sample Receipt Checklist

Client: City of Tonawanda

Job Number: 480-103816-1

Login Number: 103816

List Source: TestAmerica Buffalo

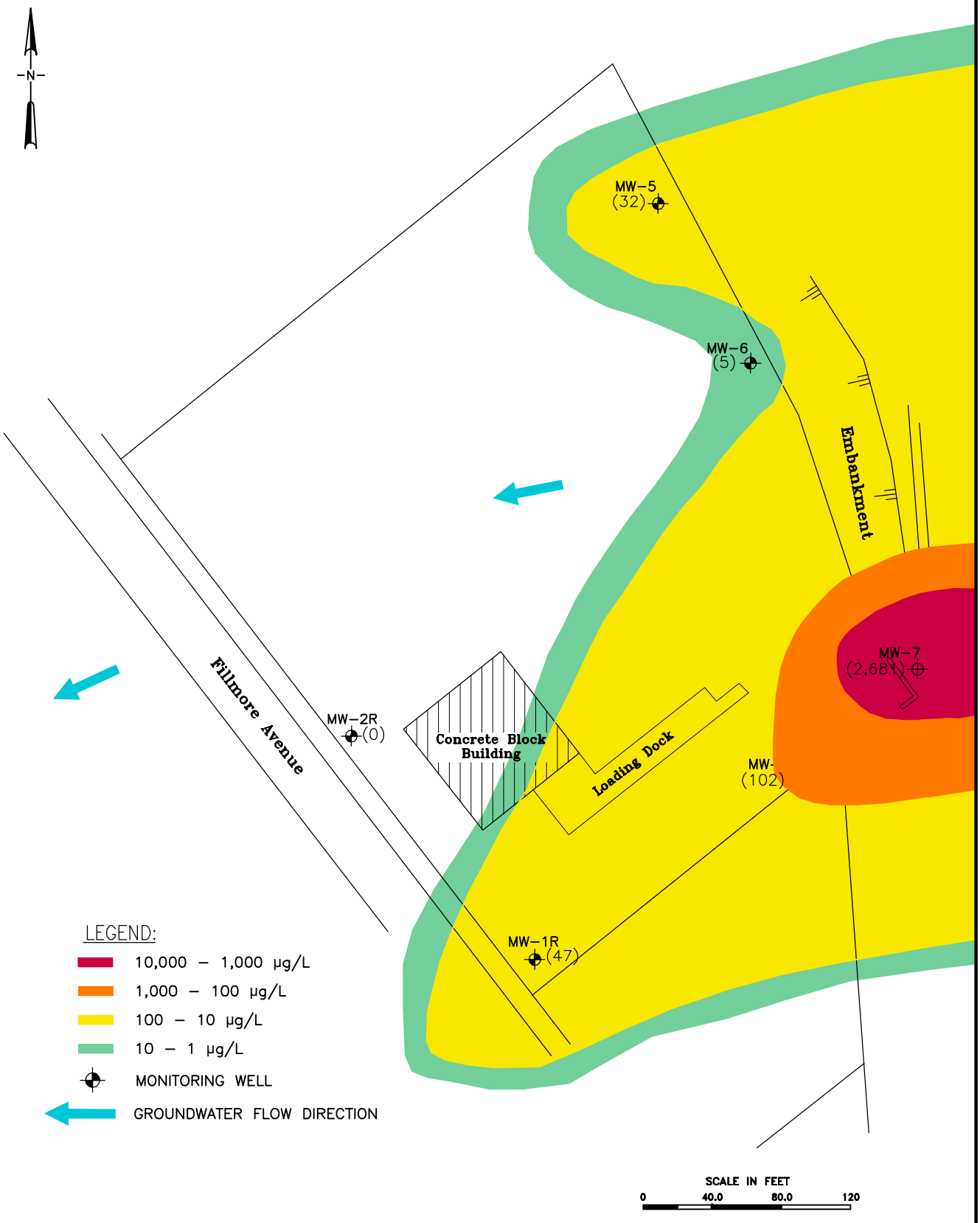
List Number: 1

Creator: Conway, Curtis R

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	CITY OF TONAWANDA
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

APPENDIX C

Groundwater Total VOC Concentration Figures

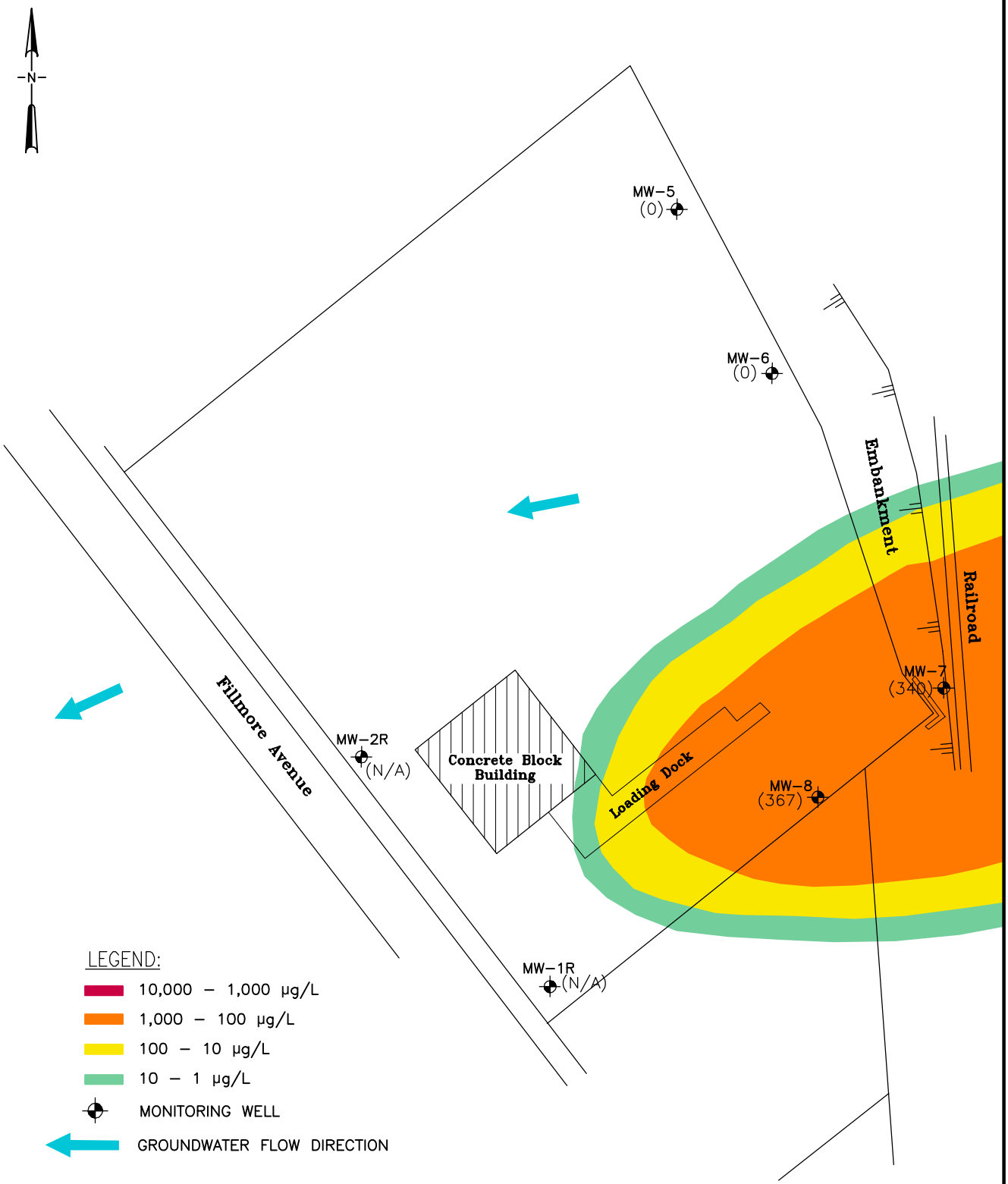


STEARNS & WHELER
Environmental Engineers & Scientists

153 FILLMORE AVENUE SITE
TONAWANDA, NEW YORK
GROUNDWATER MONITORING REPORT

DATE:09/10 JOB No.:71164

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



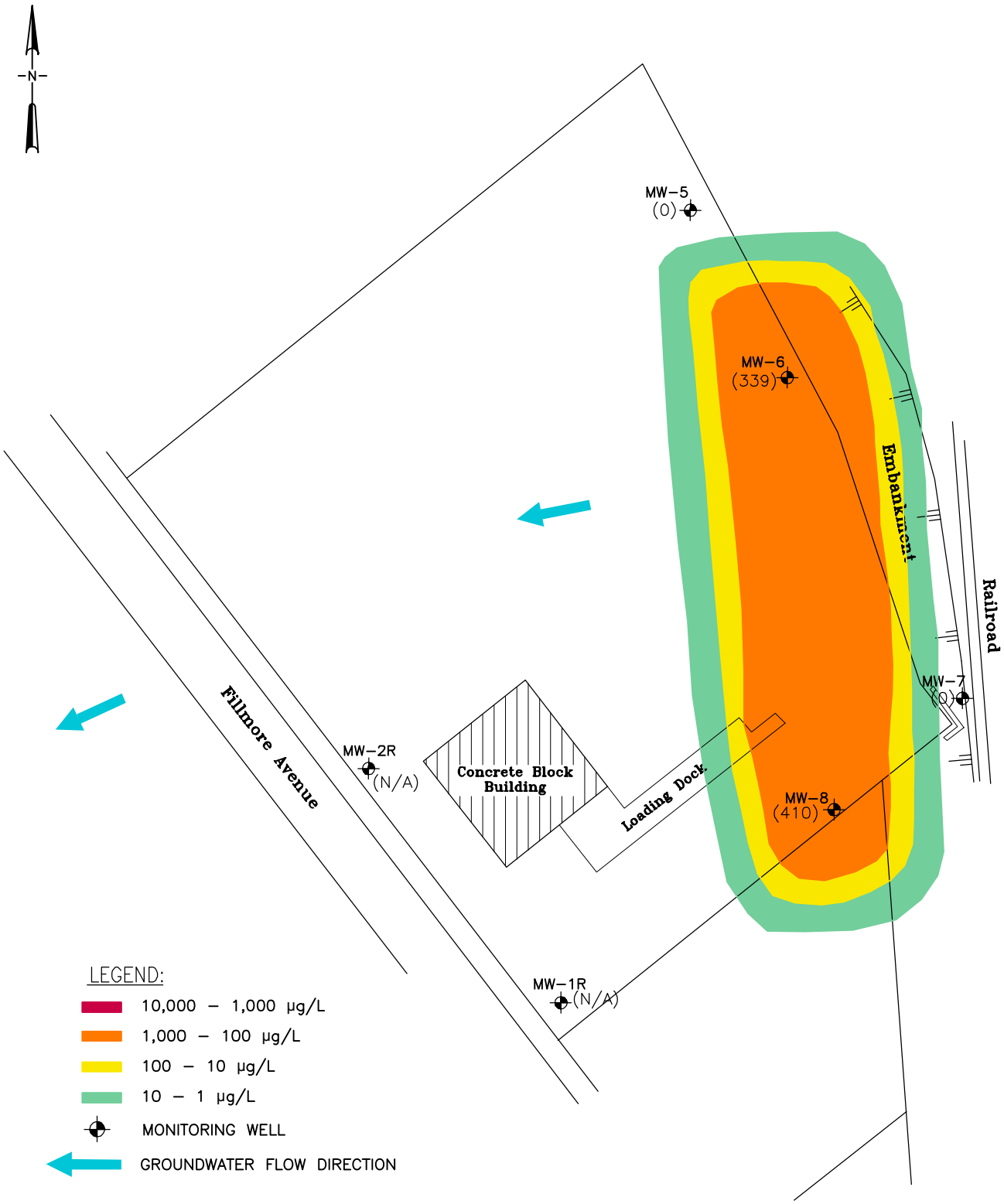
NOTE:
MONTIORING WELLS MW-1 & MW-2 WERE NOT FUNCTIONAL UNITL BEING REDRILLED IN JULY 2009.

STEARNS & WHELER
Environmental Engineers & Scientists

153 FILLMORE AVENUE SITE
TONAWANDA, NEW YORK
GROUNDWATER MONITORING REPORT

DATE:09/10 JOB No.:71164

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



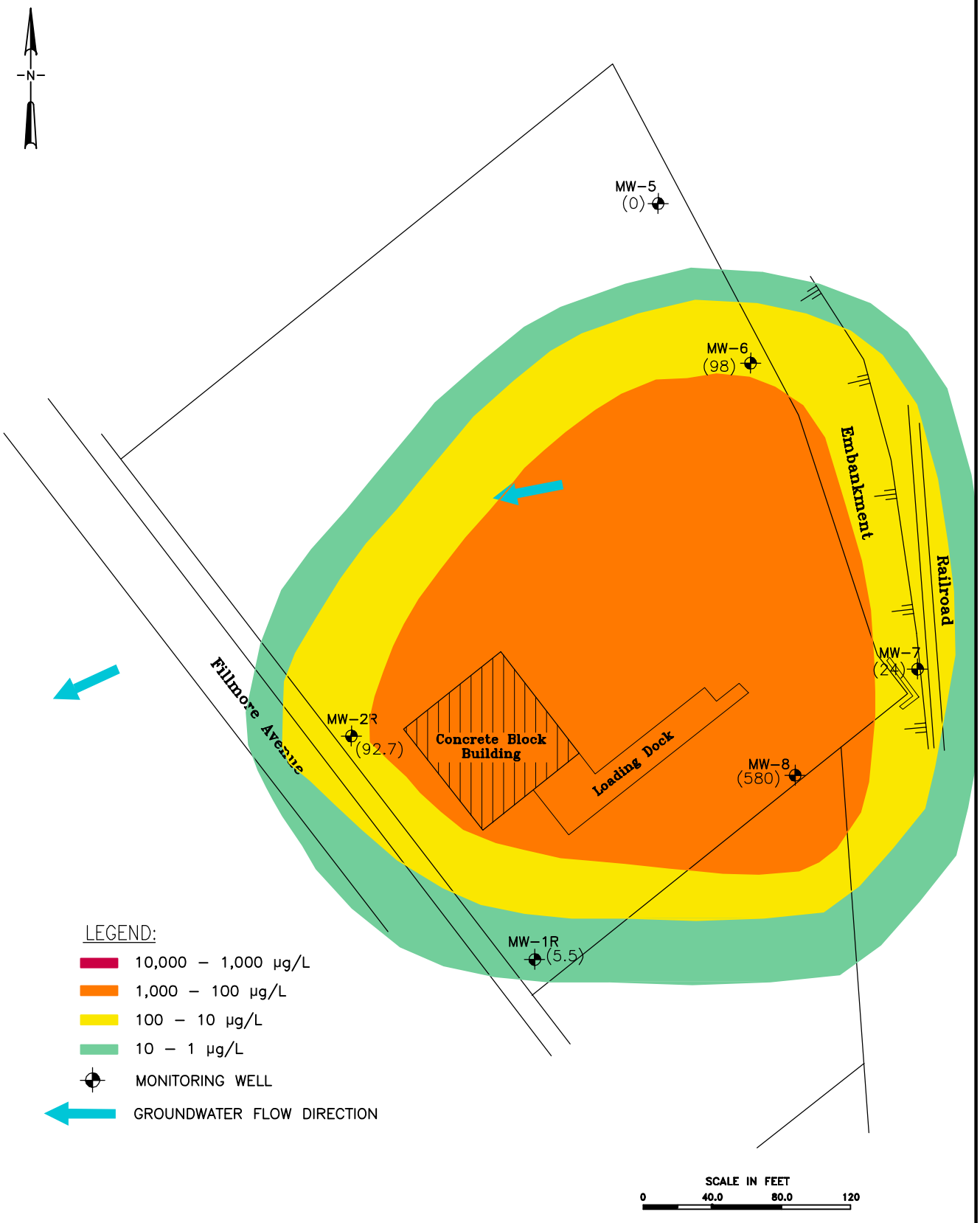
NOTE:
MONTIORING WELLS MW-1 & MW-2 WERE NOT FUNCTIONAL UNITL BEING REDRILLED IN JULY 2009.

STEARNS & WHELER
Environmental Engineers & Scientists

153 FILLMORE AVENUE SITE
TONAWANDA, NEW YORK
GROUNDWATER MONITORING REPORT

DATE:09/10 JOB No.:71164

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

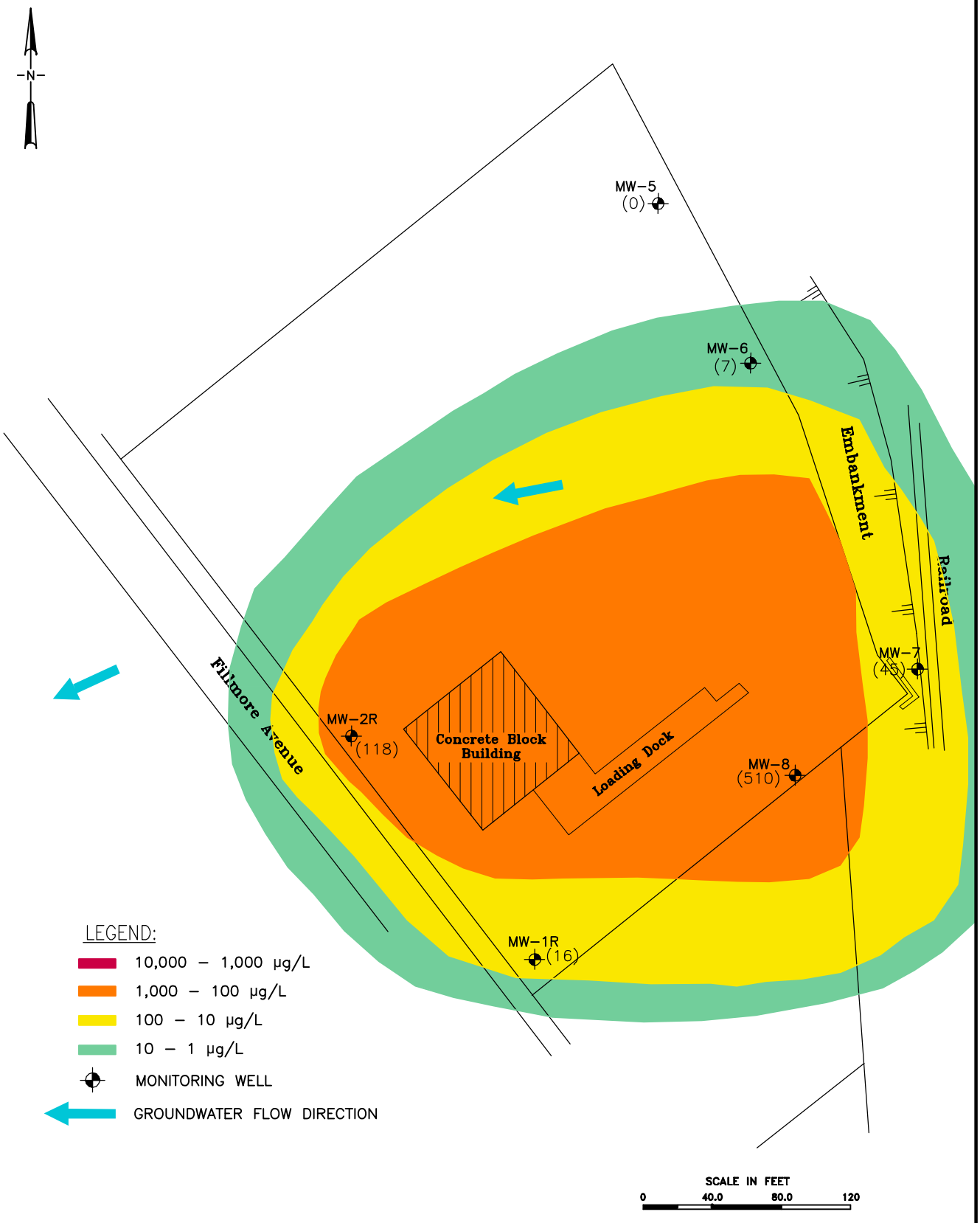


STEARNS & WHELER
Environmental Engineers & Scientists

153 FILLMORE AVENUE SITE
TONAWANDA, NEW YORK
GROUNDWATER MONITORING REPORT

DATE:09/10 JOB No.:71164

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

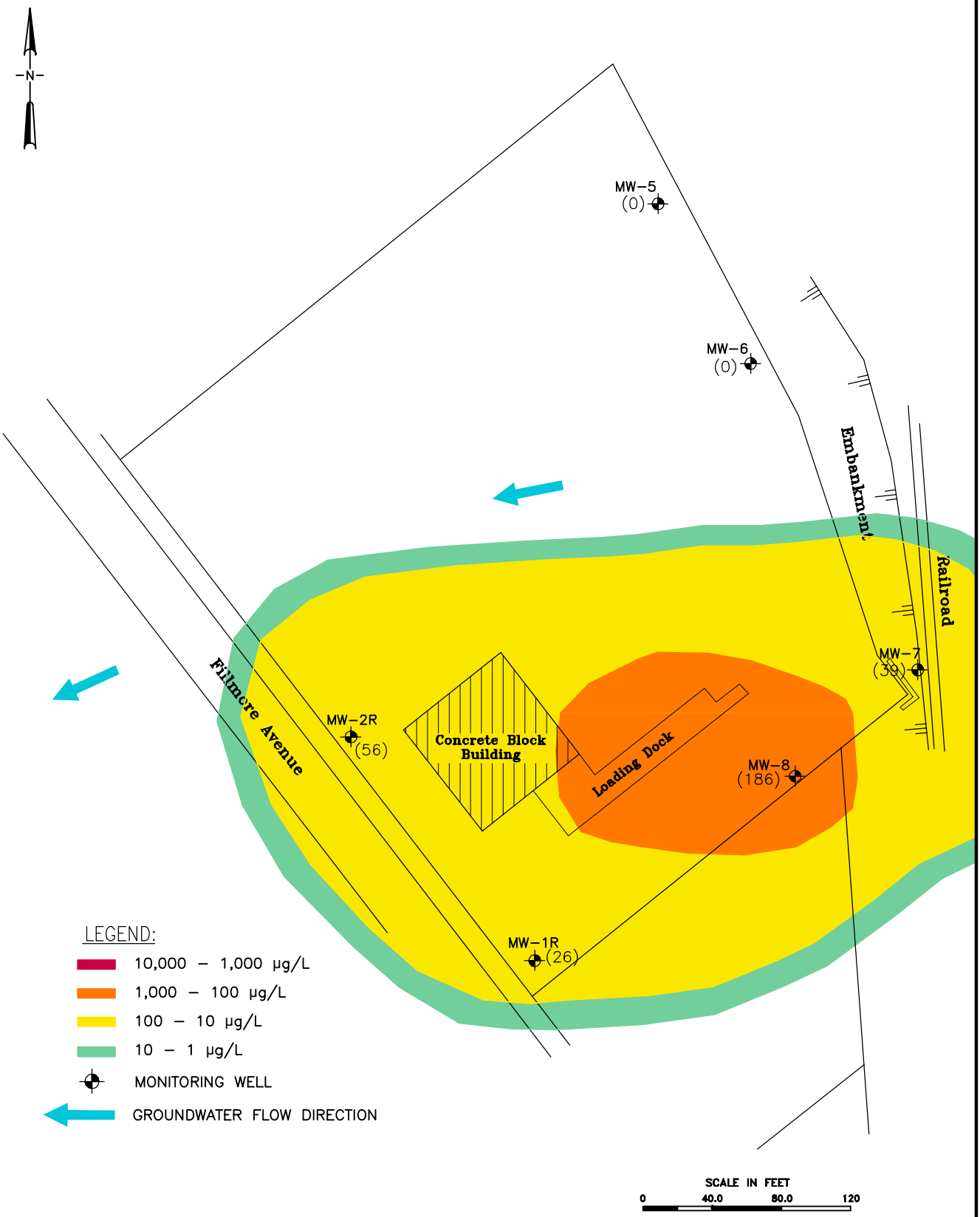


STEARNS & WHELER
Environmental Engineers & Scientists

153 FILLMORE AVENUE SITE
TONAWANDA, NEW YORK
GROUNDWATER MONITORING REPORT

DATE:09/10 JOB No.:71164

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



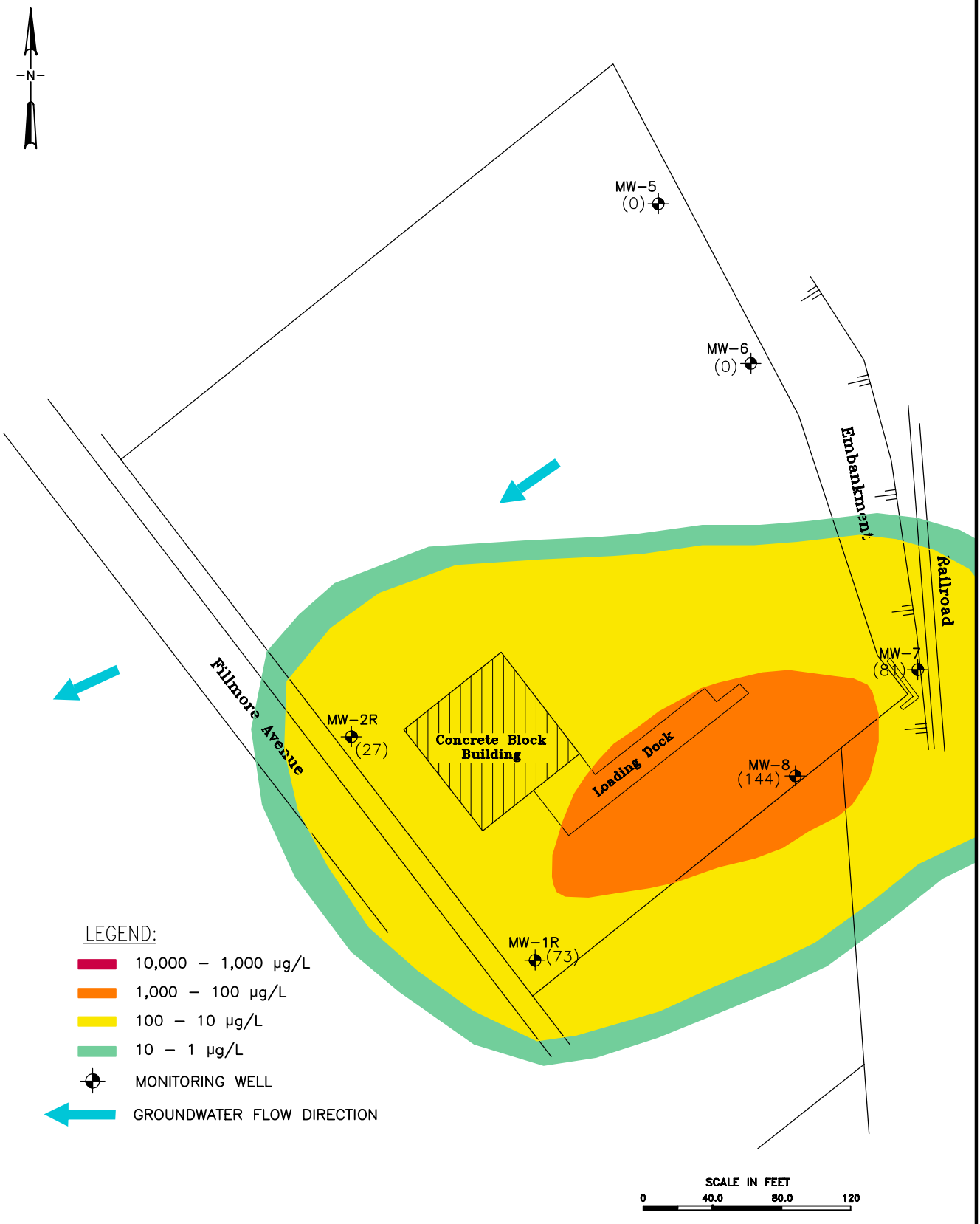
GHD CLIENTS PEOPLE PERFORMANCE

AMHERST, NEW YORK

DATE:09/11 JOB No.:8612199

153 FILLMORE AVENUE SITE
TONAWANDA, NEW YORK
GROUNDWATER MONITORING REPORT

APPENDIX C – TOTAL GROUNDWATER VOC CONCENTRATION MAP – 07/22/11



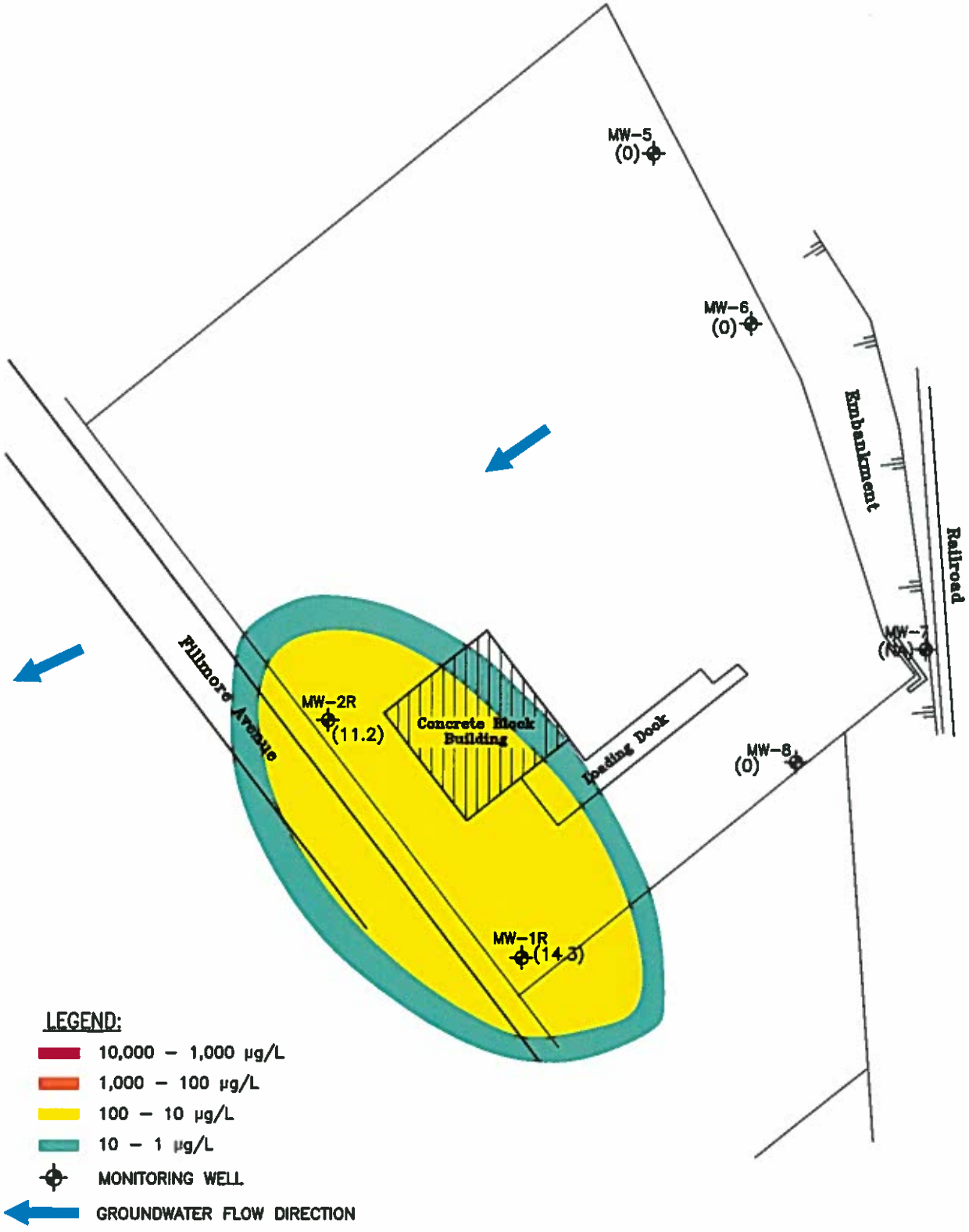
GHD CLIENTS PEOPLE PERFORMANCE

AMHERST, NEW YORK

DATE:09/12 JOB No.:8612199

153 FILLMORE AVENUE SITE
TONAWANDA, NEW YORK
GROUNDWATER MONITORING REPORT

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



0 40' 80' 120'
SCALE 1"=80' AT ORIGINAL SIZE

N

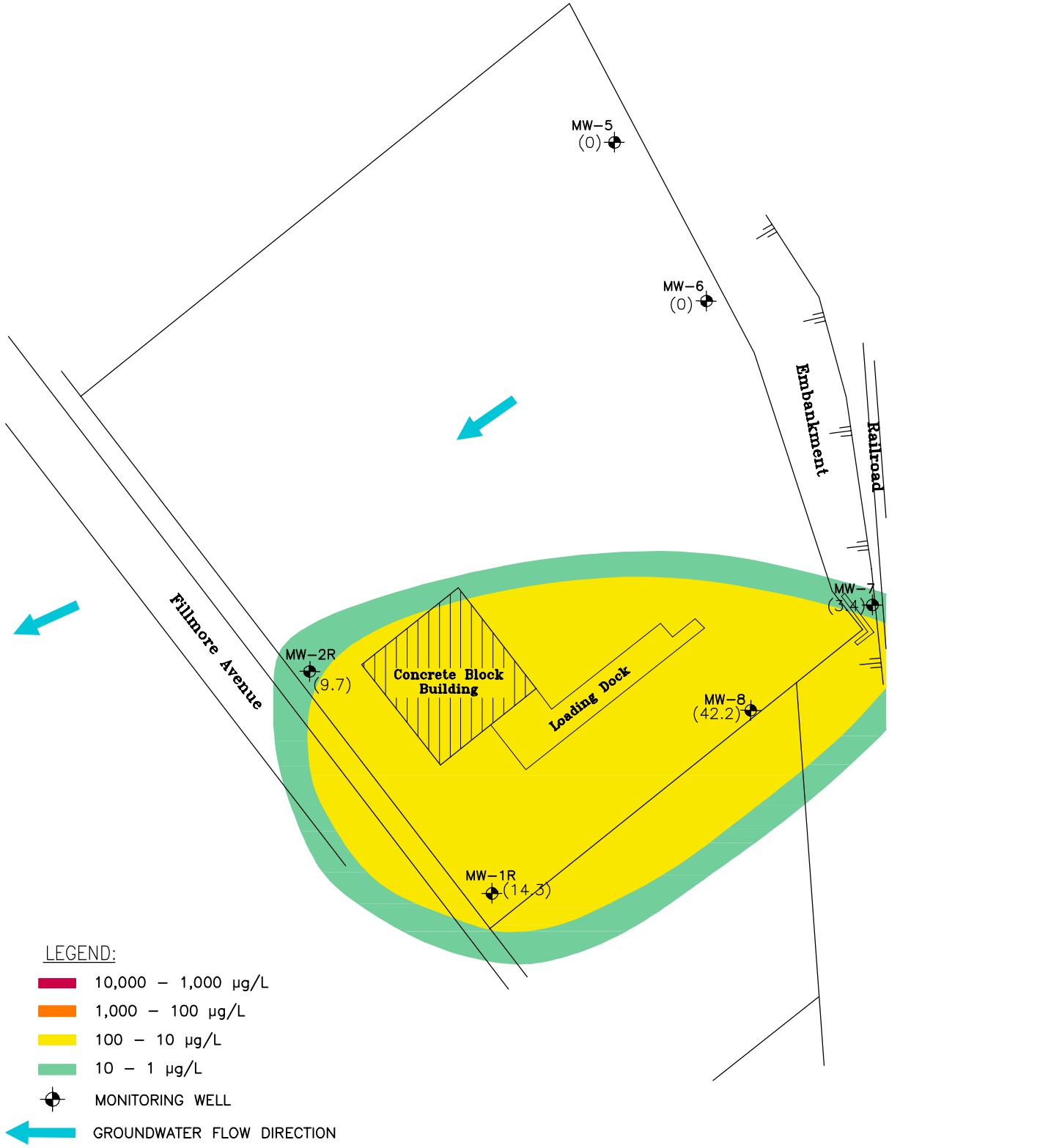
GHD

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

200 John James Audubon Parkway Suite 101, Amherst NY 14228 USA T 1 716 748 8620 F 1 716 748 8621 E amhmail@ghd.com W www.ghd.com



0 40' 80' 120'
SCALE 1"=80' AT ORIGINAL SIZE

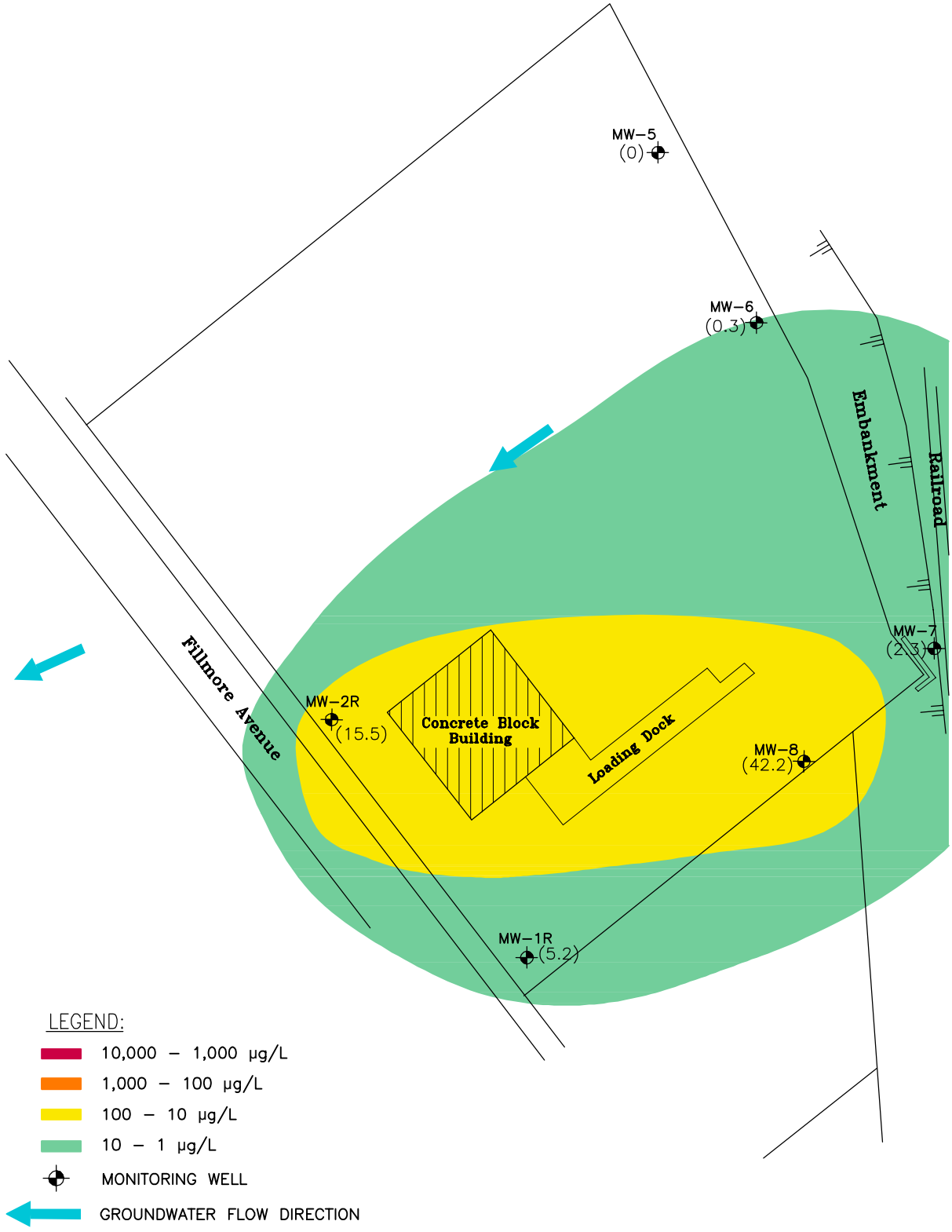
N

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

Job Number 86-12199
Revision A
Date 09 14

Figure 04

200 John James Audubon Parkway Suite 101, Amherst NY 14228 USA **T** 1 716 748 6620 **F** 1 716 748 6621 **E** amhmail@ghd.com **W** www.ghd.com



0 40' 80' 120'

SCALE 1"=80' AT ORIGINAL SIZE

N

153 FILLMORE AVENUE SITE
TONAWANDA, NEW YORK
GROUNDWATER MONITORING REPORT

TOTAL GROUNDWATER VOC CONCENTRATION MAP - 07/23/15

Job Number	86-12199
Revision	A
Date	12 15

Figure 04

200 John James Audubon Parkway Suite 101, Amherst NY 14228 USA **T** 1 716 748 6620 **F** 1 716 748 6621 **E** amhmail@ghd.com **W** www.ghd.com

APPENDIX D

Historical SVOC Analytical Test Results

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	ND	ND	ND	ND	ND	ND
bis(2-chloroethyl) ether	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Isophorone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroethoxy) methane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	10.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	**0.93J**	ND
Acenaphthylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20.0	µg/L	ND	ND	ND	ND	ND	**1.2**	ND	ND
2,4-Dinitrophenol	10.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Fluorene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.04	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	50.0	µg/L	-	**2 J**	ND	ND	ND	ND	ND	**0.48J**
Fluoranthene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Benz(a)anthracene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-ethylhexyl) phthalate	5.0	µg/L	ND	**8 J**	**1 J**	**6.2 B**	**2.3 J**	**4.8**	**1.7J**	ND
Di-n-octyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene)	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i) perylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
(3+4)-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl) ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND

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

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	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Isophorone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroethoxy) methane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2-Chloro-phthalene	10.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	**1.2J**	ND
Acenaphthylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Fluorene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.04	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	NE	µg/L	-	ND	ND	ND	ND	ND	ND	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	ND	ND	ND	ND	ND	ND	ND
Pyrene	50.0	µg/L	ND	ND	ND	ND	**1.1 J**	ND	ND	ND
Butyl benzyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Benz(a)anthracene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	0.002	µg/L	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-ethylhexyl) phthalate	5.0	µg/L	ND	**9 J**	**30 J**	**6.5 B**	**25**	ND	**1.9J**	ND
Di-n-octyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene)	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i) perylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
(3+4)-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl) ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND

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

Monitoring Well MW-5
Semi-Volatile Organic Analytical Test Results
153 Fillmore Avenue Site

Semi-Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards[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	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroethyl) ether	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroethoxy) methane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10.0	µg/L	**59**	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NE	µg/L	**800**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloro-phthalene	10.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	**1.0 J**	ND
Acenaphthylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	**0.64 J**	ND
2,6-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20.0	µg/L	**65**	ND	ND	ND	ND	**1 J**	**1.5 J**	**2.3**	ND	**0.54**
2,4-Dinitrophenol	10.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	50.0	µg/L	**93**	ND	ND	ND	ND	ND	**1.2 J**	ND	**0.51 J**	**0.49**
4-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.04	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50.0	µg/L	**220**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	NE	µg/L	-	ND	ND	ND	ND	**2 J**	**3.2 J**	ND	ND	**0.34**
Di-n-butyl phthalate	50.0	µg/L	-	ND	ND	**3 J**	**2 J**	ND	ND	ND	**0.45 J**	**0.61**
Fluoranthene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benz(a)anthracene	0.002	µg/L	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
bis(2-ethylhexyl) phthalate	5.0	µg/L	ND	**4 J**	**7 J**	**7 J**	**3 J**	**4 J**	ND	ND	**1.8 J**	ND
Di-n-octyl phthalate	50.0	µg/L	-	**75**	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene)	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i) perylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
(3+4)-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl) ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND

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

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
Phenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroethyl) ether	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NE	µg/L	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
bis(2-chloroethoxy) methane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NE	µg/L	800	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloro-phthalene	10.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	**1.2 J**	ND
Acenaphthylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	**0.59 J**	**0.43**
2,6-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20.0	µg/L	**120**	ND	**3 J**	ND	ND	**2 J**	**3.4 J**	**1.0**	**3.0**	**2.4**
2,4-Dinitrophenol	10.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	50.0	µg/L	**72**	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	50.0	µg/L	**200**	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.04	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50.0	µg/L	**530**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	50.0	µg/L	-	ND	ND	**3 J**	ND	ND	ND	ND	**0.48 J**	**0.60**
Fluoranthene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	50.0	µg/L	**64**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benz(a)anthracene	0.002	µg/L	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
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	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene)	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i) perylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
(3+4)-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroisopropyl) ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND

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

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
Phenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
bis(2-chloroethyl) ether	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
2-Chlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
1,3-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
2-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
N-Nitrosodi-n-propylamine	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Hexachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Nitrobenzene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Isophorone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
2-Nitrophenol	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	*NA	ND	ND
2,4-Dimethylphenol	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	*NA	ND	ND
bis(2-chloroethoxy) methane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
2,4-Dichlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
1,2,4-Trichlorobenzene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	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
Hexachlorobutadiene	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
4-Chloro-3-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
2-Methylnaphthalene	NE	µg/L	**1,100**	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Hexachlorocyclopentadiene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
2,4,6-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
2,4,5-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
2-Chloro-phthalene	10.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
2-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	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
3-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Acenaphthene	20.0	µg/L	**590**	ND	ND	ND	ND	ND	**9.6 J**	*NA	ND	**0.54**
2,4-Dinitrophenol	10.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
4-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Dibenzofuran	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	*NA	ND	ND
2,4-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	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
Fluorene	50.0	µg/L	**430**	ND	ND	ND	ND	ND	ND	*NA	ND	ND
4-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
4,6-Dinitro-2-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
N-Nitrosodiphenylamine	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
4-Bromophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Hexachlorobenzene	0.04	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Pentachlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Phenanthrene	50.0	µg/L	**1,100**	ND	ND	ND	ND	ND	ND	*NA	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
Di-n-butyl phthalate	50.0	µg/L	-	ND	ND	**3 J**	**1 J**	ND	ND	*NA	**0.74 J**	**0.62**
Fluoranthene	50.0	µg/L	**270**	ND	ND	ND	ND	ND	**9.4 J**	*NA	ND	ND
Pyrene	50.0	µg/L	**480**	**3 J**	ND	ND	ND	ND	**28**	*NA	ND	ND
Butyl benzyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
3,3'-Dichlorobenzidine	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Benzo(a)anthracene	0.002	µg/L	**150**	**1 J**	ND	ND	ND	ND	**16**	*NA	ND	**0.26**
Chrysene	0.002	µg/L	**140**	**1 J**	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
Benzo(b)fluoranthene	0.002	µg/L	-	**1 J**	ND	ND	ND	ND	**16**	*NA	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	**16**	*NA	ND	ND
Benzo(a)pyrene	NE	µg/L	-	**2 J**	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
Dibenz(a,h)anthracene)	NE	µg/L	-	ND	ND	ND	ND	ND	ND	*NA	ND	ND
Benzo(g,h,i) perylene	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.

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	ND	ND	ND	ND	ND	ND	ND	ND
bis(2-chloroethyl) ether	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	0.4	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NE	µg/L	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
bis(2-chloroethoxy) methane	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.5	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	NE	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,5-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloro-phthalene	10.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	**1.3 J**	ND
Acenaphthylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	20.0	µg/L	**13**	**4 J**	**3 J**	**2 J**	**2 J**	**1 J**	**1.4 J**	ND	**2.2**	**1.4**
2,4-Dinitrophenol	10.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobenzene	0.04	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	1.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50.0	µg/L	**6**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	50.0	µg/L	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	50.0	µg/L	-	ND	ND	**4 J**	**2 J**	ND	ND	ND	**0.57 J**	**0.64**
Fluoranthene	50.0	µg/L	**8**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	50.0	µg/L	**9**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	50.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5.0	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benz(a)anthracene	0.002	µg/L	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
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	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene)	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(g,h,i) perylene	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND
(3+4)-Methylphenol	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	**1.30**
bis(2-chloroisopropyl) ether	NE	µg/L	-	ND	ND	ND	ND	ND	ND	ND	ND	ND

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

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[j]	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 [e]	17
4,4'-DDT	50-29-3	1.7	7.9	47	94	0.0033 [e]	136
4,4'- DDD	72-54-8	2.6	13	92	180	0.0033 [e]	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
Acenapthylene	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[e]
p-Cresol	106-44-5	34	100[a]	500[b]	1,000[c]	NS	0.33[e]
Pentachlorophenol	87-86-5	2.4	6.7	6.7	55	0.8[e]	0.8[e]
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[e]
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[e]	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.