



2011 PERIODIC REVIEW REPORT

Groundwater Monitoring and Sampling Results

**153 Fillmore Avenue Site
City of Tonawanda**

October 2011

WATER | ENERGY & RESOURCES | ENVIRONMENT | PROPERTY & BUILDINGS | TRANSPORTATION

GROUNDWATER MONITORING AND SAMPLING RESULTS

**153 FILLMORE AVENUE SITE
CITY OF TONAWANDA**

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GHD Project No. 8612199

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SECTION 1 - SITE BACKGROUND

1.1 Site Location

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

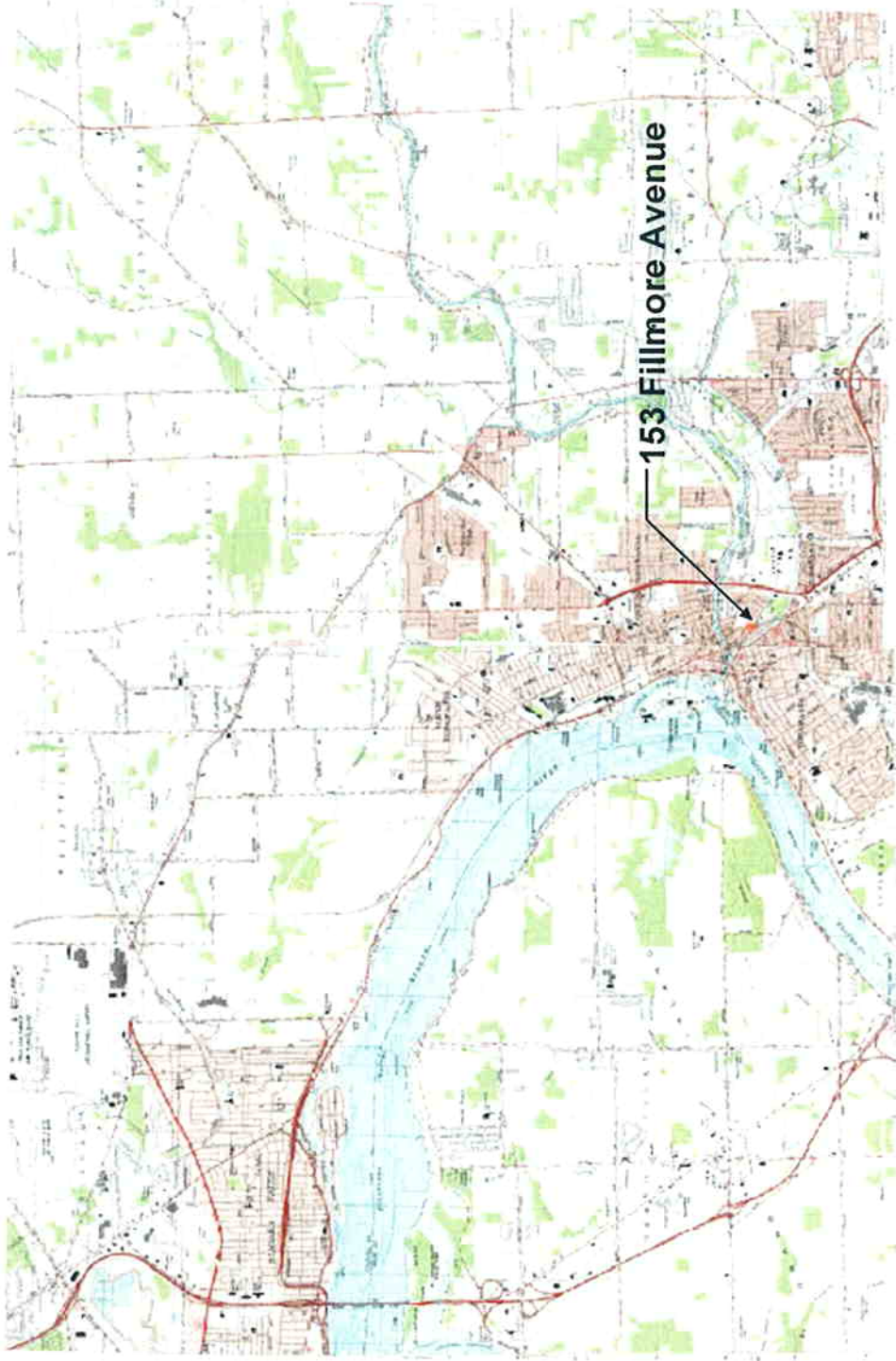
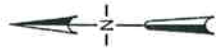
1.2 Site History

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

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

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

NYSDEC contacted the United States Environmental Protection Agency (USEPA) concerning the subject property on June 29, 1987. The USEPA conducted a preliminary assessment (PA)



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FIGURE 1
SITE LOCATION MAP

under the Comprehensive Environmental Response, Compensation and Liabilities Act (CERCLA) on November 29-30, 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.

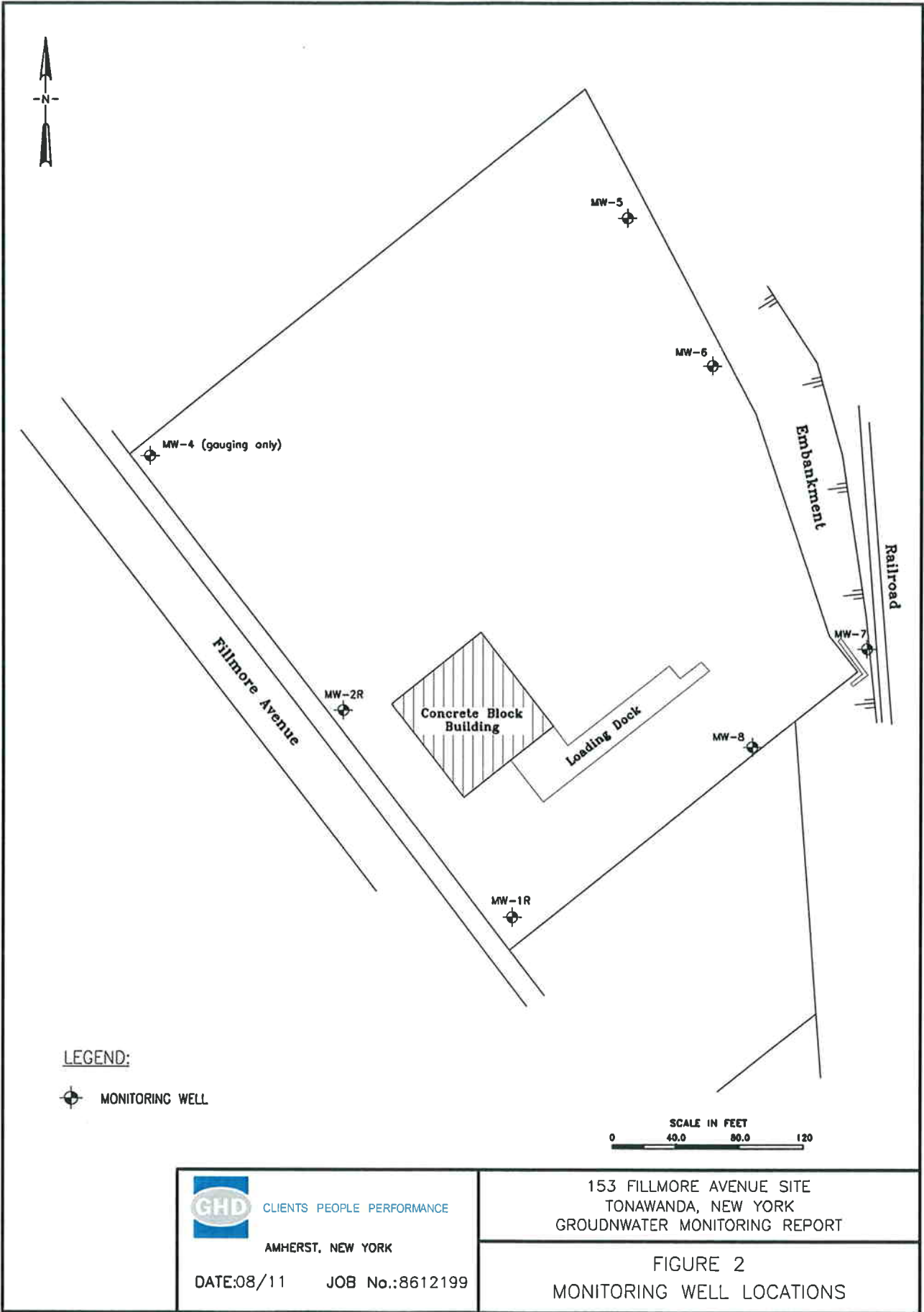
A Site Management Plan was completed after Site Investigation/Remedial Alternatives Report detailing a Groundwater Monitoring Plan. The Groundwater Monitoring Plan required annual sampling of the five down-gradient wells (MW-1 through MW-4) and MW-8 and biennial sampling of potential source wells (MW-5 through MW-7).


SECTION 2 – GROUNDWATER MONITORING ACTIVITIES

The 2011 monitoring program at the 153 Fillmore Avenue in the City of Tonawanda consisted of one annual sampling event completed on July 22, 2011. 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, each monitoring well was purged using a peristaltic pump and dedicated tubing until parameters of pH, conductance, dissolved oxygen (DO), temperature, and oxidation-reduction potential (ORP) stabilized, which provided an indication that water drawn from the well is representative of the groundwater in the surrounding formation. The results of these field parameters are presented on Table 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, samples were collected with a disposable bailer into sample containers provided by the laboratory.

Purge water generated during the groundwater sampling activities was emptied on-site away from the sampled well. Quality control samples, including a trip blank, a field blank, a matrix spike and matrix spike duplicate, and a field duplicate were collected during the sampling event. Samples were delivered under a chain of custody to Upstate Laboratories, Inc. of Syracuse, New York for analysis of VOCs, SVOCs and Target Analyte List (TAL) Metals under CLP protocols with ASP Deliverable B test results. Pesticides and PCBs were not required to be tested during the 2011 sampling event.



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	FIGURE 2 MONITORING WELL LOCATIONS
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SECTION 3 – GROUNDWATER MONITORING RESULTS

This section includes the results of the 2011 annual groundwater sampling event. Included are descriptions of site-specific hydrogeology, the identification and distribution of constituents present in groundwater, and a comparison of historical data. Constituents were compared to the applicable NYSDEC Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) Groundwater Standards and Guidance Values.

3.1 Site Hydrogeology

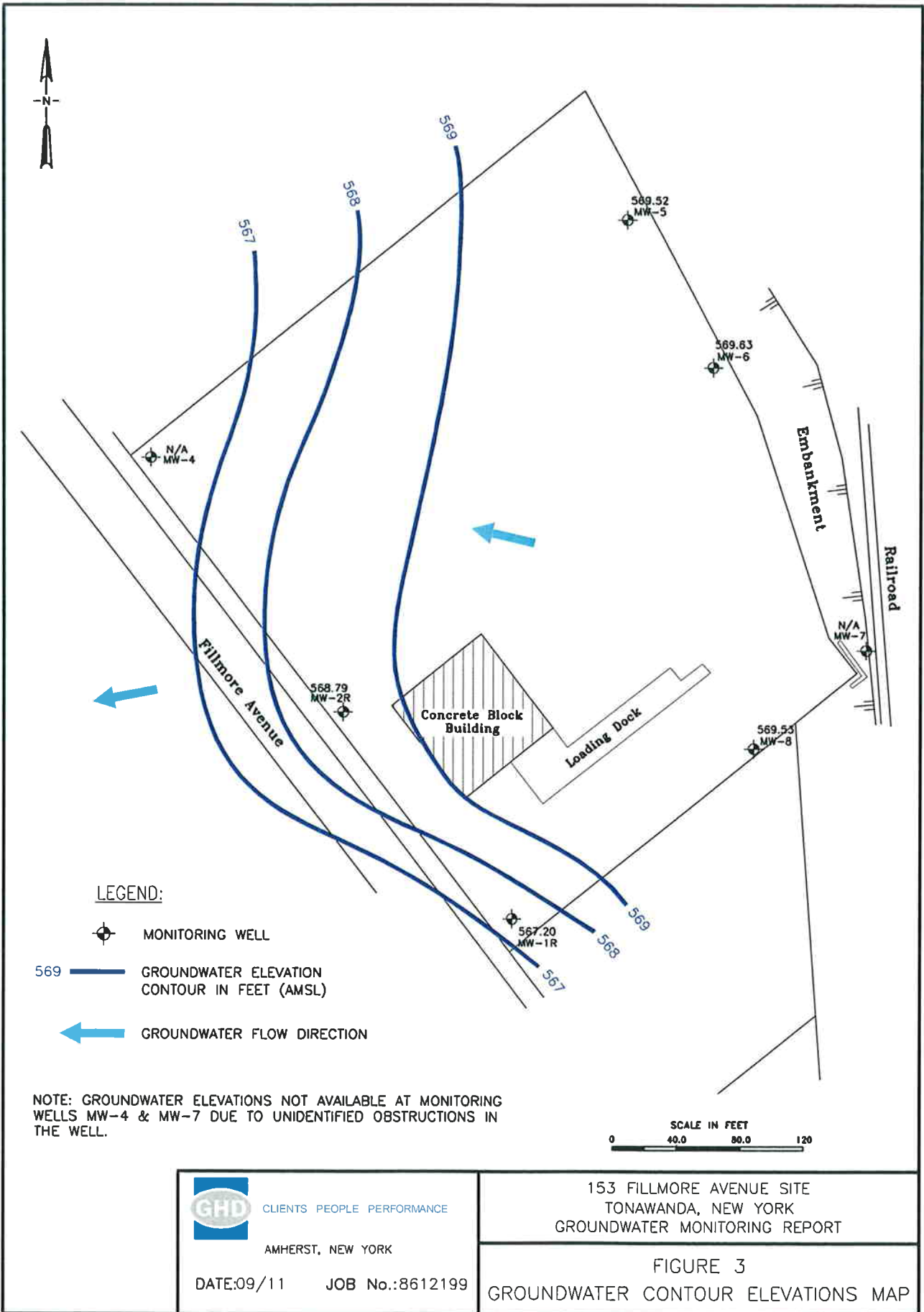
Groundwater levels were collected at each monitoring well and are presented in Table 2. Figure 3 illustrates the groundwater elevation contours based on the groundwater levels measured on July 22, 2011. The groundwater elevation data indicates that groundwater flows toward the west. The up gradient monitoring well is identified as monitoring well MW-7.

3.2 Groundwater Analytical Results

A summary of the compounds detected in groundwater during the 2011 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 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 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 2011 varied depending on the monitoring well and specific compounds detected in groundwater in comparison with previous sampling events. Results showed increasing and decreasing volatile organic concentrations when comparing test data from all sampling events. The volatile organic analytical test results detected concentrations of vinyl chloride (MW-1, MW-2 and MW-8), trans-1,2-dichloroethene (MW-8), cis-1,2-dichloroethene (MW-1, MW-2, MW-7 and MW-8), benzene (MW-2 and MW-8), exceeding groundwater quality standards as presented in Table 3.



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	FIGURE 3 GROUNDWATER CONTOUR ELEVATIONS MAP

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Detected concentrations of vinyl chloride remained the same in groundwater sampled from monitoring well MW-1 which represented a concentration above the groundwater quality standard. The concentration of vinyl chloride in groundwater sampled from MW-6 and MW-8 decreased to a level of non-detection. The concentration of vinyl chloride decreased at monitoring wells MW-2 and MW-8, but remained above the groundwater quality standard. Detected concentrations of vinyl chloride exceeded groundwater quality standards for all sampling events in at least one well.

Concentrations of cis-1,2-dichloroethene increased in groundwater sampled from monitoring wells MW-1 and MW-7, which represented concentrations above or equal to the groundwater quality standard. The concentration of cis-1,2-dichloroethene decreased at monitoring wells MW-2 and MW-7, but remained above the groundwater quality standard. The concentration of cis-1,2-dichloroethene in MW-6 decreased to levels of non-detection. Detected concentrations of cis-1,2-dichloroethene exceeded groundwater quality standards for all sampling events in at least one well.

The concentration of trans-1,2-dichloroethene increased in groundwater sampled at monitoring well MW-8. Concentrations of trans-1,2-dichloroethene exceeded groundwater quality standards for all sampling events in at least one well.

Concentrations of benzene increased to levels exceeding the groundwater quality standard in monitoring wells MW-2 and MW-8.

Concentrations of acetone increased in monitoring wells MW-2 and MW-7, but did not exceed the groundwater quality standard.

The concentration of trichloroethene increased in monitoring well MW-7, but did not exceed the groundwater quality standard.

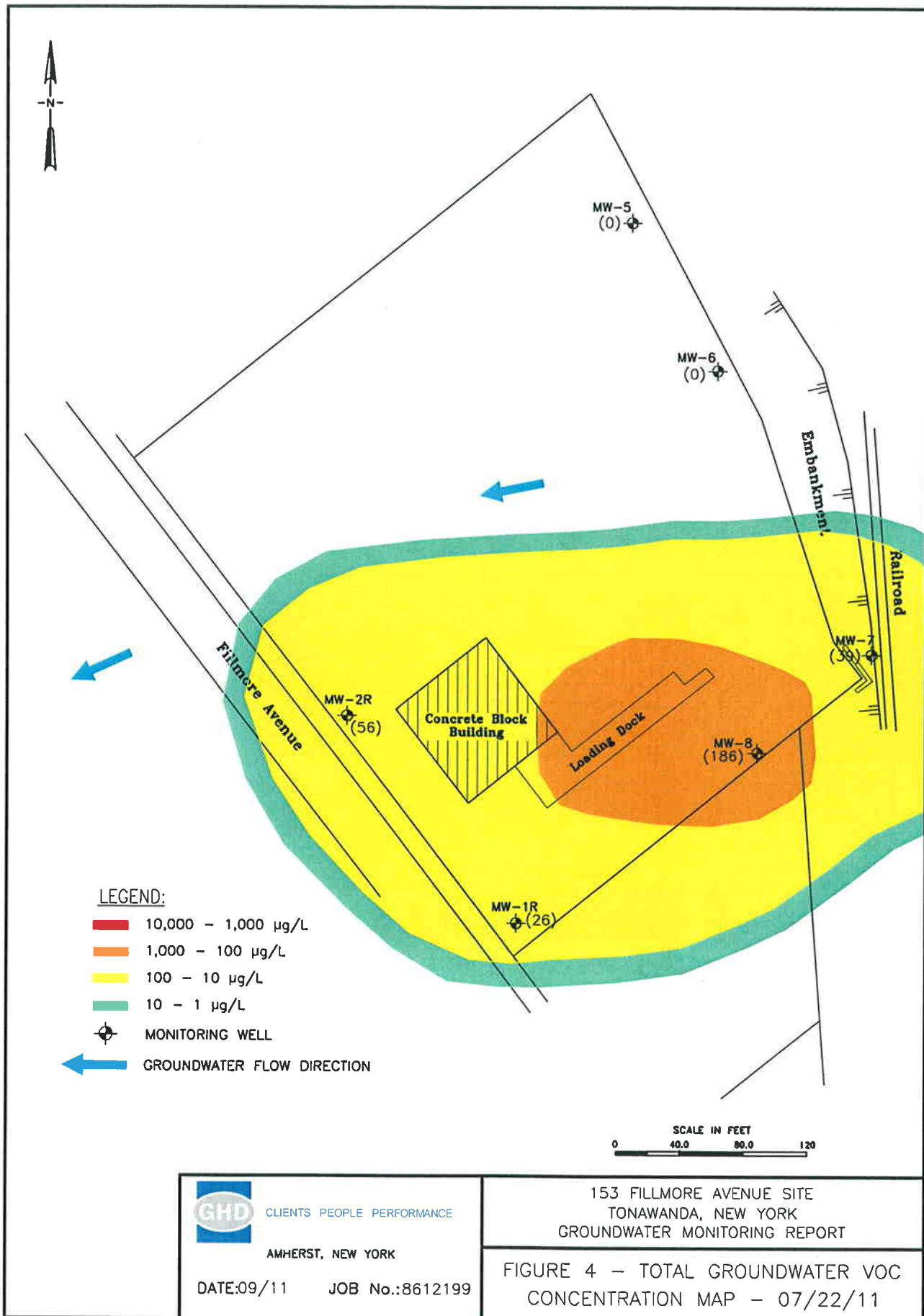
- As presented in the historical total VOC concentration groundwater plume figures in Appendix C, the total VOC plume has migrated in a westward direction over time in a similar direction as the groundwater flow.
- The October 2001 figure shows a total VOC concentration plume that is centered on the east side of the site with total VOC concentrations of approximately 2,681 ppb detected in groundwater from monitoring well MW-7.

- The total VOC concentration plume from the 2007 sampling event indicates decreasing total VOC concentration plumes centered on MW-7.
- In 2008, the center of the total VOC concentration plume migrated in a westward direction due to higher VOC concentrations detected in groundwater monitoring wells MW-6 and MW-8.
- There was no data from monitoring wells MW-1 and MW-2 during the 2007 and 2008 sampling events as the wells were nonfunctional until being re-drilled in 2009.
- The total VOC concentration plume in 2009 expanded westward with the addition of sampling and test results from monitoring wells MW-1 and MW-2.
- Total VOC concentrations increased consistently in groundwater monitoring well MW-8 from the 2001 through the 2009 sampling events.
- The total VOC concentration in monitoring well MW-8 decreased in 2010 and 2011 as presented in Figure 4.
- The total VOC plume migrated further west with test results from the 2011 sampling event due to increased total VOC concentrations in monitoring well MW-1.

3.2.2 Semi-Volatile Organic Analytical Test Results

The semi-volatile organic analytical test results for the sampling event of 2011 varied depending on the monitoring well location and specific compounds detected in groundwater in comparison with previous sampling events. Results showed increasing and decreasing semi-volatile organic concentrations when comparing data from sampling events. The semi-volatile organic analytical test results detected concentrations of bis(2-ethylhexyl)phthalate in monitoring wells MW-2 and MW-7, exceeding groundwater quality standards as presented in Table 4.

Detected concentrations of acenaphthene increased in groundwater sampled from monitoring wells MW-5 and MW-6, while concentrations of acenaphthene decreased at monitoring well MW-8. Detected concentrations of acenaphthene did not exceed groundwater quality standards.



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Detected concentrations of bis(2-ethylhexyl)phthalate increased in groundwater sampled from monitoring wells MW-1, MW-5, MW-6, MW-7 and MW-8. Concentrations in monitoring wells MW-1 and MW-7 exceeded the groundwater quality standard. Detected concentrations of bis(2-ethylhexyl)phthalate decreased in groundwater sampled from monitoring well MW-2, but remained above the groundwater quality limit.

Detected concentrations of di-n-butyl phthalate decreased in groundwater sampled from monitoring wells MW-5, MW-7 and MW-8 to levels of non-detection.

Detected concentrations of carbazole increased in MW-5.

3.2.3 Inorganic Metals Analytical Test Results

Detected concentrations of inorganic metals for the 2011 sampling event that exceeded groundwater quality standards decreased in concentrations of most parameters when compared with 2010 analytical test results. The inorganic metals analytical test results detected concentrations of aluminum (MW-1, MW-2 and MW-7), cadmium (MW-7), chromium (MW-1 and MW-2), iron (all wells), lead (MW-1, MW-2, MW-5 and MW-7), magnesium (MW-1, MW-2 and MW-7), manganese (MW-1, MW-2, MW-6, MW-7 and MW-8) and zinc (MW-7) exceeding groundwater quality standards as presented in Table 5.

Detected concentrations of aluminum increased in groundwater sampled from monitoring well MW-7. Detected concentrations of aluminum decreased in groundwater sampled from monitoring wells MW-1, MW-2, MW-5, MW-6 and MW-8. Detected concentrations of aluminum exceeded groundwater quality standards at monitoring well MW-1, MW-2 and MW-7.

Detected concentrations of barium increased in groundwater sampled from monitoring wells MW-5 and MW-7. Barium concentrations in monitoring wells MW-1, MW-2, MW-6 and MW-8 decreased from the 2010 sampling event. Detected concentrations of barium did not exceed groundwater quality standards.

Beryllium concentrations in all monitoring wells were non-detect.

Detected concentrations of cadmium increased in groundwater sampled from monitoring well MW-7. Detected concentrations of cadmium decreased in monitoring wells MW-1 and MW-2. Cadmium concentrations in monitoring well MW-1 decreased to non-detect. Cadmium

concentrations in monitoring wells MW-5, MW-6 and MW-8 remained non-detect. Cadmium concentrations exceeded groundwater quality standards in monitoring well MW-7.

Detected concentrations of chromium increased in groundwater sampled from monitoring well MW-7. Chromium concentrations decreased in monitoring wells MW-1 and MW-2. Chromium concentrations in monitoring wells MW-5, MW-6, and MW-8 remained non-detect. Chromium concentrations exceeded groundwater quality standards in monitoring wells MW-1 and MW-2.

Detected concentrations of iron increased in groundwater sampled from monitoring well MW-7 and MW-8. Detected concentrations of iron decreased in groundwater sampled from monitoring wells MW-1, MW-2, MW-5 and MW-6. Detected concentrations of iron exceeded groundwater quality standards at all monitoring wells.

Detected concentrations of lead increased in groundwater sampled from monitoring well MW-7. Detected concentrations of lead decreased in groundwater sampled from monitoring wells MW-1, MW-2, MW-5, MW-6 and MW-8. Lead concentrations in monitoring wells MW-6 and MW-8 decreased to non-detect. Detected concentrations of lead exceeded groundwater quality standards at monitoring well MW-1, MW-2, MW-5 and MW-7.

Detected concentrations of magnesium increased in groundwater sampled from monitoring wells MW-6, MW-7 and MW-8. Detected concentrations of magnesium decreased in groundwater sampled from monitoring wells MW-1, MW-2 and MW-5. Detected concentrations of magnesium exceeded groundwater quality standards at monitoring wells MW-1, MW-2 and MW-7.

Concentrations of mercury were detected in groundwater sampled from monitoring well MW-2. Mercury concentrations in monitoring well MW-1 decreased to non-detect. Detected concentrations of mercury did not exceed groundwater quality standards. Mercury concentrations in monitoring wells MW-5, MW-6, MW-7 and MW-8 remained non-detect.

Detected concentrations of manganese increased in groundwater sampled from monitoring wells MW-7 and MW-8. Detected concentrations of manganese decreased in groundwater sampled from monitoring wells MW-1, MW-2, MW-5 and MW-6. Detected concentrations of manganese exceeded groundwater quality standards at monitoring wells MW-1, MW-2, MW-6, MW-7 and MW-8.

Detected concentrations of nickel increased in groundwater sampled from monitoring well MW-7. Detected concentrations of nickel decreased in groundwater sampled from monitoring wells MW-1 and MW-2. Detected concentrations of nickel did not exceed groundwater quality standards. Nickel concentrations in monitoring wells MW-5, MW-6 and MW-8 remained non-detect.

Detected concentrations of zinc increased in groundwater sampled from monitoring wells MW-6 and MW-7. Detected concentrations of zinc decreased in groundwater sampled from monitoring wells MW-1, MW-2, MW-5 and MW-8. Detected concentrations of zinc exceeded groundwater quality standards at monitoring well MW-7.

Detected concentrations that did not exceed groundwater quality standards and represented an increase in concentration when compared to test results from 2010 are: arsenic (MW-1 and MW-2), barium (MW-5 and MW-7), copper (MW-1, MW-5 and MW-7), magnesium (MW-6 and MW-8), nickel (MW-7), zinc (MW-6).

Detected concentrations that did not exceed groundwater quality standards and represented a decrease in concentration when compared to test results from 2010 are: aluminum (MW-5, MW-6 and MW-8), barium (MW-1, MW-2, MW-6 and MW-8), cadmium (MW-1 and MW-2), copper (MW-2), lead (MW-6 and MW-8), magnesium (MW-5), manganese (MW-5), nickel (MW-1 and MW-2), selenium (MW-1 and MW-2) and zinc (MW-1, MW-2, MW-5 and MW-8).

3.3 Quality Assurance/Quality Control Analytical Results

Groundwater samples were analyzed for VOCs by USEPA SW-846 Method 8260, SVOCs by USEPA SW-846 Method 8270 and TAL Metals at Upstate Laboratories in Syracuse, New York. The laboratory data were independently reviewed in accordance with USEPA National Functional Guidelines of October 1999.

The associated laboratory analytical reports of the field duplicate, equipment blank, and other quality assurance/quality control (QA/QC) samples collected during the July 2011 sampling event are presented in Appendix D. The QA/QC measurements examined for the data were within method-specified or laboratory-derived limits. No data were rejected as a result of the data validation.

SECTION 4 – SOILS MANAGEMENT PLAN

4.1 Objective

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

4.2 Nature and Extent of Contamination

The data obtained during the investigation and remediation of the Site reveal that the contaminants of concern at this Site for surface soil consist primarily of semivolatile organic compounds (SVOCs) and metals. The primary SVOCs of concern include benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene and indeno(1,2,3-cd)pyrene. These contaminants belong to a class of SVOCs known as polycyclic aromatic hydrocarbons (PAHs). PAHs are a group of over 100 different chemicals that are ubiquitous in the environment. Sources of PAHs include incomplete combustion of coal, oil, gasoline, garbage, wood and incinerators. PAHs are also found in coal tar, crude oil, creosote, roofing tar, medicines, dyes, plastics and pesticides. The primary metals of concern in surface soil include barium, cadmium, chromium, lead and mercury.

The contaminants of concern at the Site for subsurface soil consist primarily of volatile organic compounds and semivolatile organic compounds. The primary VOCs of concern include 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 this Site for groundwater consist primarily of volatile organic compounds and metals. The primary VOCs of concern include 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 subbase cover at two areas used for parking and access;
 - A concrete and subbase cover consisting of sidewalks and the floors of Site buildings.
- Vapor barriers are not present under any of the concrete buildings slabs.

4.5 Cover System Maintenance and Repair

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

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

4.6 Management of Subsurface Soil and Fill

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

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

instructions regarding how the work is to proceed. Invasive work performed at the property will be performed in accordance with all applicable local, state, and federal regulations to protect worker health and safety, including all applicable personal protective equipment.

4.7 Contingency Plan

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

4.8 Disposal of Subsurface Soil and Fill

Soil and fill that is excavated at the Site but cannot be used as fill below the cover system will be further characterized prior to transportation off-site for disposal at a permitted facility. For excavated soil and fill with visual evidence of contamination (i.e., staining or elevated PID measurements), one composite sample and one duplicate sample will be collected for every 100 cubic yards of material. For excavated soil and fill that does not exhibit visual evidence of contamination but must be sent for off-site disposal, one composite sample and one duplicate sample will be collected for every 2,000 cubic yards of material. A minimum of one composite sample and one duplicate sample will be collected for volumes less than 2,000 cubic yards.

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

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

Additional characterization sampling for off-site disposal may be required by the disposal facility. To potentially reduce off-site disposal requirements/costs, the owner or site developer may also choose to characterize each stockpile individually.

If the analytical results indicate that concentrations exceed the standards for RCRA characteristics, the material will be considered a hazardous waste and must be properly disposed off-site at a permitted disposal facility within 90 days of excavation. If the analytical results indicate that the soil is not a hazardous waste, the material will be properly disposed off-site at a non-hazardous waste facility. Stockpiled soil cannot be transported on or off-site until the analytical results are received from the laboratory.

4.9 Subgrade Material

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

- Excavated on-site soil and fill that appears to be visually impacted shall be sampled and analyzed as described in Section 4.8. If analytical results indicate that contaminants are present at concentrations below the 6 NYCRR Part 375 commercial soil cleanup objectives (Appendix E), the soil and fill can be used as backfill on-site;
- Any off-site material brought to the Site for filling and grading purposes shall be from an acceptable borrow source free of industrial and/or other potential sources of chemical or petroleum contamination, and cannot otherwise be defined as a solid waste in accordance with 6 NYCRR Part 360-1.2(a);
- If the contractor designates a source as “virgin” soil, it shall be further documented in writing to be native soil material from areas not having supported any known prior industrial or commercial development or agricultural use;

- Virgin soil will be subject to the collection of one representative composite sample per source. The sample should be analyzed for TCL VOCs, TCL SVOCs, TCL pesticides, TCL PCBs, arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver and cyanide by a NYSDOH ELAP certified laboratory. The soil will be acceptable for use as backfill provided that all parameters meet the 6 NYCRR Part 375 commercial soil cleanup objectives as referenced in Appendix E;

- Non-virgin soil will be tested via collection of one composite sample per 500 cubic yards of material from each source. If more than 1,000 cubic yards of soil are borrowed from a given off-site nonvirgin 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 2011 Site Usage

No excavation took place on-site in 2011.

SECTION 5 - CONCLUSIONS

1. Analytical test results identified volatile organic compound concentrations that exceeded groundwater standards. Analytical testing detected the volatiles: vinyl chloride, trans-1,2-dichloroethene, cis-1,2-dichloroethene and benzene at concentrations exceeding groundwater quality standards. Volatile organic compound concentrations were found to be increasing in groundwater sampled from monitoring wells MW-1, MW-2, MW-7 and MW-8.
2. Semi-volatiles organic analytical test results detected concentrations of bis(2-ethylhexyl)phthalate that exceeded groundwater quality standards in groundwater from monitoring well MW-1, MW-2 and MW-7.
3. Inorganic metals analytical test results detected concentrations of aluminum, chromium, iron, lead, magnesium, manganese and zinc that exceed groundwater quality standards.
4. Trend analysis of volatile parameters indicates the concentrations of vinyl chloride, benzene and cis-1, 2-dichloroethene to be increasing at one or more monitoring wells.
5. Trend analysis of semi-volatile parameters indicates the concentration of bis(2-ethylhexyl)phthalate to be increasing at monitoring well MW-1, MW-5, MW-6, MW-7 and MW-8.
6. Based on 2011 analytical test results, the total VOC concentration plume appears to be migrating in a westward direction. Total VOC concentrations increased in groundwater at monitoring well MW-1. Total VOC concentrations decreased at monitoring wells MW-2, MW-6, MW-7 and MW-8.

TABLES



TABLE 1
153 Fillmore Avenue Site
City of Tonawanda
2011 Field Groundwater Parameters

Parameter	Monitoring Well Location							
	MW-1	MW-2	MW-5	MW-6	MW-7	MW-8		
Temperature (°C)	19.85	16.28	21.51	20.38	20.17	21.90		
pH	6.99	7.02	6.98	7.1	7.26	7.12		
Conductivity (mS/cm)	0.65	0.587	0.987	0.65	0.53	0.74		
Dissolved Oxygen (mg/L)	4.9	11.42	6.25	3.04	5.80	3.88		
Turbidity (NTUs) ⁽¹⁾	NA	NA	233	72	703	59		
ORP (mV)	-112.0	-67.0	-80.0	-99.0	-72.0	-69.0		

Notes: 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
Well Depth Top PVC	feet	13.5	13.5	13.5
Well Depth Elevation	feet	561.30	561.30	561.30
Depth to Static Water	feet	6.30	7.00	7.60
Height of Water	feet	7.20	6.50	5.90
Top PVC Elevation	feet	574.8	574.8	574.8
Static Water Level Elevation	feet	568.50	567.80	567.20
Well Casing Diameter	inch	2.0	2.0	2.0
Water Volume	gallon	1.21	1.09	1.00
Water Purged	gallon	3.64	3.26	2.99
Purging Method	-	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump

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
Well Depth Top PVC	feet	13.5	13.5	13.5
Well Depth Elevation	feet	561.69	561.69	561.69
Depth to Static Water	feet	5.90	6.30	6.40
Height of Water	feet	7.60	7.20	7.10
Top PVC Elevation	feet	575.19	575.19	575.19
Static Water Level Elevation	feet	569.29	568.89	568.79
Well Casing Diameter	inch	2.0	2.0	2.0
Water Volume	gallon	1.22	1.15	1.14
Water Purged	gallon	3.67	3.46	3.41
Purging Method	-	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump

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
Well Depth Top PVC	feet	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
Depth to Static Water	feet	8.41	9.40	6.90	8.50	8.30	8.80
Height of Water	feet	7.09	6.10	8.60	7.00	7.20	6.70
Top PVC Elevation	feet	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
Well Casing Diameter	inch	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
Water Purged	gallon	1.91	1.65	1.00	1.50	1.50	1.81
Purging Method	-	-	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic 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
Well Depth Top PVC	feet	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
Depth to Static Water	feet	7.93	8.50	6.70	8.7	8.1	8.5
Height of Water	feet	9.37	8.80	10.60	8.60	9.20	8.80
Top PVC Elevation	feet	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
Well Casing Diameter	inch	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
Water Purged	gallon	2.53	2.38	2.86	2.34	2.48	2.38
Purging Method		-	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic 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
Well Depth Top PVC	feet	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
Depth to Static Water	feet	4.86	16.50	14.70	(1)	(1)	(1)
Height of Water	feet	18.64	7.00	8.80	(1)	(1)	(1)
Top PVC Elevation	feet	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)
Well Casing Diameter	inch	1.0	1.0	1.0	1.0	1.0	1.0
Water Volume	gallon	1.68	0.63	0.79	(1)	(1)	(1)
Water Purged	gallon	5.03	1.89	1.50	1.50	1.25	1.25
Purging Method	-	-	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump

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

TABLE 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
Well Depth Top PVC	feet	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
Depth to Static Water	feet	8.16	8.50	6.90	7.8	8.4	8.9
Height of Water	feet	9.34	9.00	10.60	9.70	9.10	8.60
Top PVC Elevation	feet	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
Well Casing Diameter	inch	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
Water Purged	gallon	2.52	2.43	3.00	2.62	2.46	2.32
Purging Method	-	-	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic 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
Chloromethane	NE	µg/L	-	ND	ND	ND
Vinyl chloride	2.0	µg/L	ND	ND	3 J	3 J
Bromomethane	5.0	µg/L	-	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND
Acetone	50.0	µg/L	ND	ND	ND	ND
1,1-Dichloroethene	5.0	µg/L	ND	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	ND	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	47	5.5	13	23
Chloroform	7.0	µg/L	-	ND	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND
Benzene	1.0	µg/L	ND	ND	ND	ND
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND
Toluene	5.0	µg/L	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND
m,p-Xylene	5.0	µg/L	ND	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND	ND
Styrene	5.0	µg/L	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND
Total VOCs		µg/L	47	5.5	16.0	26.0
Total VOCs		mg/L	0.047	0.006	0.016	0.026

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.

** Dilution factor of 5 used

ND - Not detected for at or above reporting limit

J - Analyte detected 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	Units	08/07/01	07/22/09	07/15/10	07/22/11
	Water Quality Standards ¹					
Chloromethane	NE	µg/L	-	ND	ND	ND
Vinyl chloride	2.0	µg/L	ND	82	64	28
Bromomethane	5.0	µg/L	-	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND
Acetone	50.0	µg/L	ND	ND	ND	11
1,1-Dichloroethene	5.0	µg/L	ND	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	4 J	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	ND	ND	54	12
Chloroform	7.0	µg/L	-	ND	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND
Benzene	1.0	µg/L	ND	6.7	ND	5 J
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND
Toluene	5.0	µg/L	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND
m,p-Xylene	5.0	µg/L	ND	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND	ND
Styrene	5.0	µg/L	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND
Total VOCs		µg/L	0	92.7	118.0	56.0
Total VOCs		mg/L	0.000	0.093	0.118	0.056

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.

** Dilution factor of 5 used

ND - Not detected for at or above reporting limit

J - Analyte detected below quantitation limits

- = The analyte was not sampled for.

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

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	08/07/01	07/26/07	08/27/08	07/22/09	07/15/10	07/22/11
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	ND	ND	ND	ND	ND	ND
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND
Acetone	50.0	µg/L	30	ND	ND	ND	ND	ND
1,1-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND
Benzene	1.0	µg/L	2	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND
Toluene	5.0	µg/L	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND	ND	ND
m,p-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND
Styrene	5.0	µg/L	ND	ND	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND
Total VOCs		µg/L	32	0	0	0	0	0
Total VOCs		mg/L	0.032	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. 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.

** Dilution factor of 5 used

ND - Not detected for at or above reporting limit

J - Analyte detected below quantitation limits

- = The analyte was not sampled for.

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

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	08/07/01	07/26/07	08/27/08	07/22/09	07/15/10	07/22/11
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	ND	ND	99	42	5	ND
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND
Acetone	50.0	µg/L	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	ND	ND	3 J	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	ND	ND	240	51	2 J	ND
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND
Benzene	1.0	µg/L	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	2 J	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND
Toluene	5.0	µg/L	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND	ND	ND
m,p-Xylene	5.0	µg/L	5	ND	ND	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND
Styrene	5.0	µg/L	ND	ND	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND
Total VOCs		µg/L	5	0	339	98	7	0
Total VOCs		mg/L	0.005	0.000	0.339	0.098	0.007	0.000

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.

** Dilution factor of 5 used

ND - Not detected for at or above reporting limit

J - Analyte detected below quantitation limits

- = The analyte was not sampled for.

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

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	08/07/01	07/26/07	08/27/08	07/23/09	07/15/10	07/22/11
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	10	40 J	ND	2 J	ND	ND
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND
Acetone	50.0	µg/L	ND	ND	ND	ND	ND	27
1,1-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	10 J	ND	ND	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	150	270	ND	14	45	9.4
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND
Benzene	1.0	µg/L	36	ND	ND	1 J	ND	ND
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND
Trichloroethene	5.0	µg/L	19	10 J	ND	5.2	ND	3 J
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND
Toluene	5.0	µg/L	660	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND
Tetrachloroethene	5.0	µg/L	ND	10 J	ND	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND
Ethylbenzene	5.0	µg/L	690	ND	ND	2 J	ND	ND
m,p-Xylene	5.0	µg/L	660	ND	ND	ND	ND	ND
o-Xylene	5.0	µg/L	440	ND	ND	ND	ND	ND
Styrene	5.0	µg/L	16	ND	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND
Total VOCs		µg/L	2,681	340	0	24	45	39
Total VOCs		mg/L	2.681	0.340	0.000	0.024	0.045	0.039

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.

** Dilution factor of 5 used

ND - Not detected for at or above reporting limit

J - Analyte detected below quantitation limits

- = The analyte was not sampled for.

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

Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	08/07/01	07/26/07	08/27/08	07/23/09**	07/15/10	07/22/11
Chloromethane	NE	µg/L	-	ND	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	54	190	160	190	240	120
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND
Acetone	50.0	µg/L	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	7	15	20 J	20 J	10 J	11
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	31	160	230	370	260	52
Chloroform	7.0	µg/L	-	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND	ND
Benzene	1.0	µg/L	4	ND	ND	ND	ND	3 J
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND
Toluene	5.0	µg/L	ND	2 J	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND	ND	ND
m,p-Xylene	5.0	µg/L	6	ND	ND	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND	ND	ND	ND
Styrene	5.0	µg/L	ND	ND	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND	ND
Total VOCs		µg/L	102	367	410	580	510	186
Total VOCs		mg/L	0.102	0.367	0.410	0.580	0.510	0.186

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.

** Dilution factor of 5 used

ND - Not detected for at or above reporting limit

J - Analyte detected below quantitation limits

- = The analyte was not sampled for.

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

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

B - Analyte detected in the associated Method Blank

- = The analyte was not sampled for.

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

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

1. NYSDEC TOGS (L.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 L.1.1 criteria.

NE = NYSDEC TOGS L.1.1 water quality standard not established.

ND - Not detected for at or above reporting limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

- = The analyte was not sampled for.

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

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

- = The analyte was not sampled for.

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

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

- = The analyte was not sampled for.

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

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

- = The analyte was not sampled for.

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

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

- = The analyte was not sampled for.

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

Metals Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	08/08/01	07/22/09	07/15/10	07/22/11
Aluminum	2,000	µg/L	-	4,760	48,000	37,300
Antimony	6	µg/L	-	ND	ND	ND
Arsenic	50	µg/L	11	ND	23	36
Barium	2,000	µg/L	301	265	590	545
Beryllium	3	µg/L	-	ND	ND	ND
Cadmium	10	µg/L	ND	ND	10.4	ND
Calcium	NE	µg/L	-	188,000	635,000	400,000
Chromium	50	µg/L	ND	ND	67.7	58.2
Cobalt	NE	µg/L	-	ND	49	35.5
Copper	1,000	µg/L	-	16.6	77.7	89.5
Iron	600	µg/L	-	22,200	112,000	81,800
Lead	50	µg/L	7	3.78	80	62
Magnesium	35,000	µg/L	-	35,800	127,000	61,400
Manganese	600	µg/L	-	2,250	7,410	5,100
Mercury	0.7	µg/L	ND	ND	0.22	ND
Nickel	200	µg/L	-	ND	121	78.2
Potassium	NE	µg/L	-	4,650	12,600	12,400
Selenium	10	µg/L	-	ND	3.9	ND
Silver	50	µg/L	-	ND	ND	ND
Sodium	NE	µg/L	-	79,500	71,300	81,000
Thallium	0.5	µg/L	-	ND	ND	ND
Vanadium	NE	µg/L	-	ND	102	87
Zinc	5,000	µg/L	-	28.1	402	307

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 below quantitation limits

- = The analyte was not sampled for.

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

Metals Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	08/08/01	07/22/09	07/15/10	07/22/11
Aluminum	2,000	µg/L	-	3,250	98,500	35,400
Antimony	6	µg/L	-	ND	ND	ND
Arsenic	50	µg/L	5	ND	17	32
Barium	2,000	µg/L	73	261	2,330	724
Beryllium	3	µg/L	-	ND	5	ND
Cadmium	10	µg/L	ND	ND	20	5.32
Calcium	NE	µg/L	-	213,000	1,240,000	417,000
Chromium	50	µg/L	ND	ND	146	56.2
Cobalt	NE	µg/L	-	ND	90	30.6
Copper	1,000	µg/L	-	29.1	611	199
Iron	600	µg/L	-	11,300	165,000	71,700
Lead	50	µg/L	2	13.1	410	140
Magnesium	35,000	µg/L	-	53,400	315,000	119,000
Manganese	600	µg/L	-	490	5,250	2,110
Mercury	0.7	µg/L	ND	ND	2.8	0.542
Nickel	200	µg/L	-	ND	222	71.6
Potassium	NE	µg/L	-	3,580	20,900	11,000
Selenium	10	µg/L	-	ND	5.6	ND
Silver	50	µg/L	-	ND	ND	ND
Sodium	NE	µg/L	-	56,900	60,500	58,700
Thallium	0.5	µg/L	-	ND	ND	ND
Vanadium	NE	µg/L	-	ND	153	76
Zinc	5,000	µg/L	-	79.8	2,060	606

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 below quantitation limits

- = The analyte was not sampled for.

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

Metals Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	08/08/01	07/26/07	08/27/08	07/22/09	07/15/10	07/22/11
Aluminum	2,000	µg/L	-	1,440	5,740	6,990	2,640	1,480
Antimony	6	µg/L	-	ND	ND	ND	ND	ND
Arsenic	50	µg/L	11	ND	ND	ND	ND	ND
Barium	2,000	µg/L	2,390	160	666	522	176	239
Beryllium	3	µg/L	-	ND	ND	ND	ND	ND
Cadmium	10	µg/L	22	ND	7	ND	ND	ND
Calcium	NE	µg/L	-	164,000	163,000	193,000	173,000	159,000
Chromium	50	µg/L	ND	ND	13.9	22.1	ND	ND
Cobalt	NE	µg/L	-	ND	ND	ND	ND	ND
Copper	1,000	µg/L	-	20.8	45.9	79.1	12.9	22
Iron	600	µg/L	-	2,880	12,400	17,200	7,090	4,970
Lead	50	µg/L	580	64.5	231	527	170	91
Magnesium	35,000	µg/L	-	31,700	38,500	59,600	39,800	34,600
Manganese	600	µg/L	-	530	509	591	569	437
Mercury	0.7	µg/L	ND	ND	ND	ND	ND	ND
Nickel	200	µg/L	-	ND	ND	ND	ND	ND
Potassium	NE	µg/L	-	ND	4,270	2,030	ND	ND
Selenium	10	µg/L	-	8.1	ND	ND	ND	ND
Silver	50	µg/L	-	ND	ND	ND	ND	ND
Sodium	NE	µg/L	-	24,200	18,400	17,200	20,100	19,000
Thallium	0.5	µg/L	-	ND	ND	ND	ND	ND
Vanadium	NE	µg/L	-	ND	ND	ND	ND	ND
Zinc	5,000	µg/L	-	1,690	2,310	1,670	2,740	984

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 below quantitation limits

- = The analyte was not sampled for.

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

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

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

µ - Analyte detected below quantitation limits

- = The analyte was not sampled for.

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

Metals Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	08/08/01	07/26/07	08/27/08	07/23/09	07/15/10	07/22/11
Aluminum	2,000	µg/L	-	3,390	22,700	4,050	2,120	5,360
Antimony	6	µg/L	-	ND	ND	ND	ND	ND
Arsenic	50	µg/L	6	ND	ND	ND	6	ND
Barium	2,000	µg/L	163	76.2	173	96	64	84.4
Beryllium	3	µg/L	-	ND	ND	ND	ND	ND
Cadmium	10	µg/L	ND	11.7	40.2	ND	ND	15.7
Calcium	NE	µg/L	-	145,000	299,000	166,000	135,000	185,000
Chromium	50	µg/L	ND	7.28	36.6	ND	ND	10.8
Cobalt	NE	µg/L	-	ND	30.0	ND	ND	ND
Copper	1,000	µg/L	-	106	293	162	63	134
Iron	600	µg/L	-	11,200	38,000	15,200	9,950	17,000
Lead	50	µg/L	36	96.6	451	231	120	180
Magnesium	35,000	µg/L	-	38,100	60,500	30,600	29,500	43,500
Manganese	600	µg/L	-	942	2,210	1,380	508	1,440
Mercury	0.7	µg/L	ND	ND	0.211	ND	ND	ND
Nickel	200	µg/L	-	ND	112	36.8	ND	36.2
Potassium	NE	µg/L	-	12,500	15,000	13,900	9,940	11,100
Selenium	10	µg/L	-	17.1	ND	ND	ND	ND
Silver	50	µg/L	-	ND	ND	ND	ND	ND
Sodium	NE	µg/L	-	72,900	34,500	88,600	72,100	65,100
Thallium	0.5	µg/L	-	ND	ND	ND	ND	ND
Vanadium	NE	µg/L	-	ND	46.0	ND	ND	ND
Zinc	5,000	µg/L	-	2,540	21,000	7,010	2,470	6,270

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

µ - Analyte detected below quantitation limits

- = The analyte was not sampled for.

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

Metals Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards ¹	Units	08/08/01	07/26/07	08/27/08	07/22/09	07/15/10	07/22/11
Aluminum	2,000	µg/L	-	ND	1,420	722	199	ND
Antimony	6	µg/L	-	ND	ND	ND	ND	ND
Arsenic	50	µg/L	14	ND	ND	ND	ND	ND
Barium	2,000	µg/L	880	172	175	125	133	107
Beryllium	3	µg/L	-	ND	ND	ND	ND	ND
Cadmium	10	µg/L	ND	ND	ND	ND	ND	ND
Calcium	NE	µg/L	-	157,000	149,000	141,000	144,000	141,000
Chromium	50	µg/L	15	ND	ND	ND	ND	ND
Cobalt	NE	µg/L	-	ND	ND	ND	ND	ND
Copper	1,000	µg/L	-	10.4	15.0	ND	ND	ND
Iron	600	µg/L	-	3,230	4,640	3,120	2,870	3,090
Lead	50	µg/L	270	ND	15.4	5.42	11	ND
Magnesium	35,000	µg/L	-	28,700	27,100	28,100	25,300	26,200
Manganese	600	µg/L	-	802	891	618	665	817
Mercury	0.7	µg/L	ND	ND	ND	ND	ND	ND
Nickel	200	µg/L	-	ND	ND	ND	ND	ND
Potassium	NE	µg/L	-	1,780	4,060	3,080	ND	ND
Selenium	10	µg/L	-	9.46	ND	ND	ND	ND
Silver	50	µg/L	-	ND	ND	ND	ND	ND
Sodium	NE	µg/L	-	30,100	24,000	22,600	22,600	22,700
Thallium	0.5	µg/L	-	ND	ND	ND	ND	ND
Vanadium	NE	µg/L	-	ND	ND	ND	ND	ND
Zinc	5,000	µg/L	-	189	630	250	375	33

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 below quantitation limits

- = The analyte was not sampled for.

APPENDICES



APPENDIX A

Groundwater Field Sampling Records



**GHD INC.
GROUNDWATER FIELD SAMPLING RECORD**

SITE 153 Fillmore Avenue

DATE 07/22/11

Sampler: Brian Doyle

SAMPLE ID MW-01

Depth of well (from top of casing).....	<u>13.83 ft</u>	EL <u>560.97</u>
Initial static water level (from top of casing)...	<u>7.6 ft</u>	EL <u>567.20</u>
Top of PVC Casing Elevation	<u>574.80</u>	

Evacuation Method:

Well Volume Calculation

Peristaltic X Centrifugal

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

Airlift Pos. Displ.

2 in. casing: 6.2 ft. of water x .16 = 1.00 gallons

Bailer >>> No. of bails

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

Volume of water removed 2.99 gals.

> 3 volumes: yes no

dry: yes no

Field Tests:

Temp:	<u>19.85 C</u>
pH	<u>6.99</u>
Conductivity	<u>0.65 mS/cm</u>
DO	<u>4.9 mg/L</u>
Turbidity	<u>NA NTUs</u>
Oxidation Reduction Potential (ORP)	<u>-112.0 mV</u>

Sampling:

Time: 11:30 AM

Sampling Method: Peristaltic Pump X

Disposable Bailer

Disposable Tubing X

Observations:

Weather/Temperature: Clear, 90 ° F

Physical Appearance and Odor of Sample: Light brown, murky. No odor. Grout like substance found around inner well cap.

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

GHD INC.
GROUNDWATER FIELD SAMPLING RECORD

SITE 153 Fillmore Avenue

DATE 07/22/11

Sampler: Brian Doyle

SAMPLE ID MW-02; FD

Depth of well (from top of casing).....	<u>13.5 ft</u>	<u>EL 561.69</u>
Initial static water level (from top of casing)....	<u>6.4 ft</u>	<u>EL 568.79</u>
Top of PVC Casing Elevation	<u>575.19</u>	

Evacuation Method:

Well Volume Calculation

Peristaltic	<u>X</u>	Centrifugal	<u> </u>	1 in. casing:	<u> </u> ft. of water x .09 =	<u> </u> gallons
Airlift	<u> </u>	Pos. Displ.	<u> </u>	2 in. casing:	<u>7.1</u> ft. of water x .16 =	<u>1.14</u> gallons
Bailer	<u> </u>	>>> No. of bails	<u> </u>	3 in. casing:	<u> </u> ft. of water x .36 =	<u> </u> gallons

Volume of water removed 3.41 gals.

> 3 volumes: yes no

dry: yes no

Field Tests:

Temp:	<u>16.28</u> C
pH	<u>7.02</u>
Conductivity	<u>0.587</u> mS/cm
DO	<u>11.42</u> mg/L
Turbidity	<u>NA</u> NTUs
Oxidation Reduction Potential (ORP)	<u>-67.0</u> mV

Sampling: Time: 12:30 PM

Sampling Method:

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

Observations:

Weather/Temperature: Clear, 90° F

Physical Appearance and Odor of Sample: Brown, very murky and turbid

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

GHD INC.
GROUNDWATER FIELD SAMPLING RECORD

SITE 153 Fillmore Avenue

DATE 07/22/11

Sampler: Brian Doyle

SAMPLE ID MW-05

Depth of well (from top of casing).....	<u>15.5 ft</u>	EL <u>562.82</u>
Initial static water level (from top of casing)....	<u>8.8 ft</u>	EL <u>569.52</u>
Top of PVC Casing Elevation	<u>578.32</u>	

Evacuation Method:

Well Volume Calculation

Peristaltic X Centrifugal

1 in. casing: 6.7 ft. of water x .09 = 0.60 gallons

Airlift Pos. Displ.

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

Bailer >>> No. of bails

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

Volume of water removed 1.81 gals.
 > 3 volumes: yes no
 dry: yes no

Field Tests: Temp: 21.51 C
 pH: 6.98
 Conductivity: 0.987 mS/cm
 DO: 6.25 mg/L
 Turbidity: 233.0 NTUs
 Oxidation Reduction Potential (ORP): -80.0 mV

Sampling: Time: 2:15 PM

Sampling Method: Peristaltic Pump X
 Disposable Bailer
 Disposable Tubing X

Observations:

Weather/Temperature: Clear, 90° F

Physical Appearance and Odor of Sample: Grayish, murky with oil residue; slight sulfur odor.

Comments: Approximately 1.5 gallons of water was removed before well went dry.

**GHD INC.
GROUNDWATER FIELD SAMPLING RECORD**

SITE 153 Fillmore Avenue

DATE 07/22/11

Sampler: Brian Doyle

SAMPLE ID MW-06

Depth of well (from top of casing).....	<u>17.3 ft</u>	EL <u>560.83</u>
Initial static water level (from top of casing)....	<u>8.5 ft</u>	EL <u>569.63</u>
Top of PVC Casing Elevation	<u>578.13</u>	

Evacuation Method:

Well Volume Calculation

Peristaltic X Centrifugal _____

1 in. casing: 8.8 ft. of water x .09 = 0.79 gallons

Airlift _____ Pos. Displ. _____

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

Bailer _____ >>> No. of bails _____

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

Volume of water removed 2.38 gals.

> 3 volumes: yes no

dry: yes no

Field Tests:

Temp:	<u>20.38 C</u>
pH	<u>7.1</u>
Conductivity	<u>0.654 mS/cm</u>
DO	<u>3.04 mg/L</u>
Turbidity	<u>72 NTUs</u>
Oxidation Reduction Potential (ORP)	<u>-99.0 mV</u>

Sampling: Time: 3:00 PM

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

Observations:

Weather/Temperature: Clear, 95° F

Physical Appearance and Odor of Sample: Oil residue throughout purging and sampling. Strong odor.

Comments: _____

**GHD INC.
GROUNDWATER FIELD SAMPLING RECORD**

SITE 153 Fillmore Avenue

DATE 07/22/11

Sampler: Brian Doyle

SAMPLE ID MW-07

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:

Well Volume Calculation

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

Volume of water removed 1.25 gals.
 > 3 volumes: yes no
 dry: yes no

Field Tests: Temp: 20.17 C
 pH 7.26
 Conductivity 0.528 mS/cm
 DO 5.8 mg/L
 Turbidity 703 NTUs
 Oxidation Reduction Potential (ORP) -72.0 mV

Sampling: Time: 4:00 PM

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

Observations:

Weather/Temperature: Clear, 95° F

Physical Appearance and Odor of Sample: Clear then light brown, murky. Slight sediment odor.

Comments: There was an obstruction in the well at a depth of 8.8 feet in which the water level indicator could 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.
Approximately 0.75 gallons of water was removed before well went dry.

GHD INC.
GROUNDWATER FIELD SAMPLING RECORD

SITE 153 Fillmore Avenue

DATE 07/22/11

Sampler: Brian Doyle

SAMPLE ID MW-08; MS, MSD

Depth of well (from top of casing)..... 17.5 ft EL 560.93
Initial static water level (from top of casing).... 8.9 ft EL 569.53
Top of PVC Casing Elevation 578.43

Evacuation Method:

Well Volume Calculation

Peristaltic X Centrifugal 1 in. casing: 8.6 ft. of water x .09 = 0.77 gallons
Airlift Pos. Displ. 2 in. casing: ft. of water x .16 = gallons
Bailer >>> No. of bails 3 in. casing: ft. of water x .36 = gallons

Volume of water removed 2.32 gals.
> 3 volumes: yes no
dry: yes no

Field Tests: Temp: 21.9 C
 pH: 7.12
 Conductivity: 0.735 mS/cm
 DO: 3.88 mg/L
 Turbidity: 59 NTUs
 Oxidation Reduction Potential (ORP): -69.0 mV

Sampling: Time: 13:30 PM

Sampling Method: Peristaltic Pump X
 Disposable Bailer
 Disposable Tubing X

Observations:

Weather/Temperature: Clear, 90° F

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

Comments:

APPENDIX B

Laboratory Analytical Results



Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-001

Client Sample ID: MW-1
Collection Date: 7/22/2011 11:30:00 AM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL BY NYSDEC ASP 2005						
				200.7WTASP	(E200.7)	Analyst: DEY
Aluminum	37300	100		µg/L	1	8/13/2011 8:51:51 AM
Barium	545	50.0		µg/L	1	8/13/2011 8:51:51 AM
Beryllium	ND	3.00		µg/L	1	8/13/2011 8:51:51 AM
Cadmium	ND	5.00		µg/L	1	8/13/2011 8:51:51 AM
Calcium	400000	5000		µg/L	1	8/13/2011 8:51:51 AM
Chromium	58.2	10.0		µg/L	1	8/13/2011 8:51:51 AM
Cobalt	35.5	20.0		µg/L	1	8/13/2011 8:51:51 AM
Copper	89.5	10.0		µg/L	1	8/13/2011 8:51:51 AM
Iron	81800	60.0		µg/L	1	8/13/2011 8:51:51 AM
Magnesium	61400	5000		µg/L	1	8/13/2011 8:51:51 AM
Manganese	5100	10.0		µg/L	1	8/13/2011 8:51:51 AM
Nickel	78.2	30.0		µg/L	1	8/13/2011 8:51:51 AM
Potassium	12400	5000		µg/L	1	8/13/2011 8:51:51 AM
Silver	ND	10.0		µg/L	1	8/15/2011 12:53:14 PM
Sodium	81000	5000		µg/L	1	8/13/2011 8:51:51 AM
Vanadium	86.5	30.0		µg/L	1	8/13/2011 8:51:51 AM
Zinc	307	10.0		µg/L	1	8/13/2011 8:51:51 AM
ASP TOTAL METALS BY ICP-MS						
				200.8ASP	(E200.8)	Analyst: DEY
Antimony	ND	25		µg/L	5	8/12/2011 4:10:00 PM
Arsenic	36	25		µg/L	5	8/12/2011 4:10:00 PM
Lead	62	15		µg/L	5	8/12/2011 4:10:00 PM
Selenium	ND	15		µg/L	5	8/12/2011 4:10:00 PM
Thallium	ND	15		µg/L	5	8/12/2011 4:10:00 PM
NOTES:						
The reporting limits were raised due to matrix interference.						
TOTAL MERCURY WATERS ASP						
				245.2WTASP	(E245.2)	Analyst: ALW
Mercury	ND	0.200		µg/L	1	8/10/2011 10:47:00 AM
TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005						
				8270_ASPTCL_W	(SW3520)	Analyst: LD
Phenol	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Bis(2-chloroethyl)ether	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
2-Chlorophenol	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
1,3-Dichlorobenzene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
1,4-Dichlorobenzene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
1,2-Dichlorobenzene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
2-Methylphenol	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
N-Nitrosodi-n-propylamine	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Hexachloroethane	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM

Approved By: _____

Date: _____

Page 1 of 30

Qualifiers:

- # Accreditation not offered by NYS DOH for this parameter
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-001

Client Sample ID: MW-1
Collection Date: 7/22/2011 11:30:00 AM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005		8270_ASPTCL_W		(SW3520)		Analyst: LD
Nitrobenzene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Isophorone	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
2-Nitrophenol	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
2,4-Dimethylphenol	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Bis(2-chloroethoxy)methane	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
2,4-Dichlorophenol	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Naphthalene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
4-Chloroaniline	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Hexachlorobutadiene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
4-Chloro-3-methylphenol	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
2-Methylnaphthalene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Hexachlorocyclopentadiene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
2,4,6-Trichlorophenol	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
2,4,5-Trichlorophenol	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
2-Chloronaphthalene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
2-Nitroaniline	ND	10		µg/L	1	8/8/2011 5:33:00 PM
Dimethyl phthalate	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Acenaphthylene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
2,6-Dinitrotoluene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
3-Nitroaniline	ND	10		µg/L	1	8/8/2011 5:33:00 PM
Acenaphthene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
2,4-Dinitrophenol	ND	10		µg/L	1	8/8/2011 5:33:00 PM
4-Nitrophenol	ND	10		µg/L	1	8/8/2011 5:33:00 PM
Dibenzofuran	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
2,4-Dinitrotoluene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Diethyl phthalate	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
4-Chlorophenyl phenyl ether	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Fluorene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
4-Nitroaniline	ND	10		µg/L	1	8/8/2011 5:33:00 PM
4,6-Dinitro-2-methylphenol	ND	10		µg/L	1	8/8/2011 5:33:00 PM
N-Nitrosodiphenylamine	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
4-Bromophenyl phenyl ether	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Hexachlorobenzene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Pentachlorophenol	ND	10		µg/L	1	8/8/2011 5:33:00 PM
Phenanthrene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Anthracene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Carbazole	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Di-n-butyl phthalate	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM

Approved By: _____

Date: _____

Page 2 of 30

Qualifiers:

- # Accreditation not offered by NYS DOH for this parameter
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-001

Client Sample ID: MW-1
Collection Date: 7/22/2011 11:30:00 AM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005						
				8270_ASPTCL_W		(SW3520)
						Analyst: LD
Fluoranthene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Pyrene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Butyl benzyl phthalate	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
3,3'-Dichlorobenzidine	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Benz(a)anthracene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Chrysene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Bis(2-ethylhexyl)phthalate	6.2	5.0	B	µg/L	1	8/8/2011 5:33:00 PM
Di-n-octyl phthalate	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Benzo(b)fluoranthene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Benzo(k)fluoranthene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Benzo(a)pyrene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Indeno(1,2,3-cd)pyrene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Dibenz(a,h)anthracene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Benzo(g,h,i)perylene	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
(3+4)-Methylphenol	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
Bis(2-chloroisopropyl)ether	ND	5.0		µg/L	1	8/8/2011 5:33:00 PM
TIC: unknown (13.07)	20	0		µg/L	1	8/8/2011 5:33:00 PM
TIC: unknown (13.26)	15	0		µg/L	1	8/8/2011 5:33:00 PM
TIC: unknown (13.35)	17	0		µg/L	1	8/8/2011 5:33:00 PM
TIC: unknown (13.6)	92	0	B	µg/L	1	8/8/2011 5:33:00 PM
TIC: unknown (13.74)	17	0		µg/L	1	8/8/2011 5:33:00 PM
TIC: unknown (13.76)	26	0	B	µg/L	1	8/8/2011 5:33:00 PM
TIC: unknown (13.94)	24	0		µg/L	1	8/8/2011 5:33:00 PM
TIC: unknown (14.51)	27	0	B	µg/L	1	8/8/2011 5:33:00 PM
TIC: unknown (14.59)	11	0		µg/L	1	8/8/2011 5:33:00 PM
TIC: unknown (14.85)	16	0		µg/L	1	8/8/2011 5:33:00 PM
TIC: unknown (14.98)	14	0		µg/L	1	8/8/2011 5:33:00 PM
TIC: unknown (15.19)	12	0		µg/L	1	8/8/2011 5:33:00 PM
TIC: unknown (15.45)	11	0		µg/L	1	8/8/2011 5:33:00 PM
TIC: unknown (15.55)	13	0		µg/L	1	8/8/2011 5:33:00 PM
TIC: unknown (15.69)	11	0		µg/L	1	8/8/2011 5:33:00 PM
TIC: unknown (16.13)	18	0		µg/L	1	8/8/2011 5:33:00 PM
TIC: unknown (16.81)	13	0		µg/L	1	8/8/2011 5:33:00 PM
TIC: unknown (16.95)	13	0		µg/L	1	8/8/2011 5:33:00 PM
TIC: unknown (17.22)	11	0		µg/L	1	8/8/2011 5:33:00 PM
TIC: unknown (17.64)	300	0		µg/L	1	8/8/2011 5:33:00 PM
ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260						
				8260ASP_TCL_W		Analyst: LEF
Chloromethane	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM

Approved By: _____

Date: _____

Page 3 of 30

Qualifiers:

- # Accreditation not offered by NYS DOH for this parameter
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-001

Client Sample ID: MW-1
Collection Date: 7/22/2011 11:30:00 AM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260		8260ASP_TCL_W		Analyst: LEF		
Vinyl chloride	3	5.0	J	µg/L	1	8/3/2011 5:20:00 PM
Bromomethane	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
Chloroethane	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
Acetone	ND	10		µg/L	1	8/3/2011 5:20:00 PM
1,1-Dichloroethene	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
Carbon disulfide	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
Methylene chloride	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
1,1-Dichloroethane	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
2-Butanone	ND	10		µg/L	1	8/3/2011 5:20:00 PM
cis-1,2-Dichloroethene	23	5.0		µg/L	1	8/3/2011 5:20:00 PM
Chloroform	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
Carbon tetrachloride	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
Benzene	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
1,2-Dichloroethane	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
Trichloroethene	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
1,2-Dichloropropane	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
Bromodichloromethane	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	8/3/2011 5:20:00 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
Toluene	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
2-Hexanone	ND	10		µg/L	1	8/3/2011 5:20:00 PM
Tetrachloroethene	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
Dibromochloromethane	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
Chlorobenzene	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
Ethylbenzene	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
m,p-Xylene	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
o-Xylene	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
Styrene	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
Bromoform	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	8/3/2011 5:20:00 PM

NOTES:

The pH of the sample >2.

TICS: No compounds were detected.

Approved By: _____

Date: _____

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Qualifiers:

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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheeler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-002

Client Sample ID: MW-2
Collection Date: 7/22/2011 12:30:00 PM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL BY NYSDEC ASP 2005						
				200.7WTASP	(E200.7)	Analyst: DEY
Aluminum	35400	100		µg/L	1	8/13/2011 8:57:11 AM
Barium	724	50.0		µg/L	1	8/13/2011 8:57:11 AM
Beryllium	ND	3.00		µg/L	1	8/13/2011 8:57:11 AM
Cadmium	5.32	5.00		µg/L	1	8/13/2011 8:57:11 AM
Calcium	417000	5000		µg/L	1	8/13/2011 8:57:11 AM
Chromium	56.2	10.0		µg/L	1	8/13/2011 8:57:11 AM
Cobalt	30.6	20.0		µg/L	1	8/13/2011 8:57:11 AM
Copper	199	10.0		µg/L	1	8/13/2011 8:57:11 AM
Iron	71700	60.0		µg/L	1	8/13/2011 8:57:11 AM
Magnesium	119000	5000		µg/L	1	8/13/2011 8:57:11 AM
Manganese	2110	10.0		µg/L	1	8/13/2011 8:57:11 AM
Nickel	71.6	30.0		µg/L	1	8/13/2011 8:57:11 AM
Potassium	11000	5000		µg/L	1	8/13/2011 8:57:11 AM
Silver	ND	10.0		µg/L	1	8/15/2011 12:57:52 PM
Sodium	58700	5000		µg/L	1	8/13/2011 8:57:11 AM
Vanadium	76.0	30.0		µg/L	1	8/13/2011 8:57:11 AM
Zinc	606	10.0		µg/L	1	8/13/2011 8:57:11 AM
ASP TOTAL METALS BY ICP-MS						
				200.8ASP	(E200.8)	Analyst: DEY
Antimony	ND	25		µg/L	5	8/12/2011 4:10:00 PM
Arsenic	32	25		µg/L	5	8/12/2011 4:10:00 PM
Lead	140	15		µg/L	5	8/12/2011 4:10:00 PM
Selenium	ND	15		µg/L	5	8/12/2011 4:10:00 PM
Thallium	ND	15		µg/L	5	8/12/2011 4:10:00 PM
NOTES:						
The reporting limits were raised due to matrix interference.						
TOTAL MERCURY WATERS ASP						
				245.2WTASP	(E245.2)	Analyst: ALW
Mercury	0.542	0.200		µg/L	1	8/10/2011 10:47:00 AM
TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005						
				8270_ASPTCL_W	(SW3520)	Analyst: LD
Phenol	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Bis(2-chloroethyl)ether	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
2-Chlorophenol	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
1,3-Dichlorobenzene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
1,4-Dichlorobenzene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
1,2-Dichlorobenzene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
2-Methylphenol	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
N-Nitrosodi-n-propylamine	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Hexachloroethane	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM

Approved By: _____

Date: _____

Page 5 of 30

Qualifiers:

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- * Low Level
- B Analyte detected in the associated Method Blank
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- ND Not Detected at the Reporting Limit
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Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-002

Client Sample ID: MW-2
Collection Date: 7/22/2011 12:30:00 PM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005		8270_ASPTCL_W		(SW3520)		Analyst: LD
Nitrobenzene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Isophorone	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
2-Nitrophenol	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
2,4-Dimethylphenol	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Bis(2-chloroethoxy)methane	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
2,4-Dichlorophenol	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Naphthalene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
4-Chloroaniline	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Hexachlorobutadiene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
4-Chloro-3-methylphenol	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
2-Methylnaphthalene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Hexachlorocyclopentadiene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
2,4,6-Trichlorophenol	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
2,4,5-Trichlorophenol	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
2-Chloronaphthalene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
2-Nitroaniline	ND	10		µg/L	1	8/8/2011 5:57:00 PM
Dimethyl phthalate	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Acenaphthylene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
2,6-Dinitrotoluene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
3-Nitroaniline	ND	10		µg/L	1	8/8/2011 5:57:00 PM
Acenaphthene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
2,4-Dinitrophenol	ND	10		µg/L	1	8/8/2011 5:57:00 PM
4-Nitrophenol	ND	10		µg/L	1	8/8/2011 5:57:00 PM
Dibenzofuran	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
2,4-Dinitrotoluene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Diethyl phthalate	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
4-Chlorophenyl phenyl ether	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Fluorene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
4-Nitroaniline	ND	10		µg/L	1	8/8/2011 5:57:00 PM
4,6-Dinitro-2-methylphenol	ND	10		µg/L	1	8/8/2011 5:57:00 PM
N-Nitrosodiphenylamine	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
4-Bromophenyl phenyl ether	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Hexachlorobenzene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Pentachlorophenol	ND	10		µg/L	1	8/8/2011 5:57:00 PM
Phenanthrene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Anthracene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Carbazole	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Di-n-butyl phthalate	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM

Approved By: _____

Date: _____

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Qualifiers:

- # Accreditation not offered by NYS DOH for this parameter
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheeler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-002

Client Sample ID: MW-2
Collection Date: 7/22/2011 12:30:00 PM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005						
				8270_ASPTCL_W		(SW3520)
						Analyst: LD
Fluoranthene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Pyrene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Butyl benzyl phthalate	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
3,3'-Dichlorobenzidine	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Benz(a)anthracene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Chrysene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Bis(2-ethylhexyl)phthalate	6.5	5.0	B	µg/L	1	8/8/2011 5:57:00 PM
Di-n-octyl phthalate	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Benzo(b)fluoranthene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Benzo(k)fluoranthene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Benzo(a)pyrene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Indeno(1,2,3-cd)pyrene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Dibenz(a,h)anthracene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Benzo(g,h,i)perylene	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
(3+4)-Methylphenol	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
Bis(2-chloroisopropyl)ether	ND	5.0		µg/L	1	8/8/2011 5:57:00 PM
TIC: unknown (13.07)	20	0		µg/L	1	8/8/2011 5:57:00 PM
TIC: unknown (13.6)	60	0	B	µg/L	1	8/8/2011 5:57:00 PM
TIC: unknown (13.75)	22	0		µg/L	1	8/8/2011 5:57:00 PM
TIC: unknown (14.05)	11	0		µg/L	1	8/8/2011 5:57:00 PM
TIC: unknown (14.14)	9.7	0		µg/L	1	8/8/2011 5:57:00 PM
TIC: unknown (14.18)	12	0		µg/L	1	8/8/2011 5:57:00 PM
TIC: unknown (14.5)	16	0		µg/L	1	8/8/2011 5:57:00 PM
TIC: unknown (14.58)	11	0		µg/L	1	8/8/2011 5:57:00 PM
TIC: unknown (15.09)	10	0		µg/L	1	8/8/2011 5:57:00 PM
TIC: unknown (15.19)	9.3	0		µg/L	1	8/8/2011 5:57:00 PM
TIC: unknown (15.3)	13	0		µg/L	1	8/8/2011 5:57:00 PM
TIC: unknown (16.07)	8.9	0		µg/L	1	8/8/2011 5:57:00 PM
TIC: unknown (16.85)	11	0	B	µg/L	1	8/8/2011 5:57:00 PM
TIC: unknown (17.26)	11	0		µg/L	1	8/8/2011 5:57:00 PM
TIC: unknown (17.63)	150	0		µg/L	1	8/8/2011 5:57:00 PM
TIC: unknown (17.81)	13	0		µg/L	1	8/8/2011 5:57:00 PM
TIC: unknown (17.86)	17	0		µg/L	1	8/8/2011 5:57:00 PM
TIC: unknown (17.98)	16	0		µg/L	1	8/8/2011 5:57:00 PM
TIC: unknown (18.12)	9.4	0		µg/L	1	8/8/2011 5:57:00 PM
TIC: unknown (18.41)	14	0		µg/L	1	8/8/2011 5:57:00 PM
ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260						
				8260ASP_TCL_W		Analyst: LEF
Chloromethane	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM

Approved By: _____

Date: _____

Page 7 of 30

Qualifiers:

- # Accreditation not offered by NYS DOH for this parameter
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-002

Client Sample ID: MW-2
Collection Date: 7/22/2011 12:30:00 PM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260		8260ASP_TCL_W		Analyst: LEF		
Vinyl chloride	28	5.0		µg/L	1	8/3/2011 5:58:00 PM
Bromomethane	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
Chloroethane	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
Acetone	11	10		µg/L	1	8/3/2011 5:58:00 PM
1,1-Dichloroethene	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
Carbon disulfide	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
Methylene chloride	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
1,1-Dichloroethane	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
2-Butanone	ND	10		µg/L	1	8/3/2011 5:58:00 PM
cis-1,2-Dichloroethene	12	5.0		µg/L	1	8/3/2011 5:58:00 PM
Chloroform	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
Carbon tetrachloride	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
Benzene	5	5.0	J	µg/L	1	8/3/2011 5:58:00 PM
1,2-Dichloroethane	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
Trichloroethene	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
1,2-Dichloropropane	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
Bromodichloromethane	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	8/3/2011 5:58:00 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
Toluene	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
2-Hexanone	ND	10		µg/L	1	8/3/2011 5:58:00 PM
Tetrachloroethene	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
Dibromochloromethane	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
Chlorobenzene	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
Ethylbenzene	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
m,p-Xylene	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
o-Xylene	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
Styrene	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
Bromoform	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	8/3/2011 5:58:00 PM
TIC: Benzofuran, 2-methyl-	7.8	0		µg/L	1	8/3/2011 5:58:00 PM

NOTES:

The pH of the sample >2.

Approved By: _____

Date: _____

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Qualifiers:

- # Accreditation not offered by NYS DOH for this parameter
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD **Client Sample ID:** MW-5
Lab Order: U1107481 **Collection Date:** 7/22/2011 2:15:00 PM
Project: 153 Fillmore Ave.
Lab ID: U1107481-003 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL BY NYSDEC ASP 2005						
				200.7WTASP	(E200.7)	Analyst: DEY
Aluminum	1480	100		µg/L	1	8/13/2011 9:02:20 AM
Barium	239	50.0		µg/L	1	8/13/2011 9:02:20 AM
Beryllium	ND	3.00		µg/L	1	8/13/2011 9:02:20 AM
Cadmium	ND	5.00		µg/L	1	8/13/2011 9:02:20 AM
Calcium	159000	5000		µg/L	1	8/13/2011 9:02:20 AM
Chromium	ND	10.0		µg/L	1	8/13/2011 9:02:20 AM
Cobalt	ND	20.0		µg/L	1	8/13/2011 9:02:20 AM
Copper	22.0	10.0		µg/L	1	8/13/2011 9:02:20 AM
Iron	4970	60.0		µg/L	1	8/13/2011 9:02:20 AM
Magnesium	34600	5000		µg/L	1	8/13/2011 9:02:20 AM
Manganese	437	10.0		µg/L	1	8/13/2011 9:02:20 AM
Nickel	ND	30.0		µg/L	1	8/13/2011 9:02:20 AM
Potassium	ND	5000		µg/L	1	8/13/2011 9:02:20 AM
Silver	ND	10.0		µg/L	1	8/15/2011 1:02:28 PM
Sodium	19000	5000		µg/L	1	8/13/2011 9:02:20 AM
Vanadium	ND	30.0		µg/L	1	8/13/2011 9:02:20 AM
Zinc	984	10.0		µg/L	1	8/13/2011 9:02:20 AM
ASP TOTAL METALS BY ICP-MS						
				200.8ASP	(E200.8)	Analyst: DEY
Antimony	ND	25		µg/L	5	8/12/2011 4:10:00 PM
Arsenic	ND	25		µg/L	5	8/12/2011 4:10:00 PM
Lead	91	15		µg/L	5	8/12/2011 4:10:00 PM
Selenium	ND	15		µg/L	5	8/12/2011 4:10:00 PM
Thallium	ND	15		µg/L	5	8/12/2011 4:10:00 PM
NOTES:						
The reporting limits were raised due to matrix interference.						
TOTAL MERCURY WATERS ASP						
				245.2WTASP	(E245.2)	Analyst: ALW
Mercury	ND	0.200		µg/L	1	8/10/2011 10:47:00 AM
TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005						
				8270_ASPTCL_W	(SW3520)	Analyst: LD
Phenol	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Bis(2-chloroethyl)ether	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
2-Chlorophenol	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
1,3-Dichlorobenzene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
1,4-Dichlorobenzene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
1,2-Dichlorobenzene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
2-Methylphenol	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
N-Nitrosodi-n-propylamine	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Hexachloroethane	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM

Approved By: _____

Date: _____

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Qualifiers: # Accreditation not offered by NYS DOH for this parameter
 ** Value exceeds Maximum Contaminant Value
 E Value above quantitation range
 J Analyte detected below quantitation limits
 Q Outlying QC recoveries were associated with this parameter

* Low Level
 B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-003

Client Sample ID: MW-5
Collection Date: 7/22/2011 2:15:00 PM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005		8270_ASPTCL_W		(SW3520)		Analyst: LD
Nitrobenzene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Isophorone	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
2-Nitrophenol	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
2,4-Dimethylphenol	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Bis(2-chloroethoxy)methane	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
2,4-Dichlorophenol	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Naphthalene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
4-Chloroaniline	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Hexachlorobutadiene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
4-Chloro-3-methylphenol	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
2-Methylnaphthalene	10	5.0		µg/L	1	8/8/2011 6:21:00 PM
Hexachlorocyclopentadiene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
2,4,6-Trichlorophenol	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
2,4,5-Trichlorophenol	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
2-Chloronaphthalene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
2-Nitroaniline	ND	10		µg/L	1	8/8/2011 6:21:00 PM
Dimethyl phthalate	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Acenaphthylene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
2,6-Dinitrotoluene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
3-Nitroaniline	ND	10		µg/L	1	8/8/2011 6:21:00 PM
Acenaphthene	1	5.0	J	µg/L	1	8/8/2011 6:21:00 PM
2,4-Dinitrophenol	ND	10		µg/L	1	8/8/2011 6:21:00 PM
4-Nitrophenol	ND	10		µg/L	1	8/8/2011 6:21:00 PM
Dibenzofuran	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
2,4-Dinitrotoluene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Diethyl phthalate	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
4-Chlorophenyl phenyl ether	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Fluorene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
4-Nitroaniline	ND	10		µg/L	1	8/8/2011 6:21:00 PM
4,6-Dinitro-2-methylphenol	ND	10		µg/L	1	8/8/2011 6:21:00 PM
N-Nitrosodiphenylamine	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
4-Bromophenyl phenyl ether	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Hexachlorobenzene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Pentachlorophenol	ND	10		µg/L	1	8/8/2011 6:21:00 PM
Phenanthrene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Anthracene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Carbazole	2	5.0	J	µg/L	1	8/8/2011 6:21:00 PM
Di-n-butyl phthalate	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM

Approved By: _____

Date: _____

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Qualifiers:

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- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD **Client Sample ID:** MW-5
Lab Order: U1107481 **Collection Date:** 7/22/2011 2:15:00 PM
Project: 153 Fillmore Ave.
Lab ID: U1107481-003 **Matrix:** WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005						
				8270_ASPTCL_W		(SW3520)
						Analyst: LD
Fluoranthene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Pyrene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Butyl benzyl phthalate	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
3,3'-Dichlorobenzidine	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Benz(a)anthracene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Chrysene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Bis(2-ethylhexyl)phthalate	4	5.0	J	µg/L	1	8/8/2011 6:21:00 PM
Di-n-octyl phthalate	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Benzo(b)fluoranthene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Benzo(k)fluoranthene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Benzo(a)pyrene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Indeno(1,2,3-cd)pyrene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Dibenz(a,h)anthracene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Benzo(g,h,i)perylene	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
(3+4)-Methylphenol	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
Bis(2-chloroisopropyl)ether	ND	5.0		µg/L	1	8/8/2011 6:21:00 PM
TIC: unknown (13.2)	55	0		µg/L	1	8/8/2011 6:21:00 PM
TIC: unknown (13.24)	57	0		µg/L	1	8/8/2011 6:21:00 PM
TIC: unknown (13.6)	320	0	B	µg/L	1	8/8/2011 6:21:00 PM
TIC: unknown (13.73)	180	0		µg/L	1	8/8/2011 6:21:00 PM
TIC: unknown (13.91)	50	0		µg/L	1	8/8/2011 6:21:00 PM
TIC: unknown (14.01)	110	0		µg/L	1	8/8/2011 6:21:00 PM
TIC: unknown (14.14)	50	0		µg/L	1	8/8/2011 6:21:00 PM
TIC: unknown (14.78)	59	0		µg/L	1	8/8/2011 6:21:00 PM
TIC: unknown (15.49)	52	0		µg/L	1	8/8/2011 6:21:00 PM
TIC: unknown (15.68)	53	0		µg/L	1	8/8/2011 6:21:00 PM
TIC: unknown (15.74)	59	0		µg/L	1	8/8/2011 6:21:00 PM
TIC: unknown (15.94)	57	0		µg/L	1	8/8/2011 6:21:00 PM
TIC: unknown (16.2)	51	0		µg/L	1	8/8/2011 6:21:00 PM
TIC: unknown (16.45)	110	0		µg/L	1	8/8/2011 6:21:00 PM
TIC: unknown (16.75)	51	0		µg/L	1	8/8/2011 6:21:00 PM
TIC: unknown (17)	95	0		µg/L	1	8/8/2011 6:21:00 PM
TIC: unknown (17.63)	780	0		µg/L	1	8/8/2011 6:21:00 PM
TIC: unknown (17.99)	60	0		µg/L	1	8/8/2011 6:21:00 PM
TIC: unknown (18.04)	56	0		µg/L	1	8/8/2011 6:21:00 PM
TIC: unknown (18.33)	60	0		µg/L	1	8/8/2011 6:21:00 PM

ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260 **8260ASP_TCL_W** **Analyst: LEF**
 Chloromethane ND 5.0 µg/L 1 8/3/2011 6:38:00 PM

Approved By: _____

Date: _____

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Qualifiers: # Accreditation not offered by NYS DOH for this parameter
 ** Value exceeds Maximum Contaminant Value
 E Value above quantitation range
 J Analyte detected below quantitation limits
 Q Outlying QC recoveries were associated with this parameter

* Low Level
 B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-003

Client Sample ID: MW-5
Collection Date: 7/22/2011 2:15:00 PM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260		8260ASP_TCL_W		Analyst: LEF		
Vinyl chloride	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
Bromomethane	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
Chloroethane	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
Acetone	ND	10		µg/L	1	8/3/2011 6:38:00 PM
1,1-Dichloroethene	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
Carbon disulfide	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
Methylene chloride	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
1,1-Dichloroethane	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
2-Butanone	ND	10		µg/L	1	8/3/2011 6:38:00 PM
cis-1,2-Dichloroethene	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
Chloroform	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
Carbon tetrachloride	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
Benzene	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
1,2-Dichloroethane	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
Trichloroethene	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
1,2-Dichloropropane	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
Bromodichloromethane	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	8/3/2011 6:38:00 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
Toluene	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
2-Hexanone	ND	10		µg/L	1	8/3/2011 6:38:00 PM
Tetrachloroethene	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
Dibromochloromethane	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
Chlorobenzene	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
Ethylbenzene	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
m,p-Xylene	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
o-Xylene	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
Styrene	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
Bromoform	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	8/3/2011 6:38:00 PM
TIC: Indan, 1-methyl-	6.3	0		µg/L	1	8/3/2011 6:38:00 PM
TIC: Indane	5.4	0		µg/L	1	8/3/2011 6:38:00 PM

Approved By: _____

Date: _____

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Qualifiers:

- # Accreditation not offered by NYS DOH for this parameter
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-004

Client Sample ID: MW-6
Collection Date: 7/22/2011 3:00:00 PM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL BY NYSDEC ASP 2005						
				200.7WTASP	(E200.7)	Analyst: DEY
Aluminum	202	100		µg/L	1	8/13/2011 9:07:25 AM
Barium	191	50.0		µg/L	1	8/13/2011 9:07:25 AM
Beryllium	ND	3.00		µg/L	1	8/13/2011 9:07:25 AM
Cadmium	ND	5.00		µg/L	1	8/13/2011 9:07:25 AM
Calcium	130000	5000		µg/L	1	8/13/2011 9:07:25 AM
Chromium	ND	10.0		µg/L	1	8/13/2011 9:07:25 AM
Cobalt	ND	20.0		µg/L	1	8/13/2011 9:07:25 AM
Copper	ND	10.0		µg/L	1	8/13/2011 9:07:25 AM
Iron	7090	60.0		µg/L	1	8/13/2011 9:07:25 AM
Magnesium	24800	5000		µg/L	1	8/13/2011 9:07:25 AM
Manganese	1480	10.0		µg/L	1	8/13/2011 9:07:25 AM
Nickel	ND	30.0		µg/L	1	8/13/2011 9:07:25 AM
Potassium	ND	5000		µg/L	1	8/13/2011 9:07:25 AM
Silver	ND	10.0		µg/L	1	8/15/2011 1:07:26 PM
Sodium	16000	5000		µg/L	1	8/13/2011 9:07:25 AM
Vanadium	ND	30.0		µg/L	1	8/13/2011 9:07:25 AM
Zinc	51.6	10.0		µg/L	1	8/13/2011 9:07:25 AM
ASP TOTAL METALS BY ICP-MS						
				200.8ASP	(E200.8)	Analyst: DEY
Antimony	ND	25		µg/L	5	8/12/2011 4:10:00 PM
Arsenic	ND	25		µg/L	5	8/12/2011 4:10:00 PM
Lead	ND	15		µg/L	5	8/12/2011 4:10:00 PM
Selenium	ND	15		µg/L	5	8/12/2011 4:10:00 PM
Thallium	ND	15		µg/L	5	8/12/2011 4:10:00 PM
NOTES:						
The reporting limits were raised due to matrix interference.						
TOTAL MERCURY WATERS ASP						
				245.2WTASP	(E245.2)	Analyst: ALW
Mercury	ND	0.200		µg/L	1	8/10/2011 10:47:00 AM
TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005						
				8270_ASPTCL_W	(SW3520)	Analyst: LD
Phenol	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Bis(2-chloroethyl)ether	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
2-Chlorophenol	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
1,3-Dichlorobenzene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
1,4-Dichlorobenzene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
1,2-Dichlorobenzene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
2-Methylphenol	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
N-Nitrosodi-n-propylamine	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Hexachloroethane	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM

Approved By: _____

Date: _____

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Qualifiers:

- # Accreditation not offered by NYS DOH for this parameter
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheeler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-004

Client Sample ID: MW-6
Collection Date: 7/22/2011 3:00:00 PM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005		8270_ASPTCL_W		(SW3520)		Analyst: LD
Nitrobenzene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Isophorone	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
2-Nitrophenol	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
2,4-Dimethylphenol	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Bis(2-chloroethoxy)methane	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
2,4-Dichlorophenol	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Naphthalene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
4-Chloroaniline	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Hexachlorobutadiene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
4-Chloro-3-methylphenol	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
2-Methylnaphthalene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Hexachlorocyclopentadiene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
2,4,6-Trichlorophenol	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
2,4,5-Trichlorophenol	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
2-Chloronaphthalene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
2-Nitroaniline	ND	10		µg/L	1	8/8/2011 6:45:00 PM
Dimethyl phthalate	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Acenaphthylene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
2,6-Dinitrotoluene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
3-Nitroaniline	ND	10		µg/L	1	8/8/2011 6:45:00 PM
Acenaphthene	2	5.0	J	µg/L	1	8/8/2011 6:45:00 PM
2,4-Dinitrophenol	ND	10		µg/L	1	8/8/2011 6:45:00 PM
4-Nitrophenol	ND	10		µg/L	1	8/8/2011 6:45:00 PM
Dibenzofuran	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
2,4-Dinitrotoluene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Diethyl phthalate	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
4-Chlorophenyl phenyl ether	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Fluorene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
4-Nitroaniline	ND	10		µg/L	1	8/8/2011 6:45:00 PM
4,6-Dinitro-2-methylphenol	ND	10		µg/L	1	8/8/2011 6:45:00 PM
N-Nitrosodiphenylamine	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
4-Bromophenyl phenyl ether	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Hexachlorobenzene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Pentachlorophenol	ND	10		µg/L	1	8/8/2011 6:45:00 PM
Phenanthrene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Anthracene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Carbazole	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Di-n-butyl phthalate	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM

Approved By: _____

Date: _____

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Qualifiers:

- # Accreditation not offered by NYS DOH for this parameter
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-004

Client Sample ID: MW-6
Collection Date: 7/22/2011 3:00:00 PM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005						
				8270_ASPTCL_W (SW3520)		Analyst: LD
Fluoranthene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Pyrene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Butyl benzyl phthalate	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
3,3'-Dichlorobenzidine	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Benz(a)anthracene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Chrysene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Bis(2-ethylhexyl)phthalate	4	5.0	J	µg/L	1	8/8/2011 6:45:00 PM
Di-n-octyl phthalate	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Benzo(b)fluoranthene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Benzo(k)fluoranthene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Benzo(a)pyrene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Indeno(1,2,3-cd)pyrene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Dibenz(a,h)anthracene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Benzo(g,h,i)perylene	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
(3+4)-Methylphenol	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
Bis(2-chloroisopropyl)ether	ND	5.0		µg/L	1	8/8/2011 6:45:00 PM
TIC: unknown (13.36)	60	0		µg/L	1	8/8/2011 6:45:00 PM
TIC: unknown (13.6)	170	0	B	µg/L	1	8/8/2011 6:45:00 PM
TIC: unknown (13.73)	110	0		µg/L	1	8/8/2011 6:45:00 PM
TIC: unknown (13.85)	38	0		µg/L	1	8/8/2011 6:45:00 PM
TIC: unknown (13.93)	36	0		µg/L	1	8/8/2011 6:45:00 PM
TIC: unknown (14.13)	47	0		µg/L	1	8/8/2011 6:45:00 PM
TIC: unknown (14.42)	51	0		µg/L	1	8/8/2011 6:45:00 PM
TIC: unknown (14.51)	55	0	B	µg/L	1	8/8/2011 6:45:00 PM
TIC: unknown (14.92)	48	0		µg/L	1	8/8/2011 6:45:00 PM
TIC: unknown (14.97)	58	0		µg/L	1	8/8/2011 6:45:00 PM
TIC: unknown (15.16)	53	0		µg/L	1	8/8/2011 6:45:00 PM
TIC: unknown (15.33)	57	0		µg/L	1	8/8/2011 6:45:00 PM
TIC: unknown (16.44)	38	0		µg/L	1	8/8/2011 6:45:00 PM
TIC: unknown (16.55)	72	0		µg/L	1	8/8/2011 6:45:00 PM
TIC: unknown (16.81)	38	0		µg/L	1	8/8/2011 6:45:00 PM
TIC: unknown (16.84)	49	0		µg/L	1	8/8/2011 6:45:00 PM
TIC: unknown (17)	38	0		µg/L	1	8/8/2011 6:45:00 PM
TIC: unknown (17.27)	56	0		µg/L	1	8/8/2011 6:45:00 PM
TIC: unknown (17.63)	200	0		µg/L	1	8/8/2011 6:45:00 PM
TIC: unknown (17.72)	36	0		µg/L	1	8/8/2011 6:45:00 PM
ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260						
				8260ASP_TCL_W		Analyst: LEF
Chloromethane	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM

Approved By: _____

Date: _____

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Qualifiers:

- # Accreditation not offered by NYS DOH for this parameter
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-004

Client Sample ID: MW-6
Collection Date: 7/22/2011 3:00:00 PM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260		8260ASP_TCL_W		Analyst: LEF		
Vinyl chloride	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
Bromomethane	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
Chloroethane	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
Acetone	ND	10		µg/L	1	8/3/2011 7:17:00 PM
1,1-Dichloroethene	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
Carbon disulfide	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
Methylene chloride	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
1,1-Dichloroethane	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
2-Butanone	ND	10		µg/L	1	8/3/2011 7:17:00 PM
cis-1,2-Dichloroethene	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
Chloroform	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
Carbon tetrachloride	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
Benzene	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
1,2-Dichloroethane	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
Trichloroethene	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
1,2-Dichloropropane	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
Bromodichloromethane	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	8/3/2011 7:17:00 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
Toluene	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
2-Hexanone	ND	10		µg/L	1	8/3/2011 7:17:00 PM
Tetrachloroethene	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
Dibromochloromethane	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
Chlorobenzene	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
Ethylbenzene	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
m,p-Xylene	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
o-Xylene	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
Styrene	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
Bromoform	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	8/3/2011 7:17:00 PM

NOTES:

TICS: No compounds were detected.

Approved By: _____

Date: _____

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Qualifiers:

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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-005

Client Sample ID: MW-7
Collection Date: 7/22/2011 4:00:00 PM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL BY NYSDEC ASP 2005						
				200.7WTASP	(E200.7)	Analyst: DEY
Aluminum	5360	100		µg/L	1	8/13/2011 9:12:42 AM
Barium	84.4	50.0		µg/L	1	8/13/2011 9:12:42 AM
Beryllium	ND	3.00		µg/L	1	8/13/2011 9:12:42 AM
Cadmium	15.7	5.00		µg/L	1	8/13/2011 9:12:42 AM
Calcium	185000	5000		µg/L	1	8/13/2011 9:12:42 AM
Chromium	10.8	10.0		µg/L	1	8/13/2011 9:12:42 AM
Cobalt	ND	20.0		µg/L	1	8/13/2011 9:12:42 AM
Copper	134	10.0		µg/L	1	8/13/2011 9:12:42 AM
Iron	17000	60.0		µg/L	1	8/13/2011 9:12:42 AM
Magnesium	43500	5000		µg/L	1	8/13/2011 9:12:42 AM
Manganese	1440	10.0		µg/L	1	8/13/2011 9:12:42 AM
Nickel	36.2	30.0		µg/L	1	8/13/2011 9:12:42 AM
Potassium	11100	5000		µg/L	1	8/13/2011 9:12:42 AM
Silver	ND	10.0		µg/L	1	8/15/2011 1:12:24 PM
Sodium	65100	5000		µg/L	1	8/13/2011 9:12:42 AM
Vanadium	ND	30.0		µg/L	1	8/13/2011 9:12:42 AM
Zinc	6270	10.0		µg/L	1	8/13/2011 9:12:42 AM
ASP TOTAL METALS BY ICP-MS						
				200.8ASP	(E200.8)	Analyst: DEY
Antimony	ND	25		µg/L	5	8/12/2011 4:10:00 PM
Arsenic	ND	25		µg/L	5	8/12/2011 4:10:00 PM
Lead	180	15		µg/L	5	8/12/2011 4:10:00 PM
Selenium	ND	15		µg/L	5	8/12/2011 4:10:00 PM
Thallium	ND	15		µg/L	5	8/12/2011 4:10:00 PM
NOTES:						
The reporting limits were raised due to matrix interference.						
TOTAL MERCURY WATERS ASP						
				245.2WTASP	(E245.2)	Analyst: ALW
Mercury	ND	0.200		µg/L	1	8/10/2011 10:47:00 AM
TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005						
				8270_ASPTCL_W	(SW3520)	Analyst: LD
Phenol	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Bis(2-chloroethyl)ether	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
2-Chlorophenol	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
1,3-Dichlorobenzene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
1,4-Dichlorobenzene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
1,2-Dichlorobenzene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
2-Methylphenol	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
N-Nitrosodi-n-propylamine	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Hexachloroethane	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM

Approved By: _____

Date: _____

Page 17 of 30

Qualifiers: # Accreditation not offered by NYS DOH for this parameter
 ** Value exceeds Maximum Contaminant Value
 E Value above quantitation range
 J Analyte detected below quantitation limits
 Q Outlying QC recoveries were associated with this parameter

* Low Level
 B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD
 Lab Order: U1107481
 Project: 153 Fillmore Ave.
 Lab ID: U1107481-005

Client Sample ID: MW-7
 Collection Date: 7/22/2011 4:00:00 PM
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005		8270_ASPTCL_W		(SW3520)		Analyst: LD
Nitrobenzene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Isophorone	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
2-Nitrophenol	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
2,4-Dimethylphenol	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Bis(2-chloroethoxy)methane	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
2,4-Dichlorophenol	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
1,2,4-Trichlorobenzene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Naphthalene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
4-Chloroaniline	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Hexachlorobutadiene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
4-Chloro-3-methylphenol	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
2-Methylnaphthalene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Hexachlorocyclopentadiene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
2,4,6-Trichlorophenol	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
2,4,5-Trichlorophenol	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
2-Chloronaphthalene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
2-Nitroaniline	ND	14		µg/L	1	8/8/2011 7:09:00 PM
Dimethyl phthalate	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Acenaphthylene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
2,6-Dinitrotoluene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
3-Nitroaniline	ND	14		µg/L	1	8/8/2011 7:09:00 PM
Acenaphthene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
2,4-Dinitrophenol	ND	14		µg/L	1	8/8/2011 7:09:00 PM
4-Nitrophenol	ND	14		µg/L	1	8/8/2011 7:09:00 PM
Dibenzofuran	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
2,4-Dinitrotoluene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Diethyl phthalate	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
4-Chlorophenyl phenyl ether	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Fluorene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
4-Nitroaniline	ND	14		µg/L	1	8/8/2011 7:09:00 PM
4,6-Dinitro-2-methylphenol	ND	14		µg/L	1	8/8/2011 7:09:00 PM
N-Nitrosodiphenylamine	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
4-Bromophenyl phenyl ether	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Hexachlorobenzene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Pentachlorophenol	ND	14		µg/L	1	8/8/2011 7:09:00 PM
Phenanthrene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Anthracene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Carbazole	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Di-n-butyl phthalate	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM

Approved By: _____

Date: _____

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Qualifiers: # Accreditation not offered by NYS DOH for this parameter
 ** Value exceeds Maximum Contaminant Value
 E Value above quantitation range
 J Analyte detected below quantitation limits
 Q Outlying QC recoveries were associated with this parameter

* Low Level
 B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheeler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-005

Client Sample ID: MW-7
Collection Date: 7/22/2011 4:00:00 PM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005		8270_ASPTCL_W		(SW3520)		Analyst: LD
Fluoranthene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Pyrene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Butyl benzyl phthalate	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
3,3'-Dichlorobenzidine	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Benz(a)anthracene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Chrysene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Bis(2-ethylhexyl)phthalate	7	6.9	J	µg/L	1	8/8/2011 7:09:00 PM
Di-n-octyl phthalate	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Benzo(b)fluoranthene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Benzo(k)fluoranthene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Benzo(a)pyrene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Indeno(1,2,3-cd)pyrene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Dibenz(a,h)anthracene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Benzo(g,h,i)perylene	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
(3+4)-Methylphenol	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
Bis(2-chloroisopropyl)ether	ND	6.9		µg/L	1	8/8/2011 7:09:00 PM
TIC: 2,4(3H,8H)-Pteridinedione, 8-ethyl-	29	0		µg/L	1	8/8/2011 7:09:00 PM
TIC: unknown (13.28)	28	0		µg/L	1	8/8/2011 7:09:00 PM
TIC: unknown (13.49)	38	0		µg/L	1	8/8/2011 7:09:00 PM
TIC: unknown (13.6)	94	0	B	µg/L	1	8/8/2011 7:09:00 PM
TIC: unknown (13.76)	31	0	B	µg/L	1	8/8/2011 7:09:00 PM
TIC: unknown (13.94)	33	0		µg/L	1	8/8/2011 7:09:00 PM
TIC: unknown (14.02)	66	0		µg/L	1	8/8/2011 7:09:00 PM
TIC: unknown (14.15)	27	0		µg/L	1	8/8/2011 7:09:00 PM
TIC: unknown (14.19)	24	0		µg/L	1	8/8/2011 7:09:00 PM
TIC: unknown (14.36)	52	0		µg/L	1	8/8/2011 7:09:00 PM
TIC: unknown (14.52)	41	0		µg/L	1	8/8/2011 7:09:00 PM
TIC: unknown (14.75)	36	0		µg/L	1	8/8/2011 7:09:00 PM
TIC: unknown (15.44)	28	0		µg/L	1	8/8/2011 7:09:00 PM
TIC: unknown (15.97)	24	0		µg/L	1	8/8/2011 7:09:00 PM
TIC: unknown (16.37)	27	0		µg/L	1	8/8/2011 7:09:00 PM
TIC: unknown (16.51)	50	0		µg/L	1	8/8/2011 7:09:00 PM
TIC: unknown (16.95)	51	0		µg/L	1	8/8/2011 7:09:00 PM
TIC: unknown (17.37)	26	0		µg/L	1	8/8/2011 7:09:00 PM
TIC: unknown (17.63)	160	0		µg/L	1	8/8/2011 7:09:00 PM
TIC: unknown (17.86)	36	0		µg/L	1	8/8/2011 7:09:00 PM

ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260

8260ASP_TCL_W

Analyst: LEF

Approved By: _____

Date: _____

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Qualifiers:

- # Accreditation not offered by NYS DOH for this parameter
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-005

Client Sample ID: MW-7
Collection Date: 7/22/2011 4:00:00 PM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260		8260ASP_TCL_W		Analyst: LEF		
Chloromethane	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
Vinyl chloride	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
Bromomethane	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
Chloroethane	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
Acetone	27	10		µg/L	1	8/3/2011 10:32:00 PM
1,1-Dichloroethene	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
Carbon disulfide	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
Methylene chloride	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
1,1-Dichloroethane	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
2-Butanone	ND	10		µg/L	1	8/3/2011 10:32:00 PM
cis-1,2-Dichloroethene	9.4	5.0		µg/L	1	8/3/2011 10:32:00 PM
Chloroform	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
Carbon tetrachloride	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
Benzene	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
1,2-Dichloroethane	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
Trichloroethene	3	5.0	J	µg/L	1	8/3/2011 10:32:00 PM
1,2-Dichloropropane	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
Bromodichloromethane	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	8/3/2011 10:32:00 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
Toluene	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
2-Hexanone	ND	10		µg/L	1	8/3/2011 10:32:00 PM
Tetrachloroethene	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
Dibromochloromethane	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
Chlorobenzene	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
Ethylbenzene	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
m,p-Xylene	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
o-Xylene	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
Styrene	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
Bromoform	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	8/3/2011 10:32:00 PM

NOTES:

TICS: No compounds were detected.

Approved By: _____

Date: _____

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Qualifiers:

- # Accreditation not offered by NYS DOH for this parameter
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
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- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
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- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheeler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-006

Client Sample ID: MW-8
Collection Date: 7/22/2011 1:30:00 PM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL BY NYSDEC ASP 2005						
				200.7WTASP	(E200.7)	Analyst: DEY
Aluminum	ND	100		µg/L	1	8/13/2011 9:17:53 AM
Barium	107	50.0		µg/L	1	8/13/2011 9:17:53 AM
Beryllium	ND	3.00		µg/L	1	8/13/2011 9:17:53 AM
Cadmium	ND	5.00		µg/L	1	8/13/2011 9:17:53 AM
Calcium	141000	5000		µg/L	1	8/13/2011 9:17:53 AM
Chromium	ND	10.0		µg/L	1	8/13/2011 9:17:53 AM
Cobalt	ND	20.0		µg/L	1	8/13/2011 9:17:53 AM
Copper	ND	10.0		µg/L	1	8/13/2011 9:17:53 AM
Iron	3090	60.0		µg/L	1	8/13/2011 9:17:53 AM
Magnesium	26200	5000		µg/L	1	8/13/2011 9:17:53 AM
Manganese	817	10.0		µg/L	1	8/13/2011 9:17:53 AM
Nickel	ND	30.0		µg/L	1	8/13/2011 9:17:53 AM
Potassium	ND	5000		µg/L	1	8/13/2011 9:17:53 AM
Silver	ND	10.0		µg/L	1	8/15/2011 1:16:56 PM
Sodium	22700	5000		µg/L	1	8/13/2011 9:17:53 AM
Vanadium	ND	30.0		µg/L	1	8/13/2011 9:17:53 AM
Zinc	33.0	10.0		µg/L	1	8/13/2011 9:17:53 AM
ASP TOTAL METALS BY ICP-MS						
				200.8ASP	(E200.8)	Analyst: DEY
Antimony	ND	25		µg/L	5	8/12/2011 4:10:00 PM
Arsenic	ND	25		µg/L	5	8/12/2011 4:10:00 PM
Lead	ND	15		µg/L	5	8/12/2011 4:10:00 PM
Selenium	ND	15		µg/L	5	8/12/2011 4:10:00 PM
Thallium	ND	15		µg/L	5	8/12/2011 4:10:00 PM
NOTES:						
The reporting limits were raised due to matrix interference.						
TOTAL MERCURY WATERS ASP						
				245.2WTASP	(E245.2)	Analyst: ALW
Mercury	ND	0.200		µg/L	1	8/10/2011 10:47:00 AM
TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005						
				8270_ASPTCL_W	(SW3520)	Analyst: LD
Phenol	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Bis(2-chloroethyl)ether	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
2-Chlorophenol	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
1,3-Dichlorobenzene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
1,4-Dichlorobenzene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
1,2-Dichlorobenzene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
2-Methylphenol	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
N-Nitrosodi-n-propylamine	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Hexachloroethane	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM

Approved By: _____

Date: _____

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Qualifiers: # Accreditation not offered by NYS DOH for this parameter
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 E Value above quantitation range
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 Q Outlying QC recoveries were associated with this parameter

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 B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheeler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-006

Client Sample ID: MW-8
Collection Date: 7/22/2011 1:30:00 PM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005		8270_ASPTCL_W		(SW3520)		Analyst: LD
Nitrobenzene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Isophorone	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
2-Nitrophenol	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
2,4-Dimethylphenol	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Bis(2-chloroethoxy)methane	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
2,4-Dichlorophenol	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Naphthalene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
4-Chloroaniline	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Hexachlorobutadiene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
4-Chloro-3-methylphenol	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
2-Methylnaphthalene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Hexachlorocyclopentadiene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
2,4,6-Trichlorophenol	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
2,4,5-Trichlorophenol	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
2-Chloronaphthalene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
2-Nitroaniline	ND	10		µg/L	1	8/8/2011 7:33:00 PM
Dimethyl phthalate	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Acenaphthylene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
2,6-Dinitrotoluene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
3-Nitroaniline	ND	10		µg/L	1	8/8/2011 7:33:00 PM
Acenaphthene	1	5.0	J	µg/L	1	8/8/2011 7:33:00 PM
2,4-Dinitrophenol	ND	10		µg/L	1	8/8/2011 7:33:00 PM
4-Nitrophenol	ND	10		µg/L	1	8/8/2011 7:33:00 PM
Dibenzofuran	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
2,4-Dinitrotoluene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Diethyl phthalate	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
4-Chlorophenyl phenyl ether	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Fluorene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
4-Nitroaniline	ND	10		µg/L	1	8/8/2011 7:33:00 PM
4,6-Dinitro-2-methylphenol	ND	10		µg/L	1	8/8/2011 7:33:00 PM
N-Nitrosodiphenylamine	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
4-Bromophenyl phenyl ether	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Hexachlorobenzene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Pentachlorophenol	ND	10		µg/L	1	8/8/2011 7:33:00 PM
Phenanthrene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Anthracene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Carbazole	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Di-n-butyl phthalate	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM

Approved By: _____

Date: _____

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Qualifiers:

- # Accreditation not offered by NYS DOH for this parameter
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-006

Client Sample ID: MW-8
Collection Date: 7/22/2011 1:30:00 PM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005						
				8270_ASPTCL_W (SW3520)		Analyst: LD
Fluoranthene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Pyrene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Butyl benzyl phthalate	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
3,3'-Dichlorobenzidine	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Benz(a)anthracene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Chrysene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Bis(2-ethylhexyl)phthalate	4	5.0	J	µg/L	1	8/8/2011 7:33:00 PM
Di-n-octyl phthalate	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Benzo(b)fluoranthene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Benzo(k)fluoranthene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Benzo(a)pyrene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Indeno(1,2,3-cd)pyrene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Dibenz(a,h)anthracene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Benzo(g,h,i)perylene	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
(3+4)-Methylphenol	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
Bis(2-chloroisopropyl)ether	ND	5.0		µg/L	1	8/8/2011 7:33:00 PM
TIC: unknown (13.3)	20	0		µg/L	1	8/8/2011 7:33:00 PM
TIC: unknown (13.43)	17	0		µg/L	1	8/8/2011 7:33:00 PM
TIC: unknown (13.6)	70	0	B	µg/L	1	8/8/2011 7:33:00 PM
TIC: unknown (13.74)	29	0		µg/L	1	8/8/2011 7:33:00 PM
TIC: unknown (13.93)	14	0		µg/L	1	8/8/2011 7:33:00 PM
TIC: unknown (14.09)	83	0		µg/L	1	8/8/2011 7:33:00 PM
TIC: unknown (14.51)	35	0	B	µg/L	1	8/8/2011 7:33:00 PM
TIC: unknown (14.72)	17	0		µg/L	1	8/8/2011 7:33:00 PM
TIC: unknown (14.77)	15	0		µg/L	1	8/8/2011 7:33:00 PM
TIC: unknown (14.88)	18	0		µg/L	1	8/8/2011 7:33:00 PM
TIC: unknown (14.96)	16	0		µg/L	1	8/8/2011 7:33:00 PM
TIC: unknown (15.15)	22	0		µg/L	1	8/8/2011 7:33:00 PM
TIC: unknown (15.31)	22	0		µg/L	1	8/8/2011 7:33:00 PM
TIC: unknown (15.63)	16	0		µg/L	1	8/8/2011 7:33:00 PM
TIC: unknown (15.77)	14	0		µg/L	1	8/8/2011 7:33:00 PM
TIC: unknown (16.16)	24	0		µg/L	1	8/8/2011 7:33:00 PM
TIC: unknown (16.61)	15	0		µg/L	1	8/8/2011 7:33:00 PM
TIC: unknown (16.9)	21	0		µg/L	1	8/8/2011 7:33:00 PM
TIC: unknown (17.64)	96	0		µg/L	1	8/8/2011 7:33:00 PM
TIC: unknown (18.22)	17	0		µg/L	1	8/8/2011 7:33:00 PM
ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260						
				8260ASP_TCL_W		Analyst: LEF
Chloromethane	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM

Approved By: _____

Date: _____

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Qualifiers:

- # Accreditation not offered by NYS DOH for this parameter
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD
 Lab Order: U1107481
 Project: 153 Fillmore Ave.
 Lab ID: U1107481-006

Client Sample ID: MW-8
 Collection Date: 7/22/2011 1:30:00 PM
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260		8260ASP_TCL_W		Analyst: LEF		
Vinyl chloride	120	5.0		µg/L	1	8/3/2011 11:13:00 PM
Bromomethane	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
Chloroethane	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
Acetone	ND	10		µg/L	1	8/3/2011 11:13:00 PM
1,1-Dichloroethene	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
Carbon disulfide	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
Methylene chloride	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
trans-1,2-Dichloroethene	11	5.0		µg/L	1	8/3/2011 11:13:00 PM
1,1-Dichloroethane	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
2-Butanone	ND	10		µg/L	1	8/3/2011 11:13:00 PM
cis-1,2-Dichloroethene	52	5.0		µg/L	1	8/3/2011 11:13:00 PM
Chloroform	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
Carbon tetrachloride	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
Benzene	3	5.0	J	µg/L	1	8/3/2011 11:13:00 PM
1,2-Dichloroethane	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
Trichloroethene	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
1,2-Dichloropropane	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
Bromodichloromethane	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	8/3/2011 11:13:00 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
Toluene	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
2-Hexanone	ND	10		µg/L	1	8/3/2011 11:13:00 PM
Tetrachloroethene	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
Dibromochloromethane	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
Chlorobenzene	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
Ethylbenzene	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
m,p-Xylene	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
o-Xylene	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
Styrene	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
Bromoform	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	8/3/2011 11:13:00 PM

NOTES:

TICS: No compounds were detected.

Approved By: _____

Date: _____

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Qualifiers:

- # Accreditation not offered by NYS DOH for this parameter
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-007

Client Sample ID: Dupe
Collection Date: 7/22/2011
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS, TOTAL BY NYSDEC ASP 2005						
				200.7WTASP	(E200.7)	Analyst: DEY
Aluminum	23400	100		µg/L	1	8/13/2011 9:32:36 AM
Barium	597	50.0		µg/L	1	8/13/2011 9:32:36 AM
Beryllium	ND	3.00		µg/L	1	8/13/2011 9:32:36 AM
Cadmium	ND	5.00		µg/L	1	8/13/2011 9:32:36 AM
Calcium	421000	5000		µg/L	1	8/13/2011 9:32:36 AM
Chromium	36.7	10.0		µg/L	1	8/13/2011 9:32:36 AM
Cobalt	20.6	20.0		µg/L	1	8/13/2011 9:32:36 AM
Copper	130	10.0		µg/L	1	8/13/2011 9:32:36 AM
Iron	49200	60.0		µg/L	1	8/13/2011 9:32:36 AM
Magnesium	97700	5000		µg/L	1	8/13/2011 9:32:36 AM
Manganese	2080	10.0		µg/L	1	8/13/2011 9:32:36 AM
Nickel	47.7	30.0		µg/L	1	8/13/2011 9:32:36 AM
Potassium	8910	5000		µg/L	1	8/13/2011 9:32:36 AM
Silver	ND	10.0		µg/L	1	8/15/2011 1:31:30 PM
Sodium	59500	5000		µg/L	1	8/13/2011 9:32:36 AM
Vanadium	49.9	30.0		µg/L	1	8/13/2011 9:32:36 AM
Zinc	410	10.0		µg/L	1	8/13/2011 9:32:36 AM
ASP TOTAL METALS BY ICP-MS						
				200.8ASP	(E200.8)	Analyst: DEY
Antimony	ND	25		µg/L	5	8/12/2011 4:10:00 PM
Arsenic	39	25		µg/L	5	8/12/2011 4:10:00 PM
Lead	110	15		µg/L	5	8/12/2011 4:10:00 PM
Selenium	15	15		µg/L	5	8/12/2011 4:10:00 PM
Thallium	15	15		µg/L	5	8/12/2011 4:10:00 PM
NOTES:						
The reporting limits were raised due to matrix interference.						
TOTAL MERCURY WATERS ASP						
				245.2WTASP	(E245.2)	Analyst: ALW
Mercury	0.237	0.200		µg/L	1	8/10/2011 10:47:00 AM
TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005						
				8270_ASPTCL_W	(SW3520)	Analyst: LD
Phenol	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Bis(2-chloroethyl)ether	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
2-Chlorophenol	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
1,3-Dichlorobenzene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
1,4-Dichlorobenzene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
1,2-Dichlorobenzene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
2-Methylphenol	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
N-Nitrosodi-n-propylamine	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Hexachloroethane	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM

Approved By: _____

Date: _____

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Qualifiers:

- # Accreditation not offered by NYS DOH for this parameter
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-007

Client Sample ID: Dupe
Collection Date: 7/22/2011
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005		8270_ASPTCL_W		(SW3520)		Analyst: LD
Nitrobenzene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Isophorone	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
2-Nitrophenol	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
2,4-Dimethylphenol	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Bis(2-chloroethoxy)methane	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
2,4-Dichlorophenol	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
1,2,4-Trichlorobenzene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Naphthalene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
4-Chloroaniline	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Hexachlorobutadiene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
4-Chloro-3-methylphenol	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
2-Methylnaphthalene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Hexachlorocyclopentadiene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
2,4,6-Trichlorophenol	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
2,4,5-Trichlorophenol	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
2-Chloronaphthalene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
2-Nitroaniline	ND	10		µg/L	1	8/8/2011 8:44:00 PM
Dimethyl phthalate	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Acenaphthylene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
2,6-Dinitrotoluene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
3-Nitroaniline	ND	10		µg/L	1	8/8/2011 8:44:00 PM
Acenaphthene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
2,4-Dinitrophenol	ND	10		µg/L	1	8/8/2011 8:44:00 PM
4-Nitrophenol	ND	10		µg/L	1	8/8/2011 8:44:00 PM
Dibenzofuran	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
2,4-Dinitrotoluene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Diethyl phthalate	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
4-Chlorophenyl phenyl ether	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Fluorene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
4-Nitroaniline	ND	10		µg/L	1	8/8/2011 8:44:00 PM
4,6-Dinitro-2-methylphenol	ND	10		µg/L	1	8/8/2011 8:44:00 PM
N-Nitrosodiphenylamine	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
4-Bromophenyl phenyl ether	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Hexachlorobenzene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Pentachlorophenol	ND	10		µg/L	1	8/8/2011 8:44:00 PM
Phenanthrene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Anthracene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Carbazole	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Di-n-butyl phthalate	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM

Approved By: _____

Date: _____

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Qualifiers:

- # Accreditation not offered by NYS DOH for this parameter
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD
 Lab Order: U1107481
 Project: 153 Fillmore Ave.
 Lab ID: U1107481-007

Client Sample ID: Dupe
 Collection Date: 7/22/2011
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005						
				8270_ASPTCL_W		(SW3520)
						Analyst: LD
Fluoranthene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Pyrene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Butyl benzyl phthalate	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
3,3'-Dichlorobenzidine	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Benzo(a)anthracene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Chrysene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Bis(2-ethylhexyl)phthalate	5	5.0	J	µg/L	1	8/8/2011 8:44:00 PM
Di-n-octyl phthalate	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Benzo(b)fluoranthene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Benzo(k)fluoranthene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Benzo(a)pyrene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Indeno(1,2,3-cd)pyrene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Dibenz(a,h)anthracene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Benzo(g,h,i)perylene	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
(3+4)-Methylphenol	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
Bis(2-chloroisopropyl)ether	ND	5.0		µg/L	1	8/8/2011 8:44:00 PM
TIC: unknown (13.06)	20	0		µg/L	1	8/8/2011 8:44:00 PM
TIC: unknown (13.61)	89	0		µg/L	1	8/8/2011 8:44:00 PM
TIC: unknown (13.74)	20	0		µg/L	1	8/8/2011 8:44:00 PM
TIC: unknown (13.86)	17	0		µg/L	1	8/8/2011 8:44:00 PM
TIC: unknown (13.93)	27	0		µg/L	1	8/8/2011 8:44:00 PM
TIC: unknown (14.48)	14	0		µg/L	1	8/8/2011 8:44:00 PM
TIC: unknown (14.62)	14	0		µg/L	1	8/8/2011 8:44:00 PM
TIC: unknown (14.96)	16	0		µg/L	1	8/8/2011 8:44:00 PM
TIC: unknown (15.45)	15	0		µg/L	1	8/8/2011 8:44:00 PM
TIC: unknown (15.57)	19	0		µg/L	1	8/8/2011 8:44:00 PM
TIC: unknown (15.73)	15	0		µg/L	1	8/8/2011 8:44:00 PM
TIC: unknown (16.01)	22	0		µg/L	1	8/8/2011 8:44:00 PM
TIC: unknown (16.15)	21	0		µg/L	1	8/8/2011 8:44:00 PM
TIC: unknown (16.6)	23	0		µg/L	1	8/8/2011 8:44:00 PM
TIC: unknown (16.93)	16	0		µg/L	1	8/8/2011 8:44:00 PM
TIC: unknown (17.36)	23	0		µg/L	1	8/8/2011 8:44:00 PM
TIC: unknown (17.47)	15	0		µg/L	1	8/8/2011 8:44:00 PM
TIC: unknown (17.65)	170	0	B	µg/L	1	8/8/2011 8:44:00 PM
TIC: unknown (17.87)	19	0		µg/L	1	8/8/2011 8:44:00 PM
TIC: unknown (18.33)	14	0		µg/L	1	8/8/2011 8:44:00 PM
ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260						
				8260ASP_TCL_W		Analyst: LEF
Chloromethane	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM

Approved By: _____

Date: _____

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Qualifiers: # Accreditation not offered by NYS DOH for this parameter
 ** Value exceeds Maximum Contaminant Value
 E Value above quantitation range
 J Analyte detected below quantitation limits
 Q Outlying QC recoveries were associated with this parameter

* Low Level
 B Analyte detected in the associated Method Blank
 H Holding times for preparation or analysis exceeded
 ND Not Detected at the Reporting Limit
 S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD
 Lab Order: U1107481
 Project: 153 Fillmore Ave.
 Lab ID: U1107481-007

Client Sample ID: Dupe
 Collection Date: 7/22/2011
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260		8260ASP_TCL_W		Analyst: LEF		
Vinyl chloride	27	5.0		µg/L	1	8/4/2011 1:08:00 AM
Bromomethane	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
Chloroethane	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
Acetone	ND	10		µg/L	1	8/4/2011 1:08:00 AM
1,1-Dichloroethene	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
Carbon disulfide	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
Methylene chloride	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
1,1-Dichloroethane	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
2-Butanone	ND	10		µg/L	1	8/4/2011 1:08:00 AM
cis-1,2-Dichloroethene	12	5.0		µg/L	1	8/4/2011 1:08:00 AM
Chloroform	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
Carbon tetrachloride	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
Benzene	5.8	5.0		µg/L	1	8/4/2011 1:08:00 AM
1,2-Dichloroethane	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
Trichloroethene	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
1,2-Dichloropropane	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
Bromodichloromethane	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	8/4/2011 1:08:00 AM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
Toluene	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
2-Hexanone	ND	10		µg/L	1	8/4/2011 1:08:00 AM
Tetrachloroethene	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
Dibromochloromethane	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
Chlorobenzene	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
Ethylbenzene	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
m,p-Xylene	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
o-Xylene	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
Styrene	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
Bromofom	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	8/4/2011 1:08:00 AM
TIC: Benzofuran, 2-methyl-	8.5	0		µg/L	1	8/4/2011 1:08:00 AM

NOTES:

The pH of the sample >2.

Approved By: _____

Date: _____

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Qualifiers:

- # Accreditation not offered by NYS DOH for this parameter
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheeler GHD
 Lab Order: U1107481
 Project: 153 Fillmore Ave.
 Lab ID: U1107481-008

Client Sample ID: ULI Trip Blank
 Collection Date: 7/22/2011
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260		8260ASP_TCL_W		Analyst: LEF		
Chloromethane	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
Vinyl chloride	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
Bromomethane	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
Chloroethane	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
Acetone	ND	10		µg/L	1	8/4/2011 1:47:00 AM
1,1-Dichloroethene	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
Carbon disulfide	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
Methylene chloride	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
1,1-Dichloroethane	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
2-Butanone	ND	10		µg/L	1	8/4/2011 1:47:00 AM
cis-1,2-Dichloroethene	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
Chloroform	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
Carbon tetrachloride	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
Benzene	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
1,2-Dichloroethane	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
Trichloroethene	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
1,2-Dichloropropane	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
Bromodichloromethane	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	8/4/2011 1:47:00 AM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
Toluene	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
2-Hexanone	ND	10		µg/L	1	8/4/2011 1:47:00 AM
Tetrachloroethene	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
Dibromochloromethane	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
Chlorobenzene	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
Ethylbenzene	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
m,p-Xylene	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
o-Xylene	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
Styrene	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
Bromoform	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	8/4/2011 1:47:00 AM

NOTES:

TICS: No compounds were detected.

Approved By: _____

Date: _____

Page 29 of 30

Qualifiers:

- # Accreditation not offered by NYS DOH for this parameter
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter

- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

Upstate Laboratories, Inc.

Analytical Report

Date: 16-Aug-11

CLIENT: Stearns & Wheler GHD
Lab Order: U1107481
Project: 153 Fillmore Ave.
Lab ID: U1107481-009

Client Sample ID: Holding Blank
Collection Date: 7/25/2011 2:55:00 PM
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260		8260ASP_TCL_W		Analyst: LEF		
Chloromethane	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
Vinyl chloride	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
Bromomethane	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
Chloroethane	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
Acetone	ND	10		µg/L	1	8/4/2011 2:27:00 AM
1,1-Dichloroethene	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
Carbon disulfide	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
Methylene chloride	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
1,1-Dichloroethane	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
2-Butanone	ND	10		µg/L	1	8/4/2011 2:27:00 AM
cis-1,2-Dichloroethene	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
Chloroform	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
Carbon tetrachloride	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
Benzene	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
1,2-Dichloroethane	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
Trichloroethene	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
1,2-Dichloropropane	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
Bromodichloromethane	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	8/4/2011 2:27:00 AM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
Toluene	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
2-Hexanone	ND	10		µg/L	1	8/4/2011 2:27:00 AM
Tetrachloroethene	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
Dibromochloromethane	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
Chlorobenzene	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
Ethylbenzene	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
m,p-Xylene	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
o-Xylene	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
Styrene	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
Bromoform	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	8/4/2011 2:27:00 AM

NOTES:

TICS: No compounds were detected.

Approved By: _____

Date: _____

Page 30 of 30

Qualifiers:

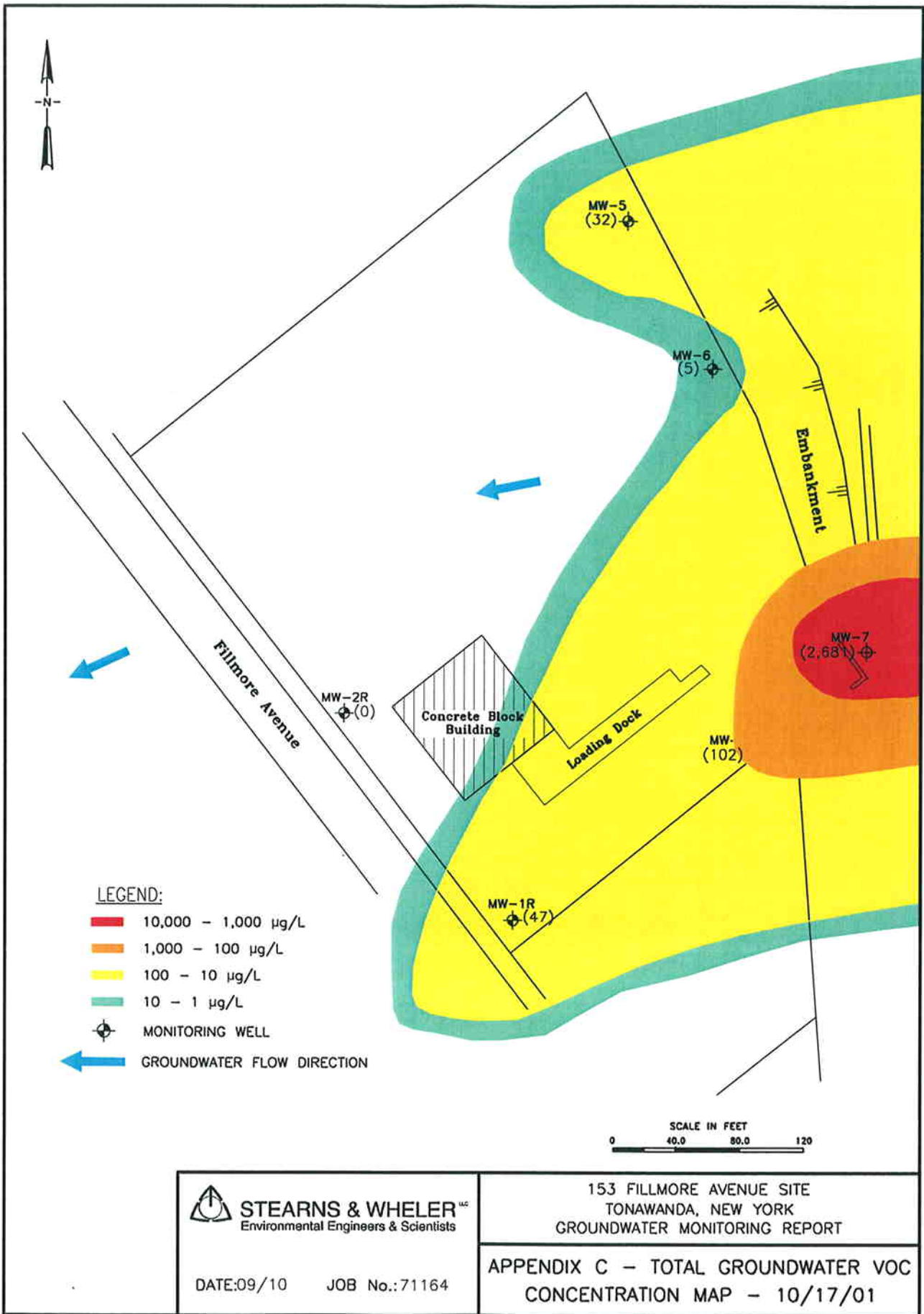
- # Accreditation not offered by NYS DOH for this parameter
- ** Value exceeds Maximum Contaminant Value
- E Value above quantitation range
- J Analyte detected below quantitation limits
- Q Outlying QC recoveries were associated with this parameter


- * Low Level
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside accepted recovery limits

APPENDIX C

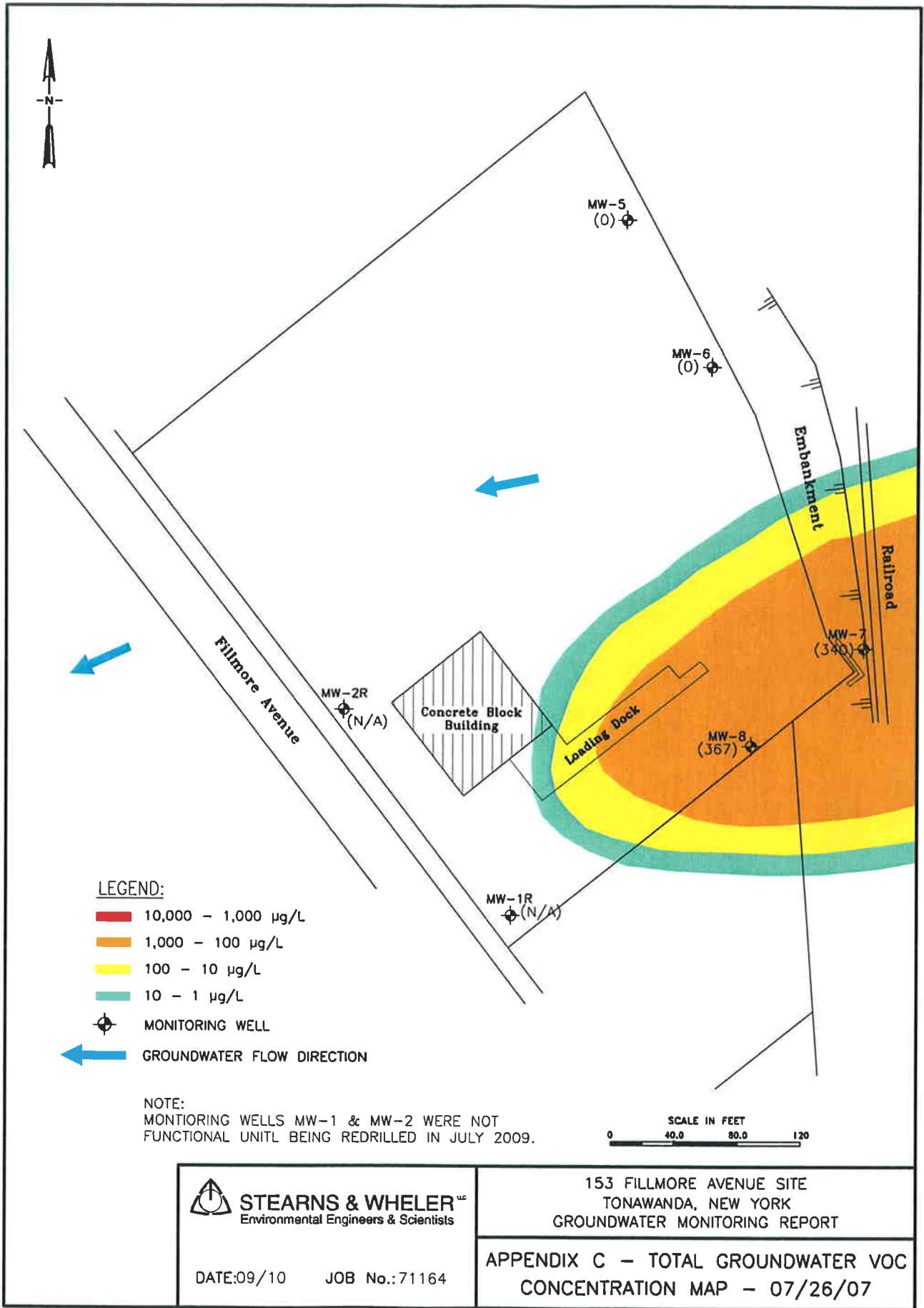
HISTORICAL GROUNDWATER TOTAL VOC CONCENTRATION FIGURES

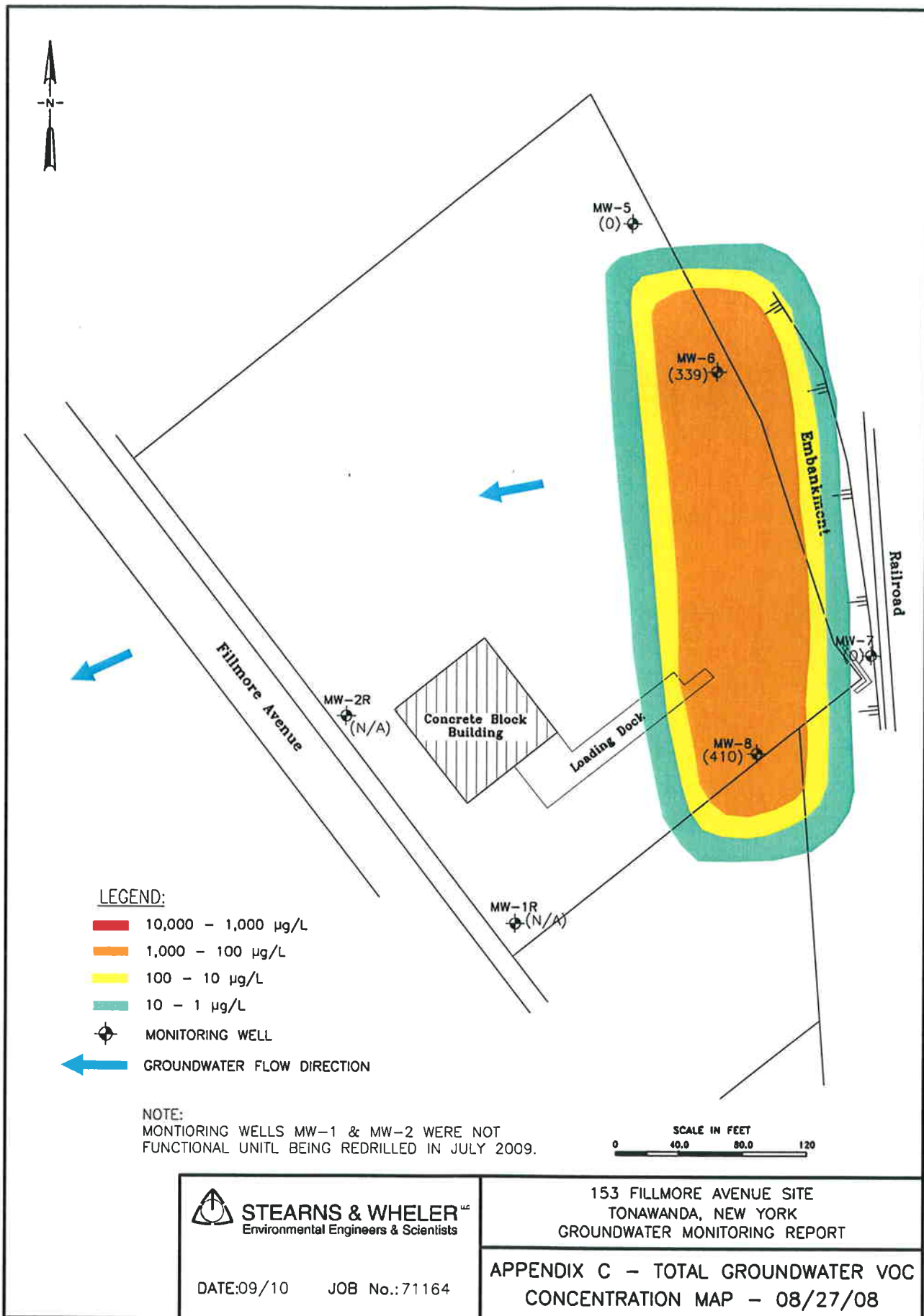






STEARNS & WHEELER^{INC}
 Environmental Engineers & Scientists
 DATE:09/10 JOB No.:71164

153 FILLMORE AVENUE SITE
 TONAWANDA, NEW YORK
 GROUNDWATER MONITORING REPORT
 APPENDIX C - TOTAL GROUNDWATER VOC
 CONCENTRATION MAP - 10/17/01



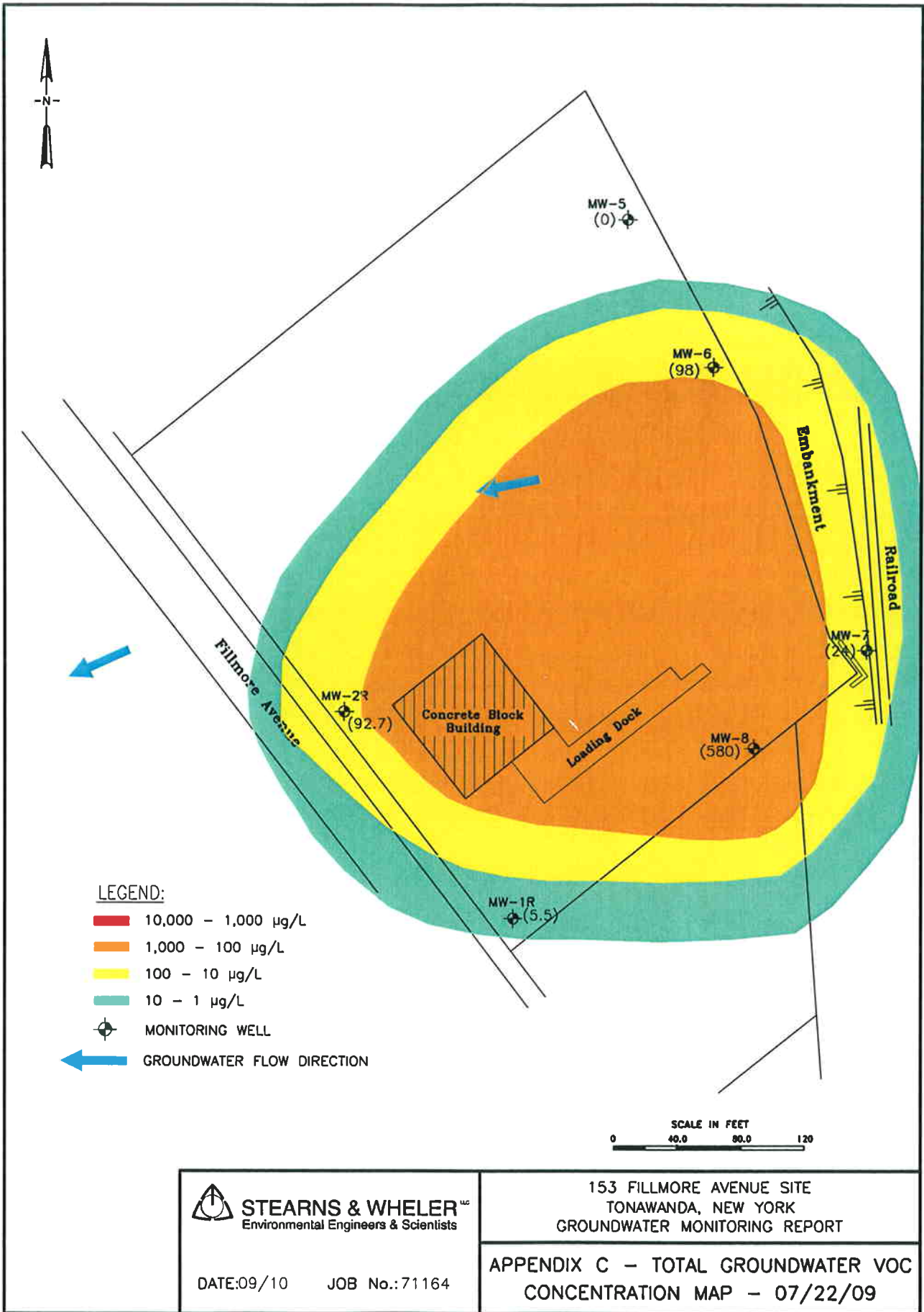


 **STEARNS & WHEELER**^{LLC}
Environmental Engineers & Scientists

DATE: 09/10 JOB No.: 71164

153 FILLMORE AVENUE SITE
TONAWANDA, NEW YORK
GROUNDWATER MONITORING REPORT

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

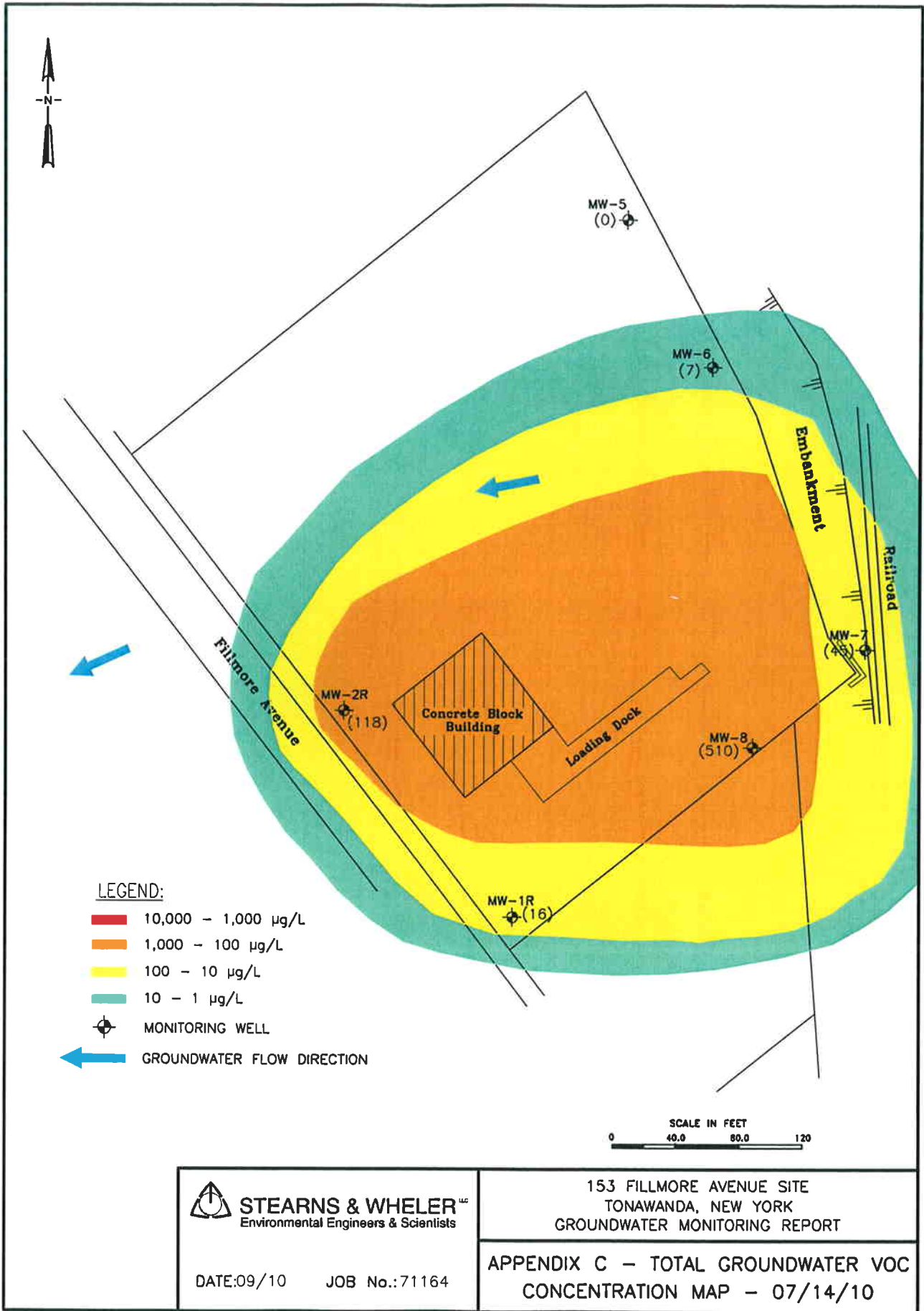


 **STEARNS & WHEELER**[™]
Environmental Engineers & Scientists

DATE:09/10 JOB No.:71164

153 FILLMORE AVENUE SITE
TONAWANDA, NEW YORK
GROUNDWATER MONITORING REPORT

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



STEARNS & WHEELER[™]
Environmental Engineers & Scientists

DATE:09/10 JOB No.:71164

153 FILLMORE AVENUE SITE
TONAWANDA, NEW YORK
GROUNDWATER MONITORING REPORT

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

APPENDIX D

Data Usability Summary Report



Data Usability Summary Report

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

153 Fillmore Ave.
Upstate Laboratories SDG#SW22
September 13, 2011
Sampling date: 07/22/11

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

153 Fillmore Ave.
SDG# SW22

DELIVERABLES

This Data Usability Summary Report (DUSR) was prepared by evaluating the analytical data package for Stearns and Wheler GHD, project located in the 153 Fillmore Ave., SDG#SW22, Upstate laboratories # U1107481, submitted to Vali-Data of WNY, LLC on September 3, 2011. This DUSR has been prepared in general compliance with NYSDEC Analytical Services Protocol and USEPA National Functional Guidelines. The laboratory performed the analyses using USEPA methods, 8260 (Volatile Organics), 8270 (Semi-Volatile Organics), 200.7, 200.8 (Inorganics) and 245.2 (Mercury).

VOLATILE ORGANIC COMPOUNDS

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

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

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

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES

The data are acceptable for use but are qualified below in Holding Times and Continuing Calibration.

DATA COMPLETENESS

All criteria were met.

NARRATIVE AND DATA REPORTING FORMS

All criteria were met except no MDL were included in the original package. Those pages are attached.

Data was not reported to 3 significant figures due to software issues. This does not affect the

153 Fillmore Ave.

SDG# SW22

usability of the data.

CHAIN OF CUSTODY AND TRAFFIC REPORTS

All criteria were met except no 'relinquished by' signature was recorded. This does not affect the usability of the data.

HOLDING TIMES

All holding times were met except the samples were at a temperature of 26°C which is outside the acceptance window (4 ± 2 Degrees °C) thus all target analytes in the samples should be qualified as estimated or undetected estimated. The pH of MW-1, MW-2 and Dupe@MW-2 were outside QC limit, thus all detects should be qualified as estimated and non-detects as unusable in these samples.

INTERNAL STANDARD (IS)

All criteria were met.

SURROGATE SPIKE RECOVERIES

All criteria were met.

METHOD BLANK

All criteria were met.

FIELD DUPLICATE SAMPLE PRECISION

All criteria were met except Acetone was detected in MW-2 but not in Dupe@MW-2.

LABORATORY CONTROL SAMPLES

All criteria were met.

MS/MSD

All criteria were met.

COMPOUND QUANTITATION

All criteria were met.

INITIAL CALIBRATION

All criteria were met except the %RSD of Bromomethane was outside ASP QC limits. ASP allows for up the two target analytes to be outside QC limits without further action.

CONTINUING CALIBRATION

All criteria were met except the %D of Chloromethane and Bromomethane were outside ASP outer QC limits in the continuing calibration file #C41611.D. These target analytes should be qualified as estimated in the associated blanks, spikes and samples.

GC/MS PERFORMANCE CHECK

All criteria were met.

SEMIVOLATILE ORGANIC COMPOUNDS

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

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

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

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES

The data are acceptable for use but are qualified below in Holding Times, Surrogate Spike Recoveries, Method Blank, Laboratory Control Samples and Continuing Calibration.

DATA COMPLETENESS

All criteria were met.

NARRATIVE AND DATA REPORTING FORMS

All criteria were met except no MDL were included in the original package. Those pages are attached. Data was not reported to 3 significant figures due to software issues. This does not affect the usability of the data.

The second page of the Form 1 for Dupe@MW-2 was not included in the original package. That page is attached.

The incorrect TIC page for MB-28196 was included in the original package. The updated page is attached and should be used for p. 76, Volume 1 and p. 12, Volume 3.

153 Fillmore Ave.

SDG# SW22

An updated TIC page for MW-7 was not included in the original package. The updated page is attached.

CHAIN OF CUSTODY AND TRAFFIC REPORTS

All criteria were met.

HOLDING TIMES

All holding times were met except the samples were at a temperature of 26°C which is outside the acceptance window (4 ± 2 Degrees °C) thus all target analytes in the samples should be qualified as estimated or undetected estimated.

INTERNAL STANDARD (IS)

All criteria were met.

SURROGATE SPIKE RECOVERIES

All criteria were met except the %Rec was outside QC limits, high, for 2,4,6-Tribromophenol in LCS-28196 performed on 8/8/11 and 8/20/11. Detected target analytes associated with 2,4,6-Tribromophenol in LCS-28196 should be qualified as estimated.

METHOD BLANK

All criteria were met except Bis(2-ethylhexyl) phthalate and 4 TIC's were detected in MB-28196 performed on 8/8/11.

Di-n-Butyl phthalate and Bis(2-ethylhexyl) phthalate were detected above the MDL, below the reporting limit and are qualified as estimated in MB-28196 performed on 8/20/11.

Eleven TIC's were detected in MB-28196 performed on 8/20/11.

These target analytes were qualified with a 'B' when detected in the samples.

FIELD DUPLICATE SAMPLE PRECISION

All criteria were met except Dupe@MW-2 recorded one additional TIC then MW-2.

LABORATORY CONTROL SAMPLES

All criteria were met except the %Rec of 4-Nitrophenol and 2,4-Dinitrotoluene were outside QC limits, high, in LCS-28196 performed on 8/8/11. These target analytes were not detected in the samples so no further action is required.

The %Rec of Phenol, 4-Chloro-3-methylphenol, 4-Nitrophenol, 2,4-Dinitrophenol and Pentachlorophenol were outside QC limits, high, in LCS-28196 performed on 8/20/11.

MS/MSD

All criteria were met except the %Rec of 4-Nitrophenol was outside QC limits, high in MW-8MS/MSD.

COMPOUND QUANTITATION

All criteria were met.

INITIAL CALIBRATION

All criteria were met except the %RSD of N-Nitrosodi-n-propylamine was outside the ASP QC limits in the initial calibration performed on 8/1/11. ASP allows for up to 4 target analytes to be outside QC limits without further action.

CONTINUING CALIBRATION

All criteria were met except the % D of N-Nitrosodi-n-propylamine in continuing calibration file # A32881.D was outside QC limits. ASP allows for up to 4 compounds to be outside QC limits without further action.

The %D of Dibenzo (a,h)anthracene, Pentachlorophenol, 3,3'-Dichlorobenzidine and Benzo(g,h,i)perylene in continuing calibration file #J05569 were outside ASP outer QC limits and should be qualified as estimated in all associated samples, blanks and spikes. The %D of Phenol, 2-Chlorophenol, 2,4,6-Trichlorophenol, 2,4,5-Trichlorophenol and Hexachlorobenzene were outside QC limits in continuing calibration file #J05569. These target analytes should be qualified as estimated in the associated samples, blanks and spikes.

GC/MS PERFORMANCE CHECK

All criteria were met.

METALS

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

- Data Completeness
- Narrative and Data Reporting Forms
- Chain of Custody and Traffic Reports
- Holding Times
- Method Blank
- Laboratory Control Sample
- MS
- Duplicate
- Field Duplicate
- Serial Dilution
- Compound Quantitation
- Calibration

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

OVERALL EVALUATION OF DATA AND POTENTIAL USABILITY ISSUES

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

DATA COMPLETENESS

All criteria were met.

NARATIVE AND DATA REPORTING FORMS

All criteria were met except Pb and Se were not recorded on Form 5A or 6, Spike Sample Recovery and Duplicates, respectively. Updated pages are attached.

CHAIN OF CUSTODY AND TRAFFIC REPORTS

All criteria were met.

HOLDING TIMES

All holding times were met. The pH of MW-1, MW-2 and Dupe@MW-2 were outside QC limit, thus all detects should be qualified as estimated and non-detects as unusable in these samples. (See VOC, above)

METHOD BLANK

All criteria were met.

LABORATORY CONTROL SAMPLE

All criteria were met.

MS

All criteria were met except the %Rec of Fe and Mn were outside QC limits, high, in MW-8S. The %Rec of Ag was outside QC limits, low, in MW-8S.

The %Rec of Fe and Mn were within QC limits in the post digest spike sample. These target analytes were qualified with an 'N' by Upstate laboratories to indicate the variance from QC limits.

No post digest spike recovery was recorded for Ag, so Ag should be qualified as estimated or undetected estimated in the samples.

DUPLICATE

All criteria were met except the %RPD of Zn was outside the QC limit of 20% but within control limits, so no further action is required.

FIELD DUPLICATE

All criteria were met except Be and Tl were detected in Dup@MW-1 but not in MW-1.

SERIAL DILUTION

All criteria were met except the %D of Ba, Mn and Zn were outside QC limits. The concentrations of Mn in the initial sample and serial dilution were >50x MDL so Mn was

HOLDING TIMES

All holding times were met. The pH of MW-1, MW-2 and Dupe@MW-2 were outside QC limit, thus all detects should be qualified as estimated and non-detects as unusable in these samples. (See VOC, above)

METHOD BLANK

All criteria were met.

LABORATORY CONTROL SAMPLES

All criteria were met.

MS/MSD

All criteria were met.

DUPLICATE

All criteria were met except Hg was not detected in MW-8dup but was detected in MW-8.

FIELD DUPLICATE

All criteria were met.

COMPOUND QUANTITATION

All criteria were met.

CALIBRATION

All criteria were met.

APPENDIX E

Part 375 Soil Cleanup Objectives



(b) Restricted use soil cleanup objectives.

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

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
Metals							
Arsenic	7440-38-2	16 ^f	16 ^f	16 ^f	16 ^f	13 ^f	16 ^f
Barium	7440-39-3	350 ^f	400	400	10,000 ^d	433	820
Beryllium	7440-41-7	14	72	590	2,700	10	47
Cadmium	7440-43-9	2.5 ^f	4.3	9.3	60	4	7.5
Chromium, hexavalent ^h	18540-29-9	22	110	400	800	1 ^e	19
Chromium, trivalent ^h	16065-83-1	36	180	1,500	6,800	41	NS
Copper	7440-50-8	270	270	270	10,000 ^d	50	1,720
Total Cyanide ^h		27	27	27	10,000 ^d	NS	40
Lead	7439-92-1	400	400	1,000	3,900	63 ^f	450
Manganese	7439-96-5	2,000 ^f	2,000 ^f	10,000 ^d	10,000 ^d	1600 ^f	2,000 ^f
Total Mercury		0.81 ^j	0.81 ^j	2.8 ^j	5.7 ^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 ^s	0.25
Dibenzofuran	132-64-9	14	59	350	1,000 ^c	NS	210
Dieldrin	60-57-1	0.039	0.2	1.4	2.8	0.006	0.1
Endosulfan I	959-98-8	4.8 ⁱ	24 ⁱ	200 ⁱ	920 ⁱ	NS	102
Endosulfan II	33213-65-9	4.8 ⁱ	24 ⁱ	200 ⁱ	920 ⁱ	NS	102
Endosulfan sulfate	1031-07-8	4.8 ⁱ	24 ⁱ	200 ⁱ	920 ⁱ	NS	1,000 ^c
Endrin	72-20-8	2.2	11	89	410	0.014	0.06
Heptachlor	76-44-8	0.42	2.1	15	29	0.14	0.38
Lindane	58-89-9	0.28	1.3	9.2	23	6	0.1
Polychlorinated biphenyls	1336-36-3	1	1	1	25	1	3.2
Semivolatiles							
Acenaphthene	83-32-9	100 ^a	100 ^a	500 ^b	1,000 ^c	20	98
Acenaphthylene	208-96-8	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	107
Anthracene	120-12-7	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	1,000 ^c
Benz(a)anthracene	56-55-3	1 ^f	1 ^f	5.6	11	NS	1 ^f
Benzo(a)pyrene	50-32-8	1 ^f	1 ^f	1 ^f	1.1	2.6	22
Benzo(b)fluoranthene	205-99-2	1 ^f	1 ^f	5.6	11	NS	1.7
Benzo(g,h,i)perylene	191-24-2	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	1,000 ^c
Benzo(k)fluoranthene	207-08-9	1	3.9	56	110	NS	1.7
Chrysene	218-01-9	1 ^f	3.9	56	110	NS	1 ^f
Dibenz(a,h)anthracene	53-70-3	0.33 ^e	0.33 ^e	0.56	1.1	NS	1,000 ^c
Fluoranthene	206-44-0	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	1,000 ^c
Fluorene	86-73-7	100 ^a	100 ^a	500 ^b	1,000 ^c	30	386
Indeno(1,2,3-cd)pyrene	193-39-5	0.5 ^f	0.5 ^f	5.6	11	NS	8.2
m-Cresol	108-39-4	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	0.33 ^e
Naphthalene	91-20-3	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	12

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

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
o-Cresol	95-48-7	100 ^a	100 ^a	500 ^b	1,000 ^c	NS	0.33 ^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.