

*2010 PERIODIC REVIEW REPORT*

Groundwater Monitoring and  
Sampling Results

153 Fillmore Avenue Site  
City of Tonawanda

**November 2010**



STEARNS & WHEELER  
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**GROUNDWATER MONITORING AND SAMPLING RESULTS**

**153 FILLMORE AVENUE SITE  
CITY OF TONAWANDA**

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November 2010

S&W Project No. 71164

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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.

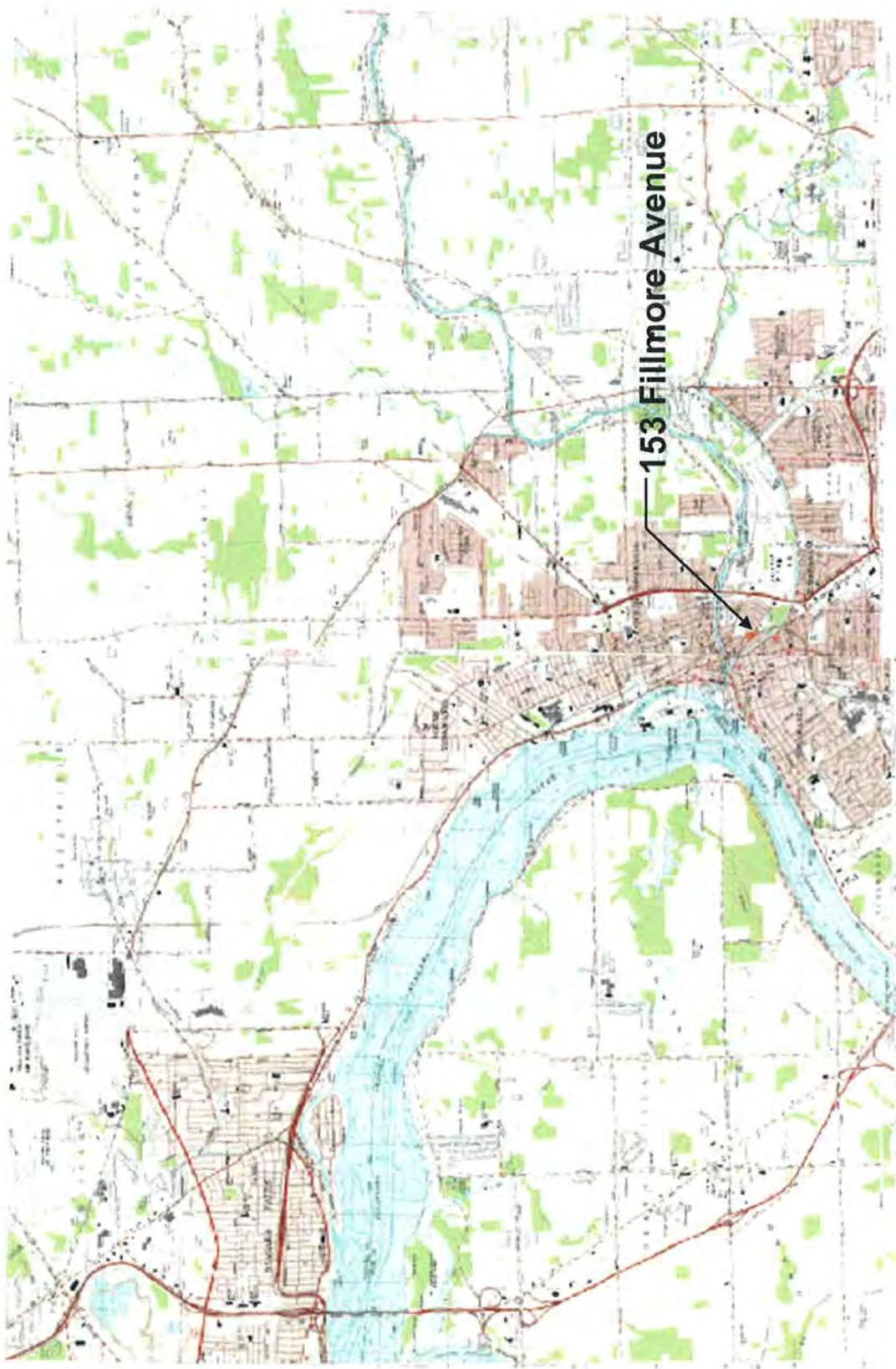
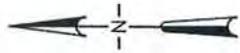
### **1.2 Site History**

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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153 FILLMORE AVENUE  
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GROUNDWATER MONITORING REPORT  
**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.

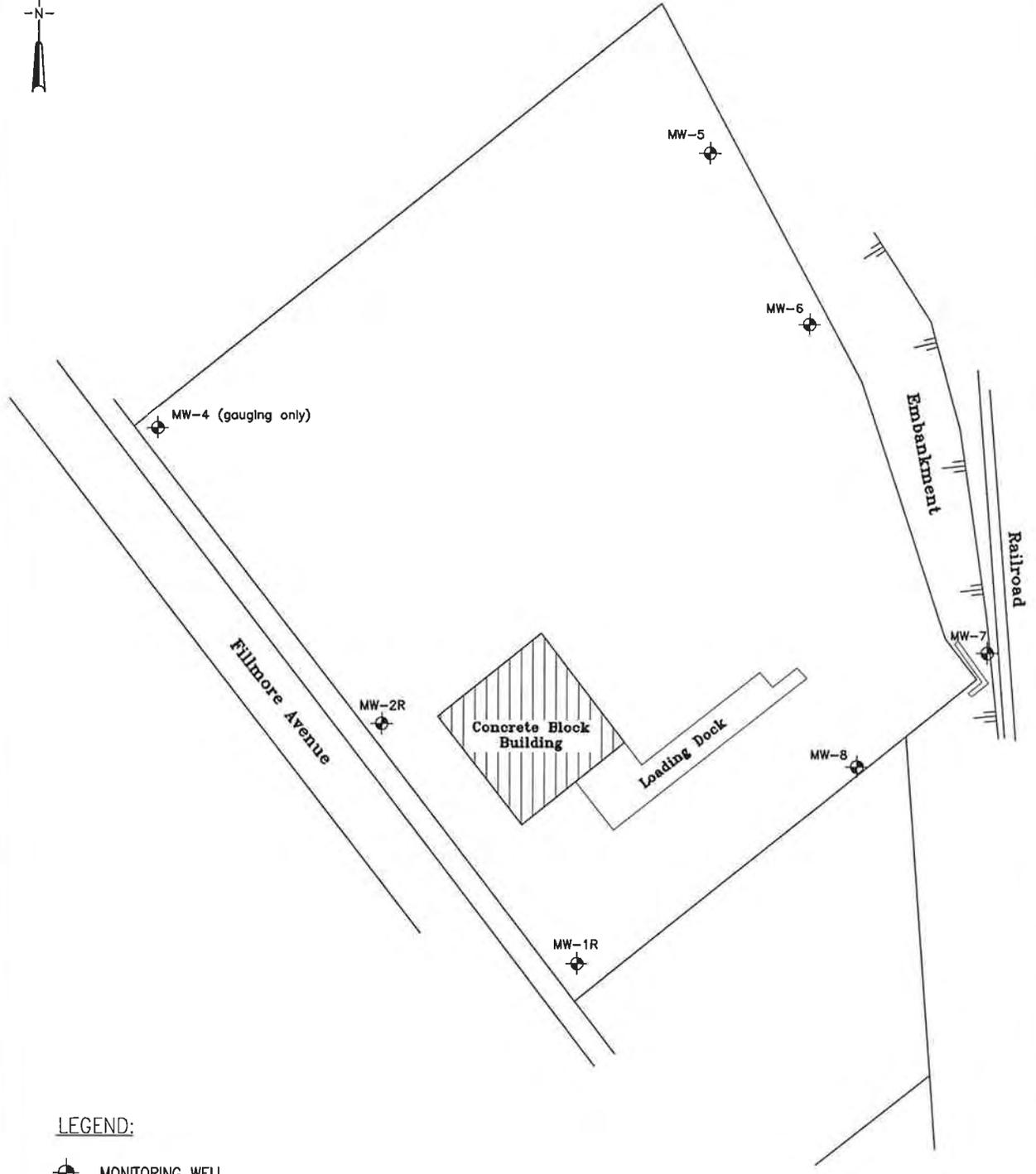
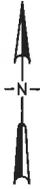
A Site Management Plan was completed after Site Investigation/Remedial Alternatives Report detailing a Groundwater Monitoring Plan. The Groundwater Monitoring Plan required annual sampling of the five down-gradient wells (MW-1 through MW-4) and MW-8 and biennial sampling of potential source wells (MW-5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

## **SECTION 2 – GROUNDWATER MONITORING ACTIVITIES**

The 2010 monitoring program at the 153 Fillmore Avenue in the City of Tonawanda consisted of one annual sampling event completed on July 15, 2010. 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 2010 sampling event.



**LEGEND:**

 MONITORING WELL

SCALE IN FEET  
 0 40.0 80.0 120

06.02.2008 BRIAN DOYLE  
 J:\70000\71164\WORD PROC\REPORTS\2010\FIGURE 2 MONITORING WELL LOCATIONS.DWG

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	<b>FIGURE 2</b> <b>MONITORING WELL LOCATIONS</b>

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## **SECTION 3 – GROUNDWATER MONITORING RESULTS**

This section includes the results of the 2010 annual groundwater sampling event. Included are descriptions of site-specific hydrogeology, the identification and distribution of constituents present in groundwater, and a comparison of historical data. Constituents were compared to the applicable NYSDEC Division of Water Technical and Operational Guidance Series (TOGS 1.1.1) Groundwater Standards and Guidance Values.

### **3.1 Site Hydrogeology**

Groundwater levels were collected at each monitoring well and are presented in Table 2. Figure 3 illustrates the groundwater elevation contours based on the groundwater levels measured on July 15, 2010. The groundwater elevation data indicates that groundwater flows toward the west. The up gradient monitoring well is identified as monitoring well MW-7.

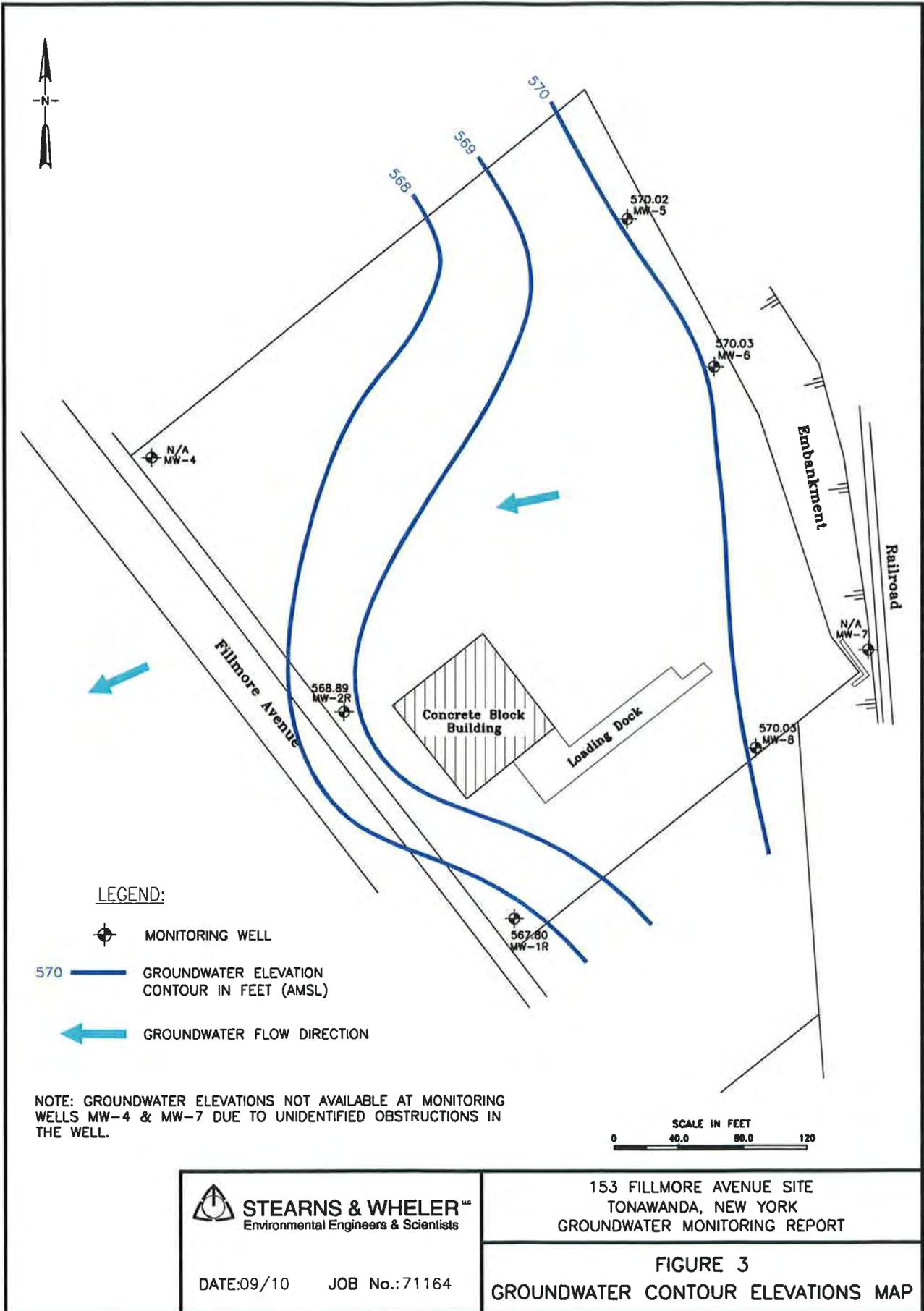
### **3.2 Groundwater Analytical Results**

A summary of the compounds detected in groundwater during the 2010 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 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 2010 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, MW-6, and MW-8), trans-1,2-dichloroethene (MW-8), cis-1,2-dichloroethene (MW-1, MW-2, MW-6, MW-7 and MW-8), exceeding groundwater quality standards as presented in Table 3.

06.02.2008 BRIAN DOYLE  
 J:\70000\71164\WORD PROC\REPORTS\2010\FIGURE 3 GROUNDWATER CONTOUR ELEVATIONS MAP.DWG

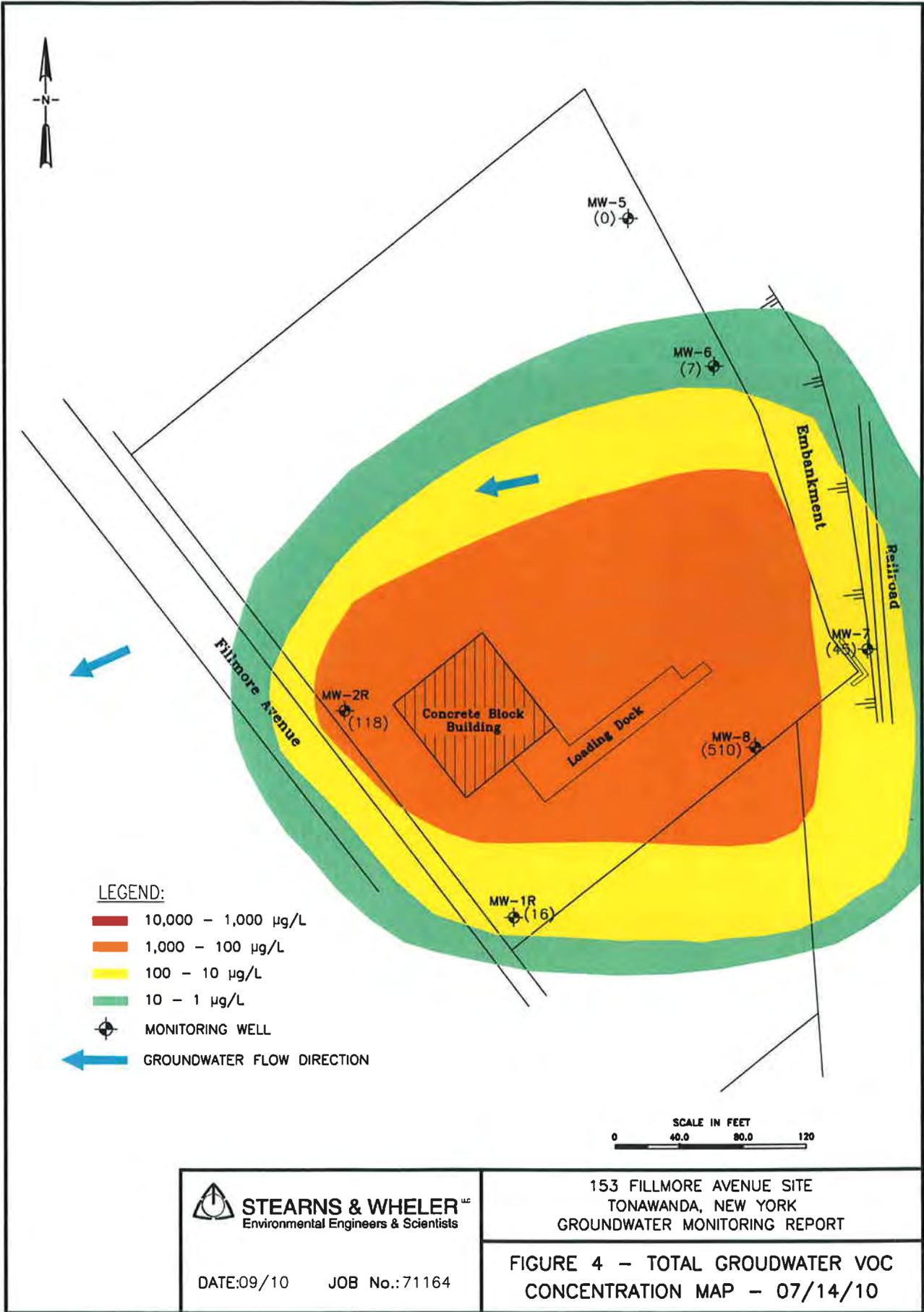


Detected concentrations of vinyl chloride increased in groundwater sampled from monitoring wells MW-1 and MW-8, which represented concentrations above the groundwater quality standard. The concentration of vinyl chloride in groundwater sampled from MW-7 decreased to a level of non-detection. The concentration of vinyl chloride decreased at monitoring well MW-6, 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, MW-2 and MW-7, which represented concentrations above or equal to the groundwater quality standard. The concentration of cis-1,2-dichloroethene decreased at monitoring well MW-8, but remained above the groundwater quality standard. The concentration of cis-1,2-dichloroethene in MW-6 decreased to levels below the groundwater quality standard. 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 decreased to levels of non-detection in groundwater sampled at monitoring wells MW-2 and MW-6. The concentration of trans-1,2-dichloroethene at monitoring well MW-8 decreased from the 2009 sampling event, but remained above the groundwater quality standard. Concentrations of trans-1,2-dichloroethene exceeded groundwater quality standards for all sampling events in at least one well.

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 as presented in Figure 4. The



**LEGEND:**

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



MONITORING WELL



GROUNDWATER FLOW DIRECTION

SCALE IN FEET  
0 40.0 80.0 120



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**FIGURE 4 - TOTAL GROUDWATER VOC  
CONCENTRATION MAP - 07/14/10**

total VOC plume migrated further west with test results from the 2010 sampling event due to increased total VOC concentrations in monitoring wells MW-1 and MW-2.

### **3.2.2 Semi-Volatile Organic Analytical Test Results**

The semi-volatile organic analytical test results for the sampling event of 2010 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 well MW-2, exceeding groundwater quality standards as presented in Table 4.

Detected concentrations of acenaphthene remained the same in groundwater sampled from monitoring well MW-8, while concentrations of acenaphthene decreased at monitoring well MW-2. Detected concentrations of acenaphthene did not exceed groundwater quality standards.

Detected concentrations of bis(2-ethylhexyl)phthalate increased in groundwater sampled from monitoring well MW-2, which represented concentrations detected above the groundwater quality standard. Detected concentrations of bis(2-ethylhexyl)phthalate decreased in groundwater sampled from monitoring wells MW-1, MW-5, MW-6, MW-7 and MW-8, all below groundwater quality limits.

Detected concentrations of di-n-butyl phthalate decreased in groundwater sampled from all monitoring wells and remain below the groundwater quality standards.

### **3.2.3 Inorganic Metals Analytical Test Results**

Detected concentrations of inorganic metals for the 2010 sampling event that exceeded groundwater quality standards increased in concentrations of most parameters when compared with 2009 analytical test results. The inorganic metals analytical test results detected concentrations of aluminum (MW-1, MW-2, MW-5 and MW-7), barium (MW-2), beryllium (MW-2), cadmium (MW-1 and MW-2), 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-5), manganese (MW-1, MW-2, MW-6 and MW-8), mercury (MW-2), and nickel (MW-2) exceeding groundwater quality standards as presented in Table 5.

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

Detected concentrations of barium increased in groundwater sampled from monitoring wells MW-1, MW-2, and MW-8. Barium concentrations in monitoring wells MW-5, MW-6 and MW-7 decreased from the 2009 sampling event. Barium concentrations exceeded groundwater quality standards in monitoring well MW-2 only.

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

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

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

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

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

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

Detected concentrations that did not exceed groundwater quality standards and represented an increase in concentration when compared to test results from 2009 are: aluminum (MW-6), arsenic (MW-1, MW-2 and MW-7), barium (MW-1 and MW-8), copper (MW-1 and MW-2), lead (MW-6 and MW-8), mercury (MW-1), nickel (MW-1), selenium (MW-1 and MW-2), zinc (MW-1, MW-2, MW-5, MW-6, and MW-8).

Detected concentrations that did not exceed groundwater quality standards and represented a decrease in concentration when compared to test results from 2009 are: aluminum (MW-8), barium (MW-5, MW-6 and MW-7), chromium (MW-5), copper (MW-5 and MW-7), magnesium (MW-6, MW-7 and MW-8), manganese (MW-5 and MW-7), nickel (MW-7), and zinc (MW-7).

### **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 2010 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 2010 Site Usage**

No excavation took place on-site in 2010.

## 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, and cis-1,2-dichloroethene 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-2.
3. Inorganic metals analytical test results detected concentrations of aluminum, barium, beryllium, cadmium, chromium, iron, lead, magnesium, manganese, mercury and nickel that exceed groundwater quality standards.
4. Trend analysis of volatile parameters indicates the concentrations of vinyl chloride 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-2.
6. Based on 2010 analytical test results, the total VOC concentration plume appears to be migrating in a westward direction. Total VOC concentrations increased in groundwater at monitoring wells MW-1, MW-2, and MW-7. Total VOC concentrations decreased at monitoring wells MW-6 and MW-8.

# TABLES

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**TABLE 1**  
**153 Fillmore Avenue Site**  
**City of Tonawanda**  
**2010 Field Groundwater Parameters**

Parameter	Monitoring Well Location							
	MW-1	MW-2	MW-5	MW-6	MW-7	MW-8		
Temperature (°C)	21.9	19.2	17.20	16.10	19.30	16.70		
pH	6.97	6.92	7.18	7.03	7.45	7.11		
Conductivity (mS/cm)	1.23	1.08	0.95	0.67	0.99	0.74		
Dissolved Oxygen (mg/L)	7.3	4.55	9.83	7.61	7.76	5.90		
Turbidity (NTUs) <sup>(1)</sup>	NA	NA	255	193	453	180		
ORP (mV)	-122.0	-68.0	-70.0	-109.0	-48.0	-104.0		

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**

<b>Property</b>	<b>Units</b>	<b>07/22/09</b>	<b>07/15/10</b>
Well Depth Top PVC	feet	13.5	13.5
Well Depth Elevation	feet	561.30	561.30
Depth to Static Water	feet	6.30	7.00
Height of Water	feet	7.20	6.50
Top PVC Elevation	feet	574.8	574.8
Static Water Level Elevation	feet	568.50	567.80
Well Casing Diameter	inch	2.0	2.0
Water Volume	gallon	1.21	1.09
Water Purged	gallon	3.64	3.26
Purging Method	-	Peristaltic Pump	Peristaltic Pump

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

<b>Property</b>	<b>Units</b>	<b>07/22/09</b>	<b>07/15/10</b>
Well Depth Top PVC	feet	13.5	13.5
Well Depth Elevation	feet	561.69	561.69
Depth to Static Water	feet	5.90	6.30
Height of Water	feet	7.60	7.20
Top PVC Elevation	feet	575.19	575.19
Static Water Level Elevation	feet	569.29	568.89
Well Casing Diameter	inch	2.0	2.0
Water Volume	gallon	1.22	1.15
Water Purged	gallon	3.67	3.46
Purging Method	-	Peristaltic Pump	Peristaltic Pump

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

<b>Property</b>	<b>Units</b>	<b>10/17/01</b>	<b>07/26/07</b>	<b>08/27/08</b>	<b>07/22/09</b>	<b>07/15/10</b>
Well Depth Top PVC	feet	15.5	15.5	15.5	15.5	15.5
Well Depth Elevation	feet	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
Height of Water	feet	7.09	6.10	8.60	7.00	7.20
Top PVC Elevation	feet	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
Well Casing Diameter	inch	1.0	1.0	1.0	1.0	1.0
Water Volume	gallon	0.64	0.55	0.77	1.90	0.65
Water Purged	gallon	1.91	1.65	1.00	1.50	1.50
Purging Method	-	-	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump

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

<b>Property</b>	<b>Units</b>	<b>10/17/01</b>	<b>07/26/07</b>	<b>08/27/08</b>	<b>07/23/09</b>	<b>07/15/10</b>
Well Depth Top PVC	feet	17.3	17.3	17.3	17.3	17.3
Well Depth Elevation	feet	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
Height of Water	feet	9.37	8.80	10.60	8.60	9.20
Top PVC Elevation	feet	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
Well Casing Diameter	inch	1.0	1.0	1.0	1.0	1.0
Water Volume	gallon	0.84	0.79	0.95	0.78	0.83
Water Purged	gallon	2.53	2.38	2.86	2.34	2.48
Purging Method		-	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump	Peristaltic Pump

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

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

<b>Property</b>	<b>Units</b>	<b>10/17/01</b>	<b>07/26/07</b>	<b>08/27/08</b>	<b>07/22/09</b>	<b>07/15/10</b>
Well Depth Top PVC	feet	17.5	17.5	17.5	17.5	17.5
Well Depth Elevation	feet	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
Height of Water	feet	9.34	9.00	10.60	9.70	9.10
Top PVC Elevation	feet	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
Well Casing Diameter	inch	1.0	1.0	1.0	1.0	1.0
Water Volume	gallon	0.84	0.81	0.95	0.87	0.82
Water Purged	gallon	2.52	2.43	3.00	2.62	2.46
Purging Method	-	-	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 <sup>1</sup>	Units	08/07/01	07/22/09	07/15/10
Chloromethane	NE	µg/L	-	ND	ND
Vinyl chloride	2.0	µg/L	ND	ND	<b>3 J</b>
Bromomethane	5.0	µg/L	-	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND
Acetone	50.0	µg/L	ND	ND	ND
1,1-Dichloroethene	5.0	µg/L	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	<b>47</b>	<b>5.5</b>	<b>13.0</b>
Chloroform	7.0	µg/L	-	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND
Benzene	1.0	µg/L	ND	ND	ND
1,2-Dichloroethane	0.6	µg/L	-	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND
Toluene	5.0	µg/L	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND
m,p-Xylene	5.0	µg/L	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND
Styrene	5.0	µg/L	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND
Total VOCs		µg/L	47	5.5	16.0
Total VOCs		mg/L	0.047	0.006	0.016

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

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 <sup>1</sup>	Units	08/07/01	07/26/07	08/27/08	07/22/09	07/15/10
Chloromethane	NE	µg/L	-	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	ND	ND	ND	ND	ND
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND
Acetone	50.0	µg/L	<b>30</b>	ND	ND	ND	ND
1,1-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND
Chloroform	7.0	µg/L	-	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND
Benzene	1.0	µg/L	<b>2</b>	ND	ND	ND	ND
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	ND	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND
Toluene	5.0	µg/L	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND	ND
m,p-Xylene	5.0	µg/L	ND	ND	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND	ND	ND
Styrene	5.0	µg/L	ND	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND
Total VOCs		µg/L	32	0	0	0	0
Total VOCs		mg/L	0.032	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 <sup>1</sup>	Units	08/07/01	07/26/07	08/27/08	07/22/09	07/15/10
Chloromethane	NE	µg/L	-	ND	ND	ND	ND
Vinyl chloride	2.0	µg/L	ND	ND	<b>99</b>	<b>42</b>	<b>5</b>
Bromomethane	5.0	µg/L	-	ND	ND	ND	ND
Chloroethane	5.0	µg/L	-	ND	ND	ND	ND
Acetone	50.0	µg/L	ND	ND	ND	ND	ND
1,1-Dichloroethene	5.0	µg/L	ND	ND	ND	ND	ND
Carbon disulfide	60.0	µg/L	-	ND	ND	ND	ND
Methylene chloride	5.0	µg/L	-	ND	ND	ND	ND
trans-1,2-Dichloroethene	5.0	µg/L	ND	ND	ND	<b>3 J</b>	ND
1,1-Dichloroethane	5.0	µg/L	ND	ND	ND	ND	ND
2-Butanone	50.0	µg/L	-	ND	ND	ND	ND
cis-1,2-Dichloroethene	5.0	µg/L	ND	ND	<b>240</b>	<b>51</b>	<b>2 J</b>
Chloroform	7.0	µg/L	-	ND	ND	ND	ND
1,1,1-Trichloroethane	5.0	µg/L	-	ND	ND	ND	ND
Carbon tetrachloride	5.0	µg/L	-	ND	ND	ND	ND
Benzene	1.0	µg/L	ND	ND	ND	ND	ND
1,2-Dichloroethane	0.6	µg/L	-	ND	ND	ND	ND
Trichloroethene	5.0	µg/L	ND	ND	ND	<b>2 J</b>	ND
1,2-Dichloropropane	1.0	µg/L	-	ND	ND	ND	ND
Bromodichloromethane	50.0	µg/L	-	ND	ND	ND	ND
4-Methyl-2-pentanone	NE	µg/L	-	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND
Toluene	5.0	µg/L	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4	µg/L	-	ND	ND	ND	ND
1,1,2-Trichloroethane	1.0	µg/L	-	ND	ND	ND	ND
2-Hexanone	50.0	µg/L	-	ND	ND	ND	ND
Tetrachloroethene	5.0	µg/L	ND	ND	ND	ND	ND
Dibromochloromethane	50.0	µg/L	-	ND	ND	ND	ND
Chlorobenzene	5.0	µg/L	-	ND	ND	ND	ND
Ethylbenzene	5.0	µg/L	ND	ND	ND	ND	ND
m,p-Xylene	5.0	µg/L	<b>5</b>	ND	ND	ND	ND
o-Xylene	5.0	µg/L	ND	ND	ND	ND	ND
Styrene	5.0	µg/L	ND	ND	ND	ND	ND
Bromoform	50.0	µg/L	-	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5.0	µg/L	-	ND	ND	ND	ND
Total VOCs		µg/L	5	0	339	98	7
Total VOCs		mg/L	0.005	0.000	0.339	0.098	0.007

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

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**

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

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 <sup>1</sup>	Units	08/08/01	07/23/09	07/15/10
Phenol	1.0	µg/L	-	ND	ND
bis(2-chloroethyl) ether	1.0	µg/L	-	ND	ND
2-Chlorophenol	NE	µg/L	-	ND	ND
1,3-Dichlorobenzene	3.0	µg/L	-	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	ND	ND
2-Methylphenol	NE	µg/L	-	ND	ND
N-Nitrosodi-n-propylamine	NE	µg/L	-	ND	ND
Hexachloroethane	5.0	µg/L	-	ND	ND
Nitrobenzene	0.4	µg/L	-	ND	ND
Isophorone	50.0	µg/L	-	ND	ND
2-Nitrophenol	NE	µg/L	-	ND	ND
2,4-Dimethylphenol	50.0	µg/L	-	ND	ND
bis(2-chloroethoxy) methane	5.0	µg/L	-	ND	ND
2,4-Dichlorophenol	1.0	µg/L	-	ND	ND
1,2,4-Trichlorobenzene	NE	µg/L	-	ND	ND
Naphthalene	10.0	µg/L	ND	ND	ND
4-Chloroaniline	5.0	µg/L	-	ND	ND
Hexachlorobutadiene	0.5	µg/L	-	ND	ND
4-Chloro-3-methylphenol	NE	µg/L	-	ND	ND
2-Methylnaphthalene	NE	µg/L	ND	ND	ND
Hexachlorocyclopentadiene	5.0	µg/L	-	ND	ND
2,4,6-Trichlorophenol	NE	µg/L	-	ND	ND
2,4,5-Trichlorophenol	NE	µg/L	-	ND	ND
2-Chloronaphthalene	10.0	µg/L	-	ND	ND
2-Nitroaniline	5.0	µg/L	-	ND	ND
Dimethyl phthalate	50.0	µg/L	-	ND	ND
Acenaphthylene	NE	µg/L	-	ND	ND
2,6-Dinitrotoluene	5.0	µg/L	-	ND	ND
3-Nitroaniline	5.0	µg/L	-	ND	ND
Acenaphthene	20.0	µg/L	ND	ND	ND
2,4-Dinitrophenol	10.0	µg/L	-	ND	ND
4-Nitrophenol	NE	µg/L	-	ND	ND
Dibenzofuran	50.0	µg/L	ND	ND	ND
2,4-Dinitrotoluene	5.0	µg/L	-	ND	ND
Diethyl phthalate	50.0	µg/L	-	ND	ND
4-Chlorophenyl phenyl ether	NE	µg/L	-	ND	ND
Fluorene	50.0	µg/L	ND	ND	ND
4-Nitroaniline	5.0	µg/L	-	ND	ND
4,6-Dinitro-2-methylphenol	NE	µg/L	-	ND	ND
N-Nitrosodiphenylamine	50.0	µg/L	-	ND	ND
4-Bromophenyl phenyl ether	NE	µg/L	-	ND	ND
Hexachlorobenzene	0.04	µg/L	-	ND	ND
Pentachlorophenol	1.0	µg/L	-	ND	ND
Phenanthrene	50.0	µg/L	ND	ND	ND
Anthracene	50.0	µg/L	ND	ND	ND
Carbazole	NE	µg/L	-	ND	ND
Di-n-butyl phthalate	50.0	µg/L	-	<b>2 J</b>	ND
Fluoranthene	50.0	µg/L	ND	ND	ND
Pyrene	50.0	µg/L	ND	ND	ND
Butyl benzyl phthalate	50.0	µg/L	-	ND	ND
3,3'-Dichlorobenzidine	5.0	µg/L	-	ND	ND
Benz(a)anthracene	0.002	µg/L	ND	ND	ND
Chrysene	0.002	µg/L	ND	ND	ND
bis(2-ethylhexyl) phthalate	5.0	µg/L	ND	<b>8 J</b>	<b>1 J</b>
Di-n-octyl phthalate	50.0	µg/L	-	ND	ND
Benzo(b)fluoranthene	0.002	µg/L	-	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	-	ND	ND
Benzo(a)pyrene	NE	µg/L	-	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	µg/L	-	ND	ND
Dibenz(a,h)anthracene	NE	µg/L	-	ND	ND
Benzo(g,h,i)perylene	NE	µg/L	-	ND	ND
(3+4)-Methylphenol	NE	µg/L	-	ND	ND
bis(2-chloroisopropyl) ether	NE	µg/L	-	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 4B**  
**Monitoring Well MW-2**  
**Semi-Volatile Organic Analytical Test Results**  
**153 Fillmore Avenue Site**

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

Semi-Volatile Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards <sup>1</sup>	Units	08/08/01	07/26/07	08/27/08	07/22/09	07/15/10
Phenol	1.0	µg/L	-	ND	ND	ND	ND
bis(2-chloroethyl) ether	1.0	µg/L	-	ND	ND	ND	ND
2-Chlorophenol	NE	µg/L	-	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND
2-Methylphenol	NE	µg/L	-	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	NE	µg/L	-	ND	ND	ND	ND
Hexachloroethane	5.0	µg/L	-	ND	ND	ND	ND
Nitrobenzene	0.4	µg/L	-	ND	ND	ND	ND
Isophorone	50.0	µg/L	-	ND	ND	ND	ND
2-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND
2,4-Dimethylphenol	50.0	µg/L	-	ND	ND	ND	ND
bis(2-chloroethoxy) methane	5.0	µg/L	-	ND	ND	ND	ND
2,4-Dichlorophenol	1.0	µg/L	-	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NE	µg/L	-	ND	ND	ND	ND
Naphthalene	10.0	µg/L	<b>59</b>	ND	ND	ND	ND
4-Chloroaniline	5.0	µg/L	-	ND	ND	ND	ND
Hexachlorobutadiene	0.5	µg/L	-	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE	µg/L	-	ND	ND	ND	ND
2-Methylnaphthalene	NE	µg/L	<b>800</b>	ND	ND	ND	ND
Hexachlorocyclopentadiene	5.0	µg/L	-	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND
2,4,5-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND
2-Chloro-phthalene	10.0	µg/L	-	ND	ND	ND	ND
2-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND
Dimethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND
Acenaphthylene	NE	µg/L	-	ND	ND	ND	ND
2,6-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND
3-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND
Acenaphthene	20.0	µg/L	<b>65</b>	ND	ND	ND	ND
2,4-Dinitrophenol	10.0	µg/L	-	ND	ND	ND	ND
4-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND
Dibenzofuran	50.0	µg/L	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND
Diethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND
Fluorene	50.0	µg/L	<b>93</b>	ND	ND	ND	ND
4-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	µg/L	-	ND	ND	ND	ND
N-Nitrosodiphenylamine	50.0	µg/L	-	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND
Hexachlorobenzene	0.04	µg/L	-	ND	ND	ND	ND
Pentachlorophenol	1.0	µg/L	-	ND	ND	ND	ND
Phenanthrene	50.0	µg/L	<b>220</b>	ND	ND	ND	ND
Anthracene	50.0	µg/L	ND	ND	ND	ND	ND
Carbazole	NE	µg/L	-	ND	ND	ND	ND
Di-n-butyl phthalate	50.0	µg/L	-	ND	ND	<b>3 J</b>	<b>2 J</b>
Fluoranthene	50.0	µg/L	ND	ND	ND	ND	ND
Pyrene	50.0	µg/L	ND	ND	ND	ND	ND
Butyl benzyl phthalate	50.0	µg/L	-	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5.0	µg/L	-	ND	ND	ND	ND
Benzo(a)anthracene	0.002	µg/L	ND	ND	ND	ND	ND
Chrysene	0.002	µg/L	ND	ND	ND	ND	ND
bis(2-ethylhexyl) phthalate	5.0	µg/L	ND	<b>4 J</b>	<b>7 J</b>	<b>7 J</b>	<b>3 J</b>
Di-n-octyl phthalate	50.0	µg/L	-	<b>75</b>	ND	ND	ND
Benzo(b)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND
Benzo(a)pyrene	NE	µg/L	-	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	µg/L	-	ND	ND	ND	ND
Dibenz(a,h)anthracene	NE	µg/L	-	ND	ND	ND	ND
Benzo(g,h,i)perylene	NE	µg/L	-	ND	ND	ND	ND
(3+4)-Methylphenol	NE	µg/L	-	ND	ND	ND	ND
bis(2-chloroisopropyl) ether	NE	µg/L	-	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 <sup>1</sup>	Units	08/08/01	07/26/07	08/27/08	07/22/09	07/15/10
Phenol	1.0	µg/L	-	ND	ND	ND	ND
bis(2-chloroethyl) ether	1.0	µg/L	-	ND	ND	ND	ND
2-Chlorophenol	NE	µg/L	-	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND
2-Methylphenol	NE	µg/L	-	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	NE	µg/L	-	ND	ND	ND	ND
Hexachloroethane	5.0	µg/L	-	ND	ND	ND	ND
Nitrobenzene	0.4	µg/L	-	ND	ND	ND	ND
Isophorone	50.0	µg/L	-	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
2,4-Dichlorophenol	1.0	µg/L	-	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NE	µg/L	-	ND	ND	ND	ND
Naphthalene	10.0	µg/L	ND	ND	ND	ND	ND
4-Chloroaniline	5.0	µg/L	-	ND	ND	ND	ND
Hexachlorobutadiene	0.5	µg/L	-	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE	µg/L	-	ND	ND	ND	ND
2-Methylnaphthalene	NE	µg/L	800	ND	ND	ND	ND
Hexachlorocyclopentadiene	5.0	µg/L	-	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND
2,4,5-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND
2-Chloro-phthalene	10.0	µg/L	-	ND	ND	ND	ND
2-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND
Dimethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND
Acenaphthylene	NE	µg/L	-	ND	ND	ND	ND
2,6-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND
3-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND
Acenaphthene	20.0	µg/L	120	ND	3 J	ND	ND
2,4-Dinitrophenol	10.0	µg/L	-	ND	ND	ND	ND
4-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND
Dibenzofuran	50.0	µg/L	72	ND	ND	ND	ND
2,4-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND
Diethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND
Fluorene	50.0	µg/L	200	ND	ND	ND	ND
4-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	µg/L	-	ND	ND	ND	ND
N-Nitrosodiphenylamine	50.0	µg/L	-	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND
Hexachlorobenzene	0.04	µg/L	-	ND	ND	ND	ND
Pentachlorophenol	1.0	µg/L	-	ND	ND	ND	ND
Phenanthrene	50.0	µg/L	530	ND	ND	ND	ND
Anthracene	50.0	µg/L	ND	ND	ND	ND	ND
Carbazole	NE	µg/L	-	ND	ND	ND	ND
Di-n-butyl phthalate	50.0	µg/L	-	ND	ND	3 J	ND
Fluoranthene	50.0	µg/L	ND	ND	ND	ND	ND
Pyrene	50.0	µg/L	64	ND	ND	ND	ND
Butyl benzyl phthalate	50.0	µg/L	-	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5.0	µg/L	-	ND	ND	ND	ND
Benz(a)anthracene	0.002	µg/L	ND	ND	ND	ND	ND
Chrysene	0.002	µg/L	ND	ND	ND	ND	ND
bis(2-ethylhexyl) phthalate	5.0	µg/L	ND	8 J	2 J	8 J	3 J
Di-n-octyl phthalate	50.0	µg/L	-	5 J	ND	ND	ND
Benzo(b)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND
Benzo(a)pyrene	NE	µg/L	-	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	µg/L	-	ND	ND	ND	ND
Dibenz(a,h)anthracene	NE	µg/L	-	ND	ND	ND	ND
Benzo(g,h,i) perylene	NE	µg/L	-	ND	ND	ND	ND
(3+4)-Methylphenol	NE	µg/L	-	ND	ND	ND	ND
bis(2-chloroisopropyl) ether	NE	µg/L	-	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 <sup>1</sup>	Units	08/08/01	07/26/07	08/27/08	07/23/09	07/15/10
Phenol	1.0	µg/L	-	ND	ND	ND	ND
bis(2-chloroethyl) ether	1.0	µg/L	-	ND	ND	ND	ND
2-Chlorophenol	NE	µg/L	-	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND
2-Methylphenol	NE	µg/L	-	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	NE	µg/L	-	ND	ND	ND	ND
Hexachloroethane	5.0	µg/L	-	ND	ND	ND	ND
Nitrobenzene	0.4	µg/L	-	ND	ND	ND	ND
Isophorone	50.0	µg/L	-	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
2,4-Dichlorophenol	1.0	µg/L	-	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NE	µg/L	-	ND	ND	ND	ND
Naphthalene	10.0	µg/L	<b>3,000</b>	ND	ND	ND	ND
4-Chloroaniline	5.0	µg/L	-	ND	ND	ND	ND
Hexachlorobutadiene	0.5	µg/L	-	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE	µg/L	-	ND	ND	ND	ND
2-Methylnaphthalene	NE	µg/L	<b>1,100</b>	ND	ND	ND	ND
Hexachlorocyclopentadiene	5.0	µg/L	-	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND
2,4,5-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND
2-Chloro-phthalene	10.0	µg/L	-	ND	ND	ND	ND
2-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND
Dimethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND
Acenaphthylene	NE	µg/L	-	ND	ND	ND	ND
2,6-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND
3-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND
Acenaphthene	20.0	µg/L	<b>590</b>	ND	ND	ND	ND
2,4-Dinitrophenol	10.0	µg/L	-	ND	ND	ND	ND
4-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND
Dibenzofuran	50.0	µg/L	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND
Diethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND
Fluorene	50.0	µg/L	<b>430</b>	ND	ND	ND	ND
4-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	µg/L	-	ND	ND	ND	ND
N-Nitrosodiphenylamine	50.0	µg/L	-	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND
Hexachlorobenzene	0.04	µg/L	-	ND	ND	ND	ND
Pentachlorophenol	1.0	µg/L	-	ND	ND	ND	ND
Phenanthrene	50.0	µg/L	<b>1,100</b>	ND	ND	ND	ND
Anthracene	50.0	µg/L	<b>350</b>	ND	ND	ND	ND
Carbazole	NE	µg/L	-	ND	ND	ND	ND
Di-n-butyl phthalate	50.0	µg/L	-	ND	ND	<b>3 J</b>	<b>1 J</b>
Fluoranthene	50.0	µg/L	<b>270</b>	ND	ND	ND	ND
Pyrene	50.0	µg/L	<b>480</b>	<b>3 J</b>	ND	ND	ND
Butyl benzyl phthalate	50.0	µg/L	-	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5.0	µg/L	-	ND	ND	ND	ND
Benz(a)anthracene	0.002	µg/L	<b>150</b>	<b>1 J</b>	ND	ND	ND
Chrysene	0.002	µg/L	<b>140</b>	<b>1 J</b>	ND	ND	ND
bis(2-ethylhexyl) phthalate	5.0	µg/L	ND	ND	ND	<b>82</b>	<b>2 J</b>
Di-n-octyl phthalate	50.0	µg/L	-	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	µg/L	-	<b>1 J</b>	ND	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND
Benzo(a)pyrene	NE	µg/L	-	<b>2 J</b>	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	µg/L	-	ND	ND	ND	ND
Dibenz(a,h)anthracene	NE	µg/L	-	ND	ND	ND	ND
Benzo(g,h,i) perylene	NE	µg/L	-	ND	ND	ND	ND
(3+4)-Methylphenol	NE	µg/L	-	ND	ND	ND	ND
bis(2-chloroisopropyl) ether	NE	µg/L	-	ND	ND	ND	ND

<sup>1</sup> 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 <sup>1</sup>	Units	08/08/01	07/26/07	08/27/08	07/22/09	07/15/10
Phenol	1.0	µg/L	-	ND	ND	ND	ND
bis(2-chloroethyl) ether	1.0	µg/L	-	ND	ND	ND	ND
2-Chlorophenol	NE	µg/L	-	ND	ND	ND	ND
1,3-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND
1,4-Dichlorobenzene	3.0	µg/L	-	ND	ND	ND	ND
2-Methylphenol	NE	µg/L	-	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	NE	µg/L	-	ND	ND	ND	ND
Hexachloroethane	5.0	µg/L	-	ND	ND	ND	ND
Nitrobenzene	0.4	µg/L	-	ND	ND	ND	ND
Isophorone	50.0	µg/L	-	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
2,4-Dichlorophenol	1.0	µg/L	-	ND	ND	ND	ND
1,2,4-Trichlorobenzene	NE	µg/L	-	ND	ND	ND	ND
Naphthalene	10.0	µg/L	ND	ND	ND	ND	ND
4-Chloroaniline	5.0	µg/L	-	ND	ND	ND	ND
Hexachlorobutadiene	0.5	µg/L	-	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE	µg/L	-	ND	ND	ND	ND
2-Methylnaphthalene	NE	µg/L	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5.0	µg/L	-	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND
2,4,5-Trichlorophenol	NE	µg/L	-	ND	ND	ND	ND
2-Chloro-phthalene	10.0	µg/L	-	ND	ND	ND	ND
2-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND
Dimethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND
Acenaphthylene	NE	µg/L	-	ND	ND	ND	ND
2,6-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND
3-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND
Acenaphthene	20.0	µg/L	<b>13</b>	<b>4 J</b>	<b>3 J</b>	<b>2 J</b>	<b>2 J</b>
2,4-Dinitrophenol	10.0	µg/L	-	ND	ND	ND	ND
4-Nitrophenol	NE	µg/L	-	ND	ND	ND	ND
Dibenzofuran	50.0	µg/L	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5.0	µg/L	-	ND	ND	ND	ND
Diethyl phthalate	50.0	µg/L	-	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND
Fluorene	50.0	µg/L	ND	ND	ND	ND	ND
4-Nitroaniline	5.0	µg/L	-	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	µg/L	-	ND	ND	ND	ND
N-Nitrosodiphenylamine	50.0	µg/L	-	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	µg/L	-	ND	ND	ND	ND
Hexachlorobenzene	0.04	µg/L	-	ND	ND	ND	ND
Pentachlorophenol	1.0	µg/L	-	ND	ND	ND	ND
Phenanthrene	50.0	µg/L	<b>6</b>	ND	ND	ND	ND
Anthracene	50.0	µg/L	ND	ND	ND	ND	ND
Carbazole	NE	µg/L	-	ND	ND	ND	ND
Di-n-butyl phthalate	50.0	µg/L	-	ND	ND	<b>4 J</b>	<b>2 J</b>
Fluoranthene	50.0	µg/L	<b>8</b>	ND	ND	ND	ND
Pyrene	50.0	µg/L	<b>9</b>	ND	ND	ND	ND
Butyl benzyl phthalate	50.0	µg/L	-	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5.0	µg/L	-	ND	ND	ND	ND
Benz(a)anthracene	0.002	µg/L	ND	ND	ND	ND	ND
Chrysene	0.002	µg/L	ND	ND	ND	ND	ND
bis(2-ethylhexyl) phthalate	5.0	µg/L	<b>85</b>	ND	ND	<b>8 J</b>	<b>3 J</b>
Di-n-octyl phthalate	50.0	µg/L	-	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	µg/L	-	ND	ND	ND	ND
Benzo(a)pyrene	NE	µg/L	-	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	µg/L	-	ND	ND	ND	ND
Dibenz(a,h)anthracene	NE	µg/L	-	ND	ND	ND	ND
Benzo(g,h,i) perylene	NE	µg/L	-	ND	ND	ND	ND
(3+4)-Methylphenol	NE	µg/L	-	ND	ND	ND	ND
bis(2-chloroisopropyl) ether	NE	µg/L	-	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 <sup>1</sup>	Units	08/08/01	07/22/09	07/15/10
Aluminum	2,000	µg/L	-	<b>4,760</b>	<b>48,000</b>
Antimony	6	µg/L	-	ND	ND
Arsenic	50	µg/L	<b>11</b>	ND	<b>23</b>
Barium	2,000	µg/L	<b>301</b>	<b>265</b>	<b>590</b>
Beryllium	3	µg/L	-	ND	ND
Cadmium	10	µg/L	ND	ND	<b>10.4</b>
Calcium	NE	µg/L	-	<b>188,000</b>	<b>635,000</b>
Chromium	50	µg/L	ND	ND	<b>67.7</b>
Cobalt	NE	µg/L	-	ND	<b>49</b>
Copper	1,000	µg/L	-	<b>16.6</b>	<b>77.7</b>
Iron	600	µg/L	-	<b>22,200</b>	<b>112,000</b>
Lead	50	µg/L	<b>7</b>	<b>3.78</b>	<b>80.00</b>
Magnesium	35,000	µg/L	-	<b>35,800</b>	<b>127,000</b>
Manganese	600	µg/L	-	<b>2,250</b>	<b>7,410</b>
Mercury	0.7	µg/L	ND	ND	<b>0.22</b>
Nickel	200	µg/L	-	ND	<b>121</b>
Potassium	NE	µg/L	-	<b>4,650</b>	<b>12,600</b>
Selenium	10	µg/L	-	ND	<b>3.9</b>
Silver	50	µg/L	-	ND	ND
Sodium	NE	µg/L	-	<b>79,500</b>	<b>71,300</b>
Thallium	0.5	µg/L	-	ND	ND
Vanadium	NE	µg/L	-	ND	<b>102</b>
Zinc	5,000	µg/L	-	<b>28.1</b>	<b>402.0</b>

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 <sup>1</sup>	Units	08/08/01	07/22/09	07/15/10
Aluminum	2,000	µg/L	-	<b>3,250</b>	<b>98,500</b>
Antimony	6	µg/L	-	ND	ND
Arsenic	50	µg/L	<b>5</b>	ND	<b>17</b>
Barium	2,000	µg/L	<b>73</b>	<b>261</b>	<b>2,330</b>
Beryllium	3	µg/L	-	ND	<b>5</b>
Cadmium	10	µg/L	ND	ND	<b>20</b>
Calcium	NE	µg/L	-	<b>213,000</b>	<b>1,240,000</b>
Chromium	50	µg/L	ND	ND	<b>146.0</b>
Cobalt	NE	µg/L	-	ND	<b>90</b>
Copper	1,000	µg/L	-	<b>29.1</b>	<b>611.0</b>
Iron	600	µg/L	-	<b>11,300</b>	<b>165,000</b>
Lead	50	µg/L	<b>2</b>	<b>13.1</b>	<b>410.0</b>
Magnesium	35,000	µg/L	-	<b>53,400</b>	<b>315,000</b>
Manganese	600	µg/L	-	<b>490</b>	<b>5,250</b>
Mercury	0.7	µg/L	ND	ND	<b>2.8</b>
Nickel	200	µg/L	-	ND	<b>222</b>
Potassium	NE	µg/L	-	<b>3,580</b>	<b>20,900</b>
Selenium	10	µg/L	-	ND	<b>5.6</b>
Silver	50	µg/L	-	ND	ND
Sodium	NE	µg/L	-	<b>56,900</b>	<b>60,500</b>
Thallium	0.5	µg/L	-	ND	ND
Vanadium	NE	µg/L	-	ND	<b>153</b>
Zinc	5,000	µg/L	-	<b>79.8</b>	<b>2,060.0</b>

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

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 <sup>1</sup>	Units	08/08/01	07/26/07	08/27/08	07/23/09	07/15/10
Aluminum	2,000	µg/L	-	148	1,630	843	941
Antimony	6	µg/L	-	ND	ND	ND	ND
Arsenic	50	µg/L	ND	ND	ND	ND	ND
Barium	2,000	µg/L	1,660	234	242	230	213
Beryllium	3	µg/L	-	ND	ND	ND	ND
Cadmium	10	µg/L	ND	ND	ND	ND	ND
Calcium	NE	µg/L	-	156,000	132,000	146,000	137,000
Chromium	50	µg/L	22	ND	ND	ND	ND
Cobalt	NE	µg/L	-	ND	ND	ND	ND
Copper	1,000	µg/L	-	ND	ND	ND	ND
Iron	600	µg/L	-	7,270	10,700	8,050	9,530
Lead	50	µg/L	84	ND	5.91	3.82	9.50
Magnesium	35,000	µg/L	-	27,900	24,300	27,900	24,600
Manganese	600	µg/L	-	1,200	2,720	1,690	1,860
Mercury	0.7	µg/L	0.2	ND	ND	ND	ND
Nickel	200	µg/L	-	ND	ND	ND	ND
Potassium	NE	µg/L	-	2,190	3,190	3,260	ND
Selenium	10	µg/L	-	13.5	ND	ND	ND
Silver	50	µg/L	-	ND	ND	ND	ND
Sodium	NE	µg/L	-	21,600	21,600	20,600	16,900
Thallium	0.5	µg/L	-	ND	ND	ND	ND
Vanadium	NE	µg/L	-	ND	ND	ND	ND
Zinc	5,000	µg/L	-	63.2	47.6	29.4	39.7

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

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

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

Metals Compounds	NYSDEC TOGS 1.1.1 Water Quality Standards <sup>1</sup>	Units	08/08/01	07/26/07	08/27/08	07/22/09	07/15/10
Aluminum	2,000	µg/L	-	ND	1,420	722	199
Antimony	6	µg/L	-	ND	ND	ND	ND
Arsenic	50	µg/L	14	ND	ND	ND	ND
Barium	2,000	µg/L	880	172	175	125	133
Beryllium	3	µg/L	-	ND	ND	ND	ND
Cadmium	10	µg/L	ND	ND	ND	ND	ND
Calcium	NE	µg/L	-	157,000	149,000	141,000	144,000
Chromium	50	µg/L	15	ND	ND	ND	ND
Cobalt	NE	µg/L	-	ND	ND	ND	ND
Copper	1,000	µg/L	-	10.4	15.0	ND	ND
Iron	600	µg/L	-	3,230	4,640	3,120	2,870
Lead	50	µg/L	270	ND	15.4	5.42	11.00
Magnesium	35,000	µg/L	-	28,700	27,100	28,100	25,300
Manganese	600	µg/L	-	802	891	618	665
Mercury	0.7	µg/L	ND	ND	ND	ND	ND
Nickel	200	µg/L	-	ND	ND	ND	ND
Potassium	NE	µg/L	-	1,780	4,060	3,080	ND
Selenium	10	µg/L	-	9.46	ND	ND	ND
Silver	50	µg/L	-	ND	ND	ND	ND
Sodium	NE	µg/L	-	30,100	24,000	22,600	22,600
Thallium	0.5	µg/L	-	ND	ND	ND	ND
Vanadium	NE	µg/L	-	ND	ND	ND	ND
Zinc	5,000	µg/L	-	189	630	250	375

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

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STEARNS & WHEELER  
CLIENTS | PEOPLE | PERFORMANCE



# **APPENDIX A**

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## **Groundwater Field Sampling Records**



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

SITE 153 Fillmore Avenue

DATE 07/14/10

Sampler: Brian Doyle

SAMPLE ID MW-01

Depth of well (from top of casing).....	<u>13.83 ft</u>	<u>EL 560.97</u>
Initial static water level (from top of casing)....	<u>7.0 ft</u>	<u>EL 567.80</u>
Top of PVC Casing Elevation	<u>574.80</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>6.8</u> ft. of water x .16 =	<u>1.09</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 3.28 gals.

> 3 volumes:  yes  no

dry:  yes  no

Field Tests:

Temp:	<u>21.90 C</u>
pH	<u>6.97</u>
Conductivity	<u>1.23 mS/cm</u>
DO	<u>7.3 mg/L</u>
Turbidity	<u>NA NTUs</u>
Oxidation Reduction Potential (ORP)	<u>-122.0 mV</u>

Sampling: Time: 2:30 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: 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.

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

SITE 153 Fillmore Avenue

DATE 07/14/10

Sampler: Brian Doyle

SAMPLE ID MW-02

Depth of well (from top of casing)..... 13.5 ft EL 561.69  
 Initial static water level (from top of casing).... 6.3 ft EL 568.89  
 Top of PVC Casing Elevation 575.19

Evacuation Method:

Well Volume Calculation

Peristaltic X Centrifugal \_\_\_\_\_ 1 in. casing: \_\_\_\_\_ ft. of water x .09 = \_\_\_\_\_ gallons  
 Airlift \_\_\_\_\_ Pos. Displ. \_\_\_\_\_ 2 in. casing: 7.2 ft. of water x .16 = 1.15 gallons  
 Bailer \_\_\_\_\_ >>> No. of bails \_\_\_\_\_ 3 in. casing: \_\_\_\_\_ ft. of water x .36 = \_\_\_\_\_ gallons

Volume of water removed 3.46 gals.  
 > 3 volumes:  yes  no  
 dry:  yes  no

Field Tests: Temp: 19.20 C  
 pH 6.92  
 Conductivity 1.08 mS/cm  
 DO 4.55 mg/L  
 Turbidity NA NTUs  
 Oxidation Reduction Potential (ORP) -68.0 mV

Sampling: Time: 3:30 PM

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

Observations:

Weather/Temperature: Overcast, 75° 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.





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

SITE 153 Fillmore Avenue

DATE 07/14/10

Sampler: Brian Doyle

SAMPLE ID MW-07

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

Evacuation Method:

Well Volume Calculation

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

Volume of water removed 1.25 gals.

> 3 volumes:    yes  **no**

dry:                 **yes**     no

Field Tests:

Temp:	<u>19.3 C</u>
pH	<u>7.43</u>
Conductivity	<u>0.994 mS/cm</u>
DO	<u>7.76 mg/L</u>
Turbidity	<u>453 NTUs</u>
Oxidation Reduction Potential (ORP)	<u>-48.0 mV</u>

Sampling:

Time: 11:20 AM

Sampling Method:

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

Observations:

Weather/Temperature: Clear, 85° F

Physical Appearance and Odor of Sample: Light brown, murky. Slight 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 1.25 gallons of water was removed before well went dry.

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

SITE 153 Fillmore Avenue

DATE 07/14/10

Sampler: Brian Doyle

SAMPLE ID MW-08

Depth of well (from top of casing).....	<u>17.5 ft</u>	EL <u>560.93</u>
Initial static water level (from top of casing)....	<u>8.4 ft</u>	EL <u>570.03</u>
Top of PVC Casing Elevation	<u>578.43</u>	

Evacuation Method:

Well Volume Calculation

Peristaltic	<u>X</u>	Centrifugal	<u>          </u>	1 in. casing:	<u>9.1</u> ft. of water x .09 =	<u>0.82</u> gallons
Airlift	<u>          </u>	Pos. Displ.	<u>          </u>	2 in. casing:	<u>          </u> ft. of water x .16 =	<u>          </u> gallons
Bailer	<u>          </u>	>>> No. of bails	<u>          </u>	3 in. casing:	<u>          </u> ft. of water x .36 =	<u>          </u> gallons

Volume of water removed 2.46 gals.  
 > 3 volumes:  yes  no  
 dry:  yes  no

Field Tests: Temp: 16.7 C  
 pH 7.11  
 Conductivity 0.743 mS/cm  
 DO 5.9 mg/L  
 Turbidity 180 NTUs  
 Oxidation Reduction Potential (ORP) -104.0 mV

Sampling: Time: 12:30 PM

Sampling Method: Peristaltic Pump X  
 Disposable Bailer             
 Disposable Tubing X

Observations:

Weather/Temperature: Clear, 85° F  
 Physical Appearance and Odor of Sample: Turbid with some sediment initially, then greyish black. No odor.

Comments: Replaced lock.

# **APPENDIX B**

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## **Laboratory Analytical Results**



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

# **Upstate Laboratories, Inc.**

**Shipping: 6034 Corporate Dr. \* E. Syracuse, NY 13057-1017 \* (315) 437-0255 \* Fax (315) 437-1209**

**Mailing: Box 169 \* Syracuse, NY 13206**

Albany (518) 459-3134 \* Binghamton (607) 724-0478 \* Buffalo (716) 972-0371

Rochester (866) 437-0255 \* New Jersey (908) 581-4285

Mr. David Rowlinson  
Stearns & Wheler GHD  
415 N. French Rd.  
Amherst, NY 14228

Tuesday, August 24, 2010

RE: Analytical Report:  
153 Fillmore Ave

Order No.: U1007294

Dear Mr. David Rowlinson:

Upstate Laboratories, Inc. received 9 sample(s) on 7/16/2010 for the analyses presented in the following report.

All analytical results relate to the samples as received by the laboratory.

All analytical data conforms with standard approved methodologies and quality control. Our quality control narrative will be included should any anomalies occur.

We have included the Chain of Custody Record as part of your report. You may need to reference this form for a more detailed explanation of your samples. Samples will be disposed of approximately one month from final report date.

Should you have any questions regarding these tests, please feel free to give us a call.

Thank you for your patronage.

Sincerely,

UPSTATE LABORATORIES, INC.

  
Anthony J. Scala  
President/CEO

CC:

Enclosures: report, invoice

J. Zimmerman, Vali-Data: ASP-B Pkg on disk

Confidentiality Statement: This report is meant for the use of the intended recipient. It may contain confidential information, which is legally privileged or otherwise protected by law. If you have received this report in error, you are strictly prohibited from reviewing, using, disseminating, distributing or copying the information.

# Upstate Laboratories, Inc.

## Analytical Report

Date: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-001

Client Sample ID: MW-1  
 Collection Date: 7/15/2010 2:30:00 PM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ICP METALS, TOTAL BY NYSDEC ASP 2005</b>						
				<b>200.7WTASP</b>	<b>(E200.7)</b>	Analyst: LJ
Aluminum	48000	100		µg/L	1	8/20/2010 6:22:52 PM
Barium	590	50.0		µg/L	1	8/20/2010 6:22:52 PM
Beryllium	ND	3.00		µg/L	1	8/20/2010 6:22:52 PM
Cadmium	10.4	5.00		µg/L	1	8/20/2010 6:22:52 PM
Calcium	635000	5000		µg/L	1	8/20/2010 6:22:52 PM
Chromium	67.7	10.0		µg/L	1	8/20/2010 6:22:52 PM
Cobalt	49.0	20.0		µg/L	1	8/20/2010 6:22:52 PM
Copper	77.7	10.0		µg/L	1	8/20/2010 6:22:52 PM
Iron	112000	60.0		µg/L	1	8/20/2010 6:22:52 PM
Magnesium	127000	5000		µg/L	1	8/20/2010 6:22:52 PM
Manganese	7410	10.0		µg/L	1	8/20/2010 6:22:52 PM
Nickel	121	30.0		µg/L	1	8/20/2010 6:22:52 PM
Potassium	12600	5000		µg/L	1	8/20/2010 6:22:52 PM
Silver	ND	10.0		µg/L	1	8/20/2010 6:22:52 PM
Sodium	71300	5000		µg/L	1	8/20/2010 6:22:52 PM
Vanadium	102	30.0		µg/L	1	8/20/2010 6:22:52 PM
Zinc	402	10.0		µg/L	1	8/20/2010 6:22:52 PM
<b>ASP TOTAL METALS BY ICP-MS</b>						
				<b>200.8ASP</b>	<b>(E200.8)</b>	Analyst: DEY
Antimony	ND	5.0		µg/L	1	8/23/2010 9:41:00 AM
Arsenic	23	5.0		µg/L	1	8/23/2010 9:41:00 AM
Lead	80	3.0		µg/L	1	8/23/2010 9:41:00 AM
Selenium	3.9	3.0		µg/L	1	8/23/2010 9:41:00 AM
Thallium	ND	3.0		µg/L	1	8/23/2010 9:41:00 AM
<b>TOTAL MERCURY WATERS ASP</b>						
				<b>245.2WTASP</b>	<b>(E245.2)</b>	Analyst: ALW
Mercury	0.215	0.200		µg/L	1	8/4/2010 11:56:00 AM
<b>TCL-SEMIVOLATILE ORGANICS BY NYSDEC ASP 2005</b>						
				<b>8270_ASPTCL_W</b>	<b>(SW3520)</b>	Analyst: LD
Phenol	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/25/2010 8:51:00 PM
2-Chlorophenol	ND	10		µg/L	1	7/25/2010 8:51:00 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
2-Methylphenol	ND	10		µg/L	1	7/25/2010 8:51:00 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Hexachloroethane	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Nitrobenzene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Isophorone	ND	10		µg/L	1	7/25/2010 8:51:00 PM

Approved By: DH

Date: 8-24-10

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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-001

Client Sample ID: MW-1  
 Collection Date: 7/15/2010 2:30:00 PM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>TCL-SEMIVOLATILE ORGANICS BY NYSDEC ASP 2005</b>						Analyst: LD
2-Nitrophenol	ND	10		µg/L	1	7/25/2010 8:51:00 PM
2,4-Dimethylphenol	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/25/2010 8:51:00 PM
2,4-Dichlorophenol	ND	10		µg/L	1	7/25/2010 8:51:00 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Naphthalene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
4-Chloroaniline	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Hexachlorobutadiene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/25/2010 8:51:00 PM
2-Methylnaphthalene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/25/2010 8:51:00 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/25/2010 8:51:00 PM
2-Chloronaphthalene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
2-Nitroaniline	ND	24		µg/L	1	7/25/2010 8:51:00 PM
Dimethyl phthalate	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Acenaphthylene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
3-Nitroaniline	ND	24		µg/L	1	7/25/2010 8:51:00 PM
Acenaphthene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
2,4-Dinitrophenol	ND	24		µg/L	1	7/25/2010 8:51:00 PM
4-Nitrophenol	ND	24		µg/L	1	7/25/2010 8:51:00 PM
Dibenzofuran	ND	10		µg/L	1	7/25/2010 8:51:00 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Diethyl phthalate	ND	10		µg/L	1	7/25/2010 8:51:00 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Fluorene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
4-Nitroaniline	ND	24		µg/L	1	7/25/2010 8:51:00 PM
4,6-Dinitro-2-methylphenol	ND	24		µg/L	1	7/25/2010 8:51:00 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/25/2010 8:51:00 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Hexachlorobenzene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Pentachlorophenol	ND	24		µg/L	1	7/25/2010 8:51:00 PM
Phenanthrene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Anthracene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Carbazole	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Di-n-butyl phthalate	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Fluoranthene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Pyrene	ND	10		µg/L	1	7/25/2010 8:51:00 PM

Approved By: *DH*

Date: *8-24-10*

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD

Client Sample ID: MW-1

Lab Order: U1007294

Collection Date: 7/15/2010 2:30:00 PM

Project: 153 Fillmore Ave

Lab ID: U1007294-001

Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>TCL-SEMIVOLATILE ORGANICS BY NYSDEC ASP 2005</b>		<b>8270_ASPTCL_W</b>		<b>(SW3520)</b>		Analyst: LD
Butyl benzyl phthalate	ND	10		µg/L	1	7/25/2010 8:51:00 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Benz(a)anthracene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Chrysene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Bis(2-ethylhexyl)phthalate	1	10	J	µg/L	1	7/25/2010 8:51:00 PM
Di-n-octyl phthalate	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Benzo(a)pyrene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/25/2010 8:51:00 PM
(3+4)-Methylphenol	ND	10		µg/L	1	7/25/2010 8:51:00 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/25/2010 8:51:00 PM
TIC: Cyclic octaatomic sulfur	14	0		µg/L	1	7/25/2010 8:51:00 PM
TIC: unknown	2.2	0		µg/L	1	7/25/2010 8:51:00 PM
<b>ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260</b>		<b>8260ASP_TCL_W</b>				Analyst: LEF
Chloromethane	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
Vinyl chloride	3	5.0	J	µg/L	1	7/26/2010 6:06:00 PM
Bromomethane	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
Chloroethane	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
Acetone	ND	10		µg/L	1	7/26/2010 6:06:00 PM
1,1-Dichloroethene	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
Carbon disulfide	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
Methylene chloride	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
1,1-Dichloroethane	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
2-Butanone	ND	10		µg/L	1	7/26/2010 6:06:00 PM
cis-1,2-Dichloroethene	13	5.0		µg/L	1	7/26/2010 6:06:00 PM
Chloroform	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
Carbon tetrachloride	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
Benzene	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
1,2-Dichloroethane	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
Trichloroethene	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
1,2-Dichloropropane	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
Bromodichloromethane	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/26/2010 6:06:00 PM

Approved By: PH

Date: 8-24-10

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
Lab Order: U1007294  
Project: 153 Fillmore Ave  
Lab ID: U1007294-001

Client Sample ID: MW-1  
Collection Date: 7/15/2010 2:30:00 PM  
Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260</b>		<b>8260ASP_TCL_W</b>		Analyst: LEF		
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
Toluene	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
2-Hexanone	ND	10		µg/L	1	7/26/2010 6:06:00 PM
Tetrachloroethene	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
Dibromochloromethane	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
Chlorobenzene	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
Ethylbenzene	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
m,p-Xylene	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
o-Xylene	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
Styrene	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
Bromoform	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	7/26/2010 6:06:00 PM

### NOTES:

TICS: No compounds were detected.

Approved By: PH

Date: 8-24-10

Page 4 of 30

Qualifiers: # Accreditation not offered by NYS DOH for this parameter  
\*\* Value exceeds Maximum Contaminant Value  
E Value above quantitation range  
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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-002

Client Sample ID: MW-2  
 Collection Date: 7/15/2010 3:30:00 PM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ICP METALS, TOTAL BY NYSDEC ASP 2005</b>						
				<b>200.7WTASP</b>	<b>(E200.7)</b>	Analyst: LJ
Aluminum	98500	100		µg/L	1	8/20/2010 6:27:40 PM
Barium	2330	50.0		µg/L	1	8/20/2010 6:27:40 PM
Beryllium	5.00	3.00		µg/L	1	8/20/2010 6:27:40 PM
Cadmium	20.2	5.00		µg/L	1	8/20/2010 6:27:40 PM
Calcium	1240000	100000		µg/L	20	8/23/2010 6:06:58 PM
Chromium	146	10.0		µg/L	1	8/20/2010 6:27:40 PM
Cobalt	90.0	20.0		µg/L	1	8/20/2010 6:27:40 PM
Copper	611	10.0		µg/L	1	8/20/2010 6:27:40 PM
Iron	165000	60.0		µg/L	1	8/20/2010 6:27:40 PM
Magnesium	315000	5000		µg/L	1	8/20/2010 6:27:40 PM
Manganese	5250	10.0		µg/L	1	8/20/2010 6:27:40 PM
Nickel	222	30.0		µg/L	1	8/20/2010 6:27:40 PM
Potassium	20900	5000		µg/L	1	8/20/2010 6:27:40 PM
Silver	ND	10.0		µg/L	1	8/20/2010 6:27:40 PM
Sodium	60500	5000		µg/L	1	8/20/2010 6:27:40 PM
Vanadium	153	30.0		µg/L	1	8/20/2010 6:27:40 PM
Zinc	2060	10.0		µg/L	1	8/20/2010 6:27:40 PM
<b>ASP TOTAL METALS BY ICP-MS</b>						
				<b>200.8ASP</b>	<b>(E200.8)</b>	Analyst: DEY
Antimony	ND	5.0		µg/L	1	8/23/2010 9:41:00 AM
Arsenic	17	5.0		µg/L	1	8/23/2010 9:41:00 AM
Lead	410	3.0		µg/L	1	8/23/2010 9:41:00 AM
Selenium	5.6	3.0		µg/L	1	8/23/2010 9:41:00 AM
Thallium	ND	3.0		µg/L	1	8/23/2010 9:41:00 AM
<b>TOTAL MERCURY WATERS ASP</b>						
				<b>245.2WTASP</b>	<b>(E245.2)</b>	Analyst: ALW
Mercury	2.83	0.200		µg/L	1	8/4/2010 11:56:00 AM
<b>TCL-SEMIVOLATILE ORGANICS BY NYSDEC ASP 2005</b>						
				<b>8270_ASPTCL_W</b>	<b>(SW3520)</b>	Analyst: LD
Phenol	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Bis(2-chloroethyl)ether	ND	100		µg/L	10	7/25/2010 9:34:00 PM
2-Chlorophenol	ND	100		µg/L	10	7/25/2010 9:34:00 PM
1,3-Dichlorobenzene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
1,4-Dichlorobenzene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
1,2-Dichlorobenzene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
2-Methylphenol	ND	100		µg/L	10	7/25/2010 9:34:00 PM
N-Nitrosodi-n-propylamine	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Hexachloroethane	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Nitrobenzene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Isophorone	ND	100		µg/L	10	7/25/2010 9:34:00 PM

Approved By: DH

Date: 8-24-10

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-002

Client Sample ID: MW-2  
 Collection Date: 7/15/2010 3:30:00 PM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>TCL-SEMIVOLATILE ORGANICS BY NYSDEC ASP 2005</b>						
				<b>8270_ASPTCL_W</b>		<b>(SW3520)</b>
						Analyst: LD
2-Nitrophenol	ND	100		µg/L	10	7/25/2010 9:34:00 PM
2,4-Dimethylphenol	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Bis(2-chloroethoxy)methane	ND	100		µg/L	10	7/25/2010 9:34:00 PM
2,4-Dichlorophenol	ND	100		µg/L	10	7/25/2010 9:34:00 PM
1,2,4-Trichlorobenzene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Naphthalene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
4-Chloroaniline	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Hexachlorobutadiene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
4-Chloro-3-methylphenol	ND	100		µg/L	10	7/25/2010 9:34:00 PM
2-Methylnaphthalene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Hexachlorocyclopentadiene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
2,4,6-Trichlorophenol	ND	100		µg/L	10	7/25/2010 9:34:00 PM
2,4,5-Trichlorophenol	ND	100		µg/L	10	7/25/2010 9:34:00 PM
2-Chloronaphthalene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
2-Nitroaniline	ND	240		µg/L	10	7/25/2010 9:34:00 PM
Dimethyl phthalate	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Acenaphthylene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
2,6-Dinitrotoluene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
3-Nitroaniline	ND	240		µg/L	10	7/25/2010 9:34:00 PM
Acenaphthene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
2,4-Dinitrophenol	ND	240		µg/L	10	7/25/2010 9:34:00 PM
4-Nitrophenol	ND	240		µg/L	10	7/25/2010 9:34:00 PM
Dibenzofuran	ND	100		µg/L	10	7/25/2010 9:34:00 PM
2,4-Dinitrotoluene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Diethyl phthalate	ND	100		µg/L	10	7/25/2010 9:34:00 PM
4-Chlorophenyl phenyl ether	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Fluorene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
4-Nitroaniline	ND	240		µg/L	10	7/25/2010 9:34:00 PM
4,6-Dinitro-2-methylphenol	ND	240		µg/L	10	7/25/2010 9:34:00 PM
N-Nitrosodiphenylamine	ND	100		µg/L	10	7/25/2010 9:34:00 PM
4-Bromophenyl phenyl ether	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Hexachlorobenzene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Pentachlorophenol	ND	240		µg/L	10	7/25/2010 9:34:00 PM
Phenanthrene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Anthracene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Carbazole	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Di-n-butyl phthalate	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Fluoranthene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Pyrene	ND	100		µg/L	10	7/25/2010 9:34:00 PM

Approved By: P.H.

Date: 8-24-10

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-002

Client Sample ID: MW-2  
 Collection Date: 7/15/2010 3:30:00 PM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>TCL-SEMIVOLATILE ORGANICS BY NYSDEC ASP 2005</b>		<b>8270_ASPTCL_W</b>		<b>(SW3520)</b>		Analyst: LD
Butyl benzyl phthalate	ND	100		µg/L	10	7/25/2010 9:34:00 PM
3,3'-Dichlorobenzidine	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Benz(a)anthracene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Chrysene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Bis(2-ethylhexyl)phthalate	30	100	J	µg/L	10	7/25/2010 9:34:00 PM
Di-n-octyl phthalate	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Benzo(b)fluoranthene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Benzo(k)fluoranthene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Benzo(a)pyrene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Indeno(1,2,3-cd)pyrene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Dibenz(a,h)anthracene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Benzo(g,h,i)perylene	ND	100		µg/L	10	7/25/2010 9:34:00 PM
(3+4)-Methylphenol	ND	100		µg/L	10	7/25/2010 9:34:00 PM
Bis(2-chloroisopropyl)ether	ND	100		µg/L	10	7/25/2010 9:34:00 PM

**NOTES:**

The reporting limits were raised due to matrix interference.  
 TICS: No compounds were detected.

<b>ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260</b>		<b>8260ASP_TCL_W</b>				Analyst: LEF
Chloromethane	ND	25		µg/L	5	7/26/2010 6:45:00 PM
Vinyl chloride	64	25		µg/L	5	7/26/2010 6:45:00 PM
Bromomethane	ND	25		µg/L	5	7/26/2010 6:45:00 PM
Chloroethane	ND	25		µg/L	5	7/26/2010 6:45:00 PM
Acetone	ND	50		µg/L	5	7/26/2010 6:45:00 PM
1,1-Dichloroethene	ND	25		µg/L	5	7/26/2010 6:45:00 PM
Carbon disulfide	ND	25		µg/L	5	7/26/2010 6:45:00 PM
Methylene chloride	ND	25		µg/L	5	7/26/2010 6:45:00 PM
trans-1,2-Dichloroethene	ND	25		µg/L	5	7/26/2010 6:45:00 PM
1,1-Dichloroethane	ND	25		µg/L	5	7/26/2010 6:45:00 PM
2-Butanone	ND	50		µg/L	5	7/26/2010 6:45:00 PM
cis-1,2-Dichloroethene	54	25		µg/L	5	7/26/2010 6:45:00 PM
Chloroform	ND	25		µg/L	5	7/26/2010 6:45:00 PM
1,1,1-Trichloroethane	ND	25		µg/L	5	7/26/2010 6:45:00 PM
Carbon tetrachloride	ND	25		µg/L	5	7/26/2010 6:45:00 PM
Benzene	ND	25		µg/L	5	7/26/2010 6:45:00 PM
1,2-Dichloroethane	ND	25		µg/L	5	7/26/2010 6:45:00 PM
Trichloroethene	ND	25		µg/L	5	7/26/2010 6:45:00 PM
1,2-Dichloropropane	ND	25		µg/L	5	7/26/2010 6:45:00 PM
Bromodichloromethane	ND	25		µg/L	5	7/26/2010 6:45:00 PM

Approved By: PH

Date: 8-24-10

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: 24-Aug-10

CLIENT: Stearns & Wheeler GHD

Client Sample ID: MW-2

Lab Order: U1007294

Collection Date: 7/15/2010 3:30:00 PM

Project: 153 Fillmore Ave

Lab ID: U1007294-002

Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260</b>		<b>8260ASP_TCL_W</b>				Analyst: LEF
4-Methyl-2-pentanone	ND	50		µg/L	5	7/26/2010 6:45:00 PM
cis-1,3-Dichloropropene	ND	25		µg/L	5	7/26/2010 6:45:00 PM
Toluene	ND	25		µg/L	5	7/26/2010 6:45:00 PM
trans-1,3-Dichloropropene	ND	25		µg/L	5	7/26/2010 6:45:00 PM
1,1,2-Trichloroethane	ND	25		µg/L	5	7/26/2010 6:45:00 PM
2-Hexanone	ND	50		µg/L	5	7/26/2010 6:45:00 PM
Tetrachloroethene	ND	25		µg/L	5	7/26/2010 6:45:00 PM
Dibromochloromethane	ND	25		µg/L	5	7/26/2010 6:45:00 PM
Chlorobenzene	ND	25		µg/L	5	7/26/2010 6:45:00 PM
Ethylbenzene	ND	25		µg/L	5	7/26/2010 6:45:00 PM
m,p-Xylene	ND	25		µg/L	5	7/26/2010 6:45:00 PM
o-Xylene	ND	25		µg/L	5	7/26/2010 6:45:00 PM
Styrene	ND	25		µg/L	5	7/26/2010 6:45:00 PM
Bromoform	ND	25		µg/L	5	7/26/2010 6:45:00 PM
1,1,2,2-Tetrachloroethane	ND	25		µg/L	5	7/26/2010 6:45:00 PM

### NOTES:

The reporting limits were raised due to matrix interference.

The pH of the sample >2.

TICS: No compounds were detected.

Sample foamed during purging procedure.

Approved By: PH

Date: 8-24-10

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-003

Client Sample ID: MW-5  
 Collection Date: 7/15/2010 9:30:00 AM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ICP METALS, TOTAL BY NYSDEC ASP 2005</b>						
				<b>200.7WTASP</b>	<b>(E200.7)</b>	Analyst: LJ
Aluminum	2640	100		µg/L	1	8/20/2010 6:32:33 PM
Barium	176	50.0		µg/L	1	8/20/2010 6:32:33 PM
Beryllium	ND	3.00		µg/L	1	8/20/2010 6:32:33 PM
Cadmium	ND	5.00		µg/L	1	8/20/2010 6:32:33 PM
Calcium	173000	5000		µg/L	1	8/20/2010 6:32:33 PM
Chromium	ND	10.0		µg/L	1	8/20/2010 6:32:33 PM
Cobalt	ND	20.0		µg/L	1	8/20/2010 6:32:33 PM
Copper	12.9	10.0		µg/L	1	8/20/2010 6:32:33 PM
Iron	7090	60.0		µg/L	1	8/20/2010 6:32:33 PM
Magnesium	39800	5000		µg/L	1	8/20/2010 6:32:33 PM
Manganese	569	10.0		µg/L	1	8/20/2010 6:32:33 PM
Nickel	ND	30.0		µg/L	1	8/20/2010 6:32:33 PM
Potassium	ND	5000		µg/L	1	8/20/2010 6:32:33 PM
Silver	ND	10.0		µg/L	1	8/20/2010 6:32:33 PM
Sodium	20100	5000		µg/L	1	8/20/2010 6:32:33 PM
Vanadium	ND	30.0		µg/L	1	8/20/2010 6:32:33 PM
Zinc	2740	10.0		µg/L	1	8/20/2010 6:32:33 PM
<b>ASP TOTAL METALS BY ICP-MS</b>						
				<b>200.8ASP</b>	<b>(E200.8)</b>	Analyst: DEY
Antimony	ND	5.0		µg/L	1	8/23/2010 9:41:00 AM
Arsenic	ND	5.0		µg/L	1	8/23/2010 9:41:00 AM
Lead	170	3.0		µg/L	1	8/23/2010 9:41:00 AM
Selenium	ND	3.0		µg/L	1	8/23/2010 9:41:00 AM
Thallium	ND	3.0		µg/L	1	8/23/2010 9:41:00 AM
<b>TOTAL MERCURY WATERS ASP</b>						
				<b>245.2WTASP</b>	<b>(E245.2)</b>	Analyst: ALW
Mercury	ND	0.200		µg/L	1	8/4/2010 11:56:00 AM
<b>TCL-SEMIVOLATILE ORGANICS BY NYSDEC ASP 2005</b>						
				<b>8270_ASPTCL_W</b>	<b>(SW3520)</b>	Analyst: LD
Phenol	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/25/2010 10:17:00 PM
2-Chlorophenol	ND	10		µg/L	1	7/25/2010 10:17:00 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
2-Methylphenol	ND	10		µg/L	1	7/25/2010 10:17:00 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Hexachloroethane	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Nitrobenzene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Isophorone	ND	10		µg/L	1	7/25/2010 10:17:00 PM

Approved By: PH

Date: 8-24-10

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-003

Client Sample ID: MW-5  
 Collection Date: 7/15/2010 9:30:00 AM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>TCL-SEMIVOLATILE ORGANICS BY NYSDEC ASP 2005</b>						
				<b>8270_ASPTCL_W</b>		<b>(SW3520)</b>
						<b>Analyst: LD</b>
2-Nitrophenol	ND	10		µg/L	1	7/25/2010 10:17:00 PM
2,4-Dimethylphenol	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/25/2010 10:17:00 PM
2,4-Dichlorophenol	ND	10		µg/L	1	7/25/2010 10:17:00 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Naphthalene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
4-Chloroaniline	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Hexachlorobutadiene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/25/2010 10:17:00 PM
2-Methylnaphthalene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/25/2010 10:17:00 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/25/2010 10:17:00 PM
2-Chloronaphthalene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
2-Nitroaniline	ND	24		µg/L	1	7/25/2010 10:17:00 PM
Dimethyl phthalate	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Acenaphthylene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
3-Nitroaniline	ND	24		µg/L	1	7/25/2010 10:17:00 PM
Acenaphthene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
2,4-Dinitrophenol	ND	24		µg/L	1	7/25/2010 10:17:00 PM
4-Nitrophenol	ND	24		µg/L	1	7/25/2010 10:17:00 PM
Dibenzofuran	ND	10		µg/L	1	7/25/2010 10:17:00 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Diethyl phthalate	ND	10		µg/L	1	7/25/2010 10:17:00 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Fluorene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
4-Nitroaniline	ND	24		µg/L	1	7/25/2010 10:17:00 PM
4,6-Dinitro-2-methylphenol	ND	24		µg/L	1	7/25/2010 10:17:00 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/25/2010 10:17:00 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Hexachlorobenzene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Pentachlorophenol	ND	24		µg/L	1	7/25/2010 10:17:00 PM
Phenanthrene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Anthracene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Carbazole	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Di-n-butyl phthalate	2	10	J	µg/L	1	7/25/2010 10:17:00 PM
Fluoranthene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Pyrene	ND	10		µg/L	1	7/25/2010 10:17:00 PM

Approved By: PH

Date: 8-24-10

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-003

Client Sample ID: MW-5  
 Collection Date: 7/15/2010 9:30:00 AM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>TCL-SEMIVOLATILE ORGANICS BY NYSDEC ASP 2005</b>		<b>8270_ASPTCL_W</b>		<b>(SW3520)</b>		Analyst: LD
Butyl benzyl phthalate	ND	10		µg/L	1	7/25/2010 10:17:00 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Benzo(a)anthracene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Chrysene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Bis(2-ethylhexyl)phthalate	3	10	J	µg/L	1	7/25/2010 10:17:00 PM
Di-n-octyl phthalate	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Benzo(a)pyrene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/25/2010 10:17:00 PM
(3+4)-Methylphenol	ND	10		µg/L	1	7/25/2010 10:17:00 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/25/2010 10:17:00 PM
TIC: 9-Hexadecenoic acid	4.5	0		µg/L	1	7/25/2010 10:17:00 PM
TIC: 9-Octadecenamamide, (Z)-	4.3	0		µg/L	1	7/25/2010 10:17:00 PM
TIC: Cyclic octaatomic sulfur	8.5	0		µg/L	1	7/25/2010 10:17:00 PM
TIC: Hexadecane, 2,6,10,14-tetramethyl- (17.05)	14	0		µg/L	1	7/25/2010 10:17:00 PM
TIC: Hexadecane, 2,6,10,14-tetramethyl- (17.71)	3.4	0		µg/L	1	7/25/2010 10:17:00 PM
TIC: Naphthalene, 1,2-dimethyl-	4.6	0		µg/L	1	7/25/2010 10:17:00 PM
TIC: Naphthalene, 1,6,7-trimethyl-	3.3	0		µg/L	1	7/25/2010 10:17:00 PM
TIC: Pentadecane, 2,6,10,14-tetramethyl-	11	0		µg/L	1	7/25/2010 10:17:00 PM
TIC: Pentadecane, 7-methyl-	4.9	0		µg/L	1	7/25/2010 10:17:00 PM
TIC: unknown (14.04)	4.3	0		µg/L	1	7/25/2010 10:17:00 PM
TIC: unknown (14.65)	6.7	0		µg/L	1	7/25/2010 10:17:00 PM
TIC: unknown (14.7)	4.1	0		µg/L	1	7/25/2010 10:17:00 PM
TIC: unknown (14.97)	7.4	0		µg/L	1	7/25/2010 10:17:00 PM
TIC: unknown (15.27)	3.3	0		µg/L	1	7/25/2010 10:17:00 PM
TIC: unknown (15.41)	8.9	0		µg/L	1	7/25/2010 10:17:00 PM
TIC: unknown (15.8)	11	0		µg/L	1	7/25/2010 10:17:00 PM
TIC: unknown (16.12)	5.2	0		µg/L	1	7/25/2010 10:17:00 PM
TIC: unknown (16.36)	3.1	0		µg/L	1	7/25/2010 10:17:00 PM
TIC: unknown (17.49)	3.1	0		µg/L	1	7/25/2010 10:17:00 PM
TIC: unknown (18.15)	4.7	0		µg/L	1	7/25/2010 10:17:00 PM
<b>ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260</b>		<b>8260ASP_TCL_W</b>				Analyst: LEF
Chloromethane	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM

Approved By: PH

Date: 8-24-10

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-003

Client Sample ID: MW-5  
 Collection Date: 7/15/2010 9:30:00 AM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260</b>		<b>8260ASP_TCL_W</b>				Analyst: LEF
Vinyl chloride	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
Bromomethane	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
Chloroethane	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
Acetone	ND	10		µg/L	1	7/26/2010 7:24:00 PM
1,1-Dichloroethene	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
Carbon disulfide	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
Methylene chloride	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
1,1-Dichloroethane	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
2-Butanone	ND	10		µg/L	1	7/26/2010 7:24:00 PM
cis-1,2-Dichloroethene	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
Chloroform	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
Carbon tetrachloride	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
Benzene	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
1,2-Dichloroethane	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
Trichloroethene	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
1,2-Dichloropropane	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
Bromodichloromethane	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/26/2010 7:24:00 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
Toluene	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
2-Hexanone	ND	10		µg/L	1	7/26/2010 7:24:00 PM
Tetrachloroethene	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
Dibromochloromethane	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
Chlorobenzene	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
Ethylbenzene	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
m,p-Xylene	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
o-Xylene	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
Styrene	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
Bromoform	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	7/26/2010 7:24:00 PM
TIC: Benzene, cyclopropyl-	7.7	0		µg/L	1	7/26/2010 7:24:00 PM
TIC: Indan, 1-methyl-	6.6	0		µg/L	1	7/26/2010 7:24:00 PM

Approved By: *PH*

Date: *8-24-10*

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-004

Client Sample ID: MW-6  
 Collection Date: 7/15/2010 10:30:00 AM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ICP METALS, TOTAL BY NYSDEC ASP 2005</b>						
				<b>200.7WTASP</b>	<b>(E200.7)</b>	Analyst: LJ
Aluminum	941	100		µg/L	1	8/20/2010 6:37:36 PM
Barium	213	50.0		µg/L	1	8/20/2010 6:37:36 PM
Beryllium	ND	3.00		µg/L	1	8/20/2010 6:37:36 PM
Cadmium	ND	5.00		µg/L	1	8/20/2010 6:37:36 PM
Calcium	137000	5000		µg/L	1	8/20/2010 6:37:36 PM
Chromium	ND	10.0		µg/L	1	8/20/2010 6:37:36 PM
Cobalt	ND	20.0		µg/L	1	8/20/2010 6:37:36 PM
Copper	ND	10.0		µg/L	1	8/20/2010 6:37:36 PM
Iron	9530	60.0		µg/L	1	8/20/2010 6:37:36 PM
Magnesium	24600	5000		µg/L	1	8/20/2010 6:37:36 PM
Manganese	1860	10.0		µg/L	1	8/20/2010 6:37:36 PM
Nickel	ND	30.0		µg/L	1	8/20/2010 6:37:36 PM
Potassium	ND	5000		µg/L	1	8/20/2010 6:37:36 PM
Silver	ND	10.0		µg/L	1	8/20/2010 6:37:36 PM
Sodium	16900	5000		µg/L	1	8/20/2010 6:37:36 PM
Vanadium	ND	30.0		µg/L	1	8/20/2010 6:37:36 PM
Zinc	39.7	10.0		µg/L	1	8/20/2010 6:37:36 PM
<b>ASP TOTAL METALS BY ICP-MS</b>						
				<b>200.8ASP</b>	<b>(E200.8)</b>	Analyst: DEY
Antimony	ND	5.0		µg/L	1	8/23/2010 9:41:00 AM
Arsenic	ND	5.0		µg/L	1	8/23/2010 9:41:00 AM
Lead	9.5	3.0		µg/L	1	8/23/2010 9:41:00 AM
Selenium	ND	3.0		µg/L	1	8/23/2010 9:41:00 AM
Thallium	ND	3.0		µg/L	1	8/23/2010 9:41:00 AM
<b>TOTAL MERCURY WATERS ASP</b>						
				<b>245.2WTASP</b>	<b>(E245.2)</b>	Analyst: ALW
Mercury	ND	0.200		µg/L	1	8/4/2010 11:56:00 AM
<b>TCL-SEMIVOLATILE ORGANICS BY NYSDEC ASP 2005</b>						
				<b>8270_ASPTCL_W</b>	<b>(SW3520)</b>	Analyst: LD
Phenol	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/25/2010 11:01:00 PM
2-Chlorophenol	ND	10		µg/L	1	7/25/2010 11:01:00 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
2-Methylphenol	ND	10		µg/L	1	7/25/2010 11:01:00 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Hexachloroethane	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Nitrobenzene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Isophorone	ND	10		µg/L	1	7/25/2010 11:01:00 PM

Approved By: DH

Date: 8-24-10

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-004

Client Sample ID: MW-6  
 Collection Date: 7/15/2010 10:30:00 AM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>TCL-SEMIVOLATILE ORGANICS BY NYSDEC ASP 2005</b>		<b>8270_ASPTCL_W</b>		<b>(SW3520)</b>		Analyst: LD
2-Nitrophenol	ND	10		µg/L	1	7/25/2010 11:01:00 PM
2,4-Dimethylphenol	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/25/2010 11:01:00 PM
2,4-Dichlorophenol	ND	10		µg/L	1	7/25/2010 11:01:00 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Naphthalene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
4-Chloroaniline	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Hexachlorobutadiene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/25/2010 11:01:00 PM
2-Methylnaphthalene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/25/2010 11:01:00 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/25/2010 11:01:00 PM
2-Chloronaphthalene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
2-Nitroaniline	ND	24		µg/L	1	7/25/2010 11:01:00 PM
Dimethyl phthalate	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Acenaphthylene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
3-Nitroaniline	ND	24		µg/L	1	7/25/2010 11:01:00 PM
Acenaphthene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
2,4-Dinitrophenol	ND	24		µg/L	1	7/25/2010 11:01:00 PM
4-Nitrophenol	ND	24		µg/L	1	7/25/2010 11:01:00 PM
Dibenzofuran	ND	10		µg/L	1	7/25/2010 11:01:00 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Diethyl phthalate	ND	10		µg/L	1	7/25/2010 11:01:00 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Fluorene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
4-Nitroaniline	ND	24		µg/L	1	7/25/2010 11:01:00 PM
4,6-Dinitro-2-methylphenol	ND	24		µg/L	1	7/25/2010 11:01:00 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/25/2010 11:01:00 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Hexachlorobenzene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Pentachlorophenol	ND	24		µg/L	1	7/25/2010 11:01:00 PM
Phenanthrene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Anthracene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Carbazole	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Di-n-butyl phthalate	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Fluoranthene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Pyrene	ND	10		µg/L	1	7/25/2010 11:01:00 PM

Approved By: PH

Date: 8-24-10

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-004

Client Sample ID: MW-6  
 Collection Date: 7/15/2010 10:30:00 AM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>TCL-SEMIVOLATILE ORGANICS BY NYSDEC ASP 2005</b>		<b>8270_ASPTCL_W</b>		<b>(SW3520)</b>		Analyst: LD
Butyl benzyl phthalate	ND	10		µg/L	1	7/25/2010 11:01:00 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Benzo(a)anthracene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Chrysene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Bis(2-ethylhexyl)phthalate	3	10	J	µg/L	1	7/25/2010 11:01:00 PM
Di-n-octyl phthalate	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Benzo(a)pyrene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/25/2010 11:01:00 PM
(3+4)-Methylphenol	ND	10		µg/L	1	7/25/2010 11:01:00 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/25/2010 11:01:00 PM
TIC: 1,1'-Biphenyl, 2-ethyl-	6.2	0		µg/L	1	7/25/2010 11:01:00 PM
TIC: 1,1'-Biphenyl, 4-methyl-	9.5	0		µg/L	1	7/25/2010 11:01:00 PM
TIC: Azulene, 7-ethyl-1,4-dimethyl-	8.8	0		µg/L	1	7/25/2010 11:01:00 PM
TIC: Cyclohexane, octyl-	5.0	0		µg/L	1	7/25/2010 11:01:00 PM
TIC: Hexadecane	9.1	0		µg/L	1	7/25/2010 11:01:00 PM
TIC: Hexadecane, 2,6,10,14-tetramethyl-	11	0		µg/L	1	7/25/2010 11:01:00 PM
TIC: Naphthalene, 1,2,3,4-tetramethyl-	7.1	0		µg/L	1	7/25/2010 11:01:00 PM
TIC: Naphthalene, 1,4,6-trimethyl-	8.6	0		µg/L	1	7/25/2010 11:01:00 PM
TIC: Naphthalene, 1,4-dimethyl-	5.6	0		µg/L	1	7/25/2010 11:01:00 PM
TIC: Naphthalene, 2,3,6-trimethyl-	7.0	0		µg/L	1	7/25/2010 11:01:00 PM
TIC: Pentadecane, 2,6,10,14-tetramethyl-	15	0		µg/L	1	7/25/2010 11:01:00 PM
TIC: Pentadecane, 7-methyl-	8.3	0		µg/L	1	7/25/2010 11:01:00 PM
TIC: Phenanthrene, 2,5-dimethyl-	7.0	0		µg/L	1	7/25/2010 11:01:00 PM
TIC: unknown (13.37)	5.7	0		µg/L	1	7/25/2010 11:01:00 PM
TIC: unknown (13.41)	5.5	0		µg/L	1	7/25/2010 11:01:00 PM
TIC: unknown (13.78)	7.2	0		µg/L	1	7/25/2010 11:01:00 PM
TIC: unknown (15.21)	5.5	0		µg/L	1	7/25/2010 11:01:00 PM
TIC: unknown (15.86)	12	0		µg/L	1	7/25/2010 11:01:00 PM
TIC: unknown (16.36)	12	0		µg/L	1	7/25/2010 11:01:00 PM
TIC: unknown (16.75)	6.8	0		µg/L	1	7/25/2010 11:01:00 PM
<b>ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260</b>		<b>8260ASP_TCL_W</b>				Analyst: LEF
Chloromethane	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM

Approved By: DH

Date: 8-24-10

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-004

Client Sample ID: MW-6  
 Collection Date: 7/15/2010 10:30:00 AM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260</b>		<b>8260ASP_TCL_W</b>		Analyst: LEF		
Vinyl chloride	5.1	5.0		µg/L	1	7/26/2010 8:02:00 PM
Bromomethane	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
Chloroethane	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
Acetone	ND	10		µg/L	1	7/26/2010 8:02:00 PM
1,1-Dichloroethene	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
Carbon disulfide	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
Methylene chloride	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
1,1-Dichloroethane	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
2-Butanone	ND	10		µg/L	1	7/26/2010 8:02:00 PM
cis-1,2-Dichloroethene	2	5.0	J	µg/L	1	7/26/2010 8:02:00 PM
Chloroform	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
Carbon tetrachloride	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
Benzene	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
1,2-Dichloroethane	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
Trichloroethene	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
1,2-Dichloropropane	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
Bromodichloromethane	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/26/2010 8:02:00 PM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
Toluene	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
2-Hexanone	ND	10		µg/L	1	7/26/2010 8:02:00 PM
Tetrachloroethene	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
Dibromochloromethane	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
Chlorobenzene	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
Ethylbenzene	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
m,p-Xylene	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
o-Xylene	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
Styrene	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
Bromoform	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	7/26/2010 8:02:00 PM

**NOTES:**

TICS: No compounds were detected.

Approved By: PJ

Date: 8-24-10

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-005

Client Sample ID: MW-7  
 Collection Date: 7/15/2010 11:30:00 AM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ICP METALS, TOTAL BY NYSDEC ASP 2005</b>						
				<b>200.7WTASP</b>	<b>(E200.7)</b>	Analyst: LJ
Aluminum	2120	100		µg/L	1	8/20/2010 6:42:14 PM
Barium	64.3	50.0		µg/L	1	8/20/2010 6:42:14 PM
Beryllium	ND	3.00		µg/L	1	8/20/2010 6:42:14 PM
Cadmium	ND	5.00		µg/L	1	8/20/2010 6:42:14 PM
Calcium	135000	5000		µg/L	1	8/20/2010 6:42:14 PM
Chromium	ND	10.0		µg/L	1	8/20/2010 6:42:14 PM
Cobalt	ND	20.0		µg/L	1	8/20/2010 6:42:14 PM
Copper	62.9	10.0		µg/L	1	8/20/2010 6:42:14 PM
Iron	9950	60.0		µg/L	1	8/20/2010 6:42:14 PM
Magnesium	29500	5000		µg/L	1	8/20/2010 6:42:14 PM
Manganese	508	10.0		µg/L	1	8/20/2010 6:42:14 PM
Nickel	ND	30.0		µg/L	1	8/20/2010 6:42:14 PM
Potassium	9940	5000		µg/L	1	8/20/2010 6:42:14 PM
Silver	ND	10.0		µg/L	1	8/20/2010 6:42:14 PM
Sodium	72100	5000		µg/L	1	8/20/2010 6:42:14 PM
Vanadium	ND	30.0		µg/L	1	8/20/2010 6:42:14 PM
Zinc	2470	10.0		µg/L	1	8/20/2010 6:42:14 PM
<b>ASP TOTAL METALS BY ICP-MS</b>						
				<b>200.8ASP</b>	<b>(E200.8)</b>	Analyst: DEY
Antimony	ND	5.0		µg/L	1	8/23/2010 9:41:00 AM
Arsenic	5.7	5.0		µg/L	1	8/23/2010 9:41:00 AM
Lead	120	3.0		µg/L	1	8/23/2010 9:41:00 AM
Selenium	ND	3.0		µg/L	1	8/23/2010 9:41:00 AM
Thallium	ND	3.0		µg/L	1	8/23/2010 9:41:00 AM
<b>TOTAL MERCURY WATERS ASP</b>						
				<b>245.2WTASP</b>	<b>(E245.2)</b>	Analyst: ALW
Mercury	ND	0.200		µg/L	1	8/4/2010 11:56:00 AM
<b>TCL-SEMIVOLATILE ORGANICS BY NYSDEC ASP 2005</b>						
				<b>8270_ASPTCL_W</b>	<b>(SW3520)</b>	Analyst: LD
Phenol	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/25/2010 11:44:00 PM
2-Chlorophenol	ND	10		µg/L	1	7/25/2010 11:44:00 PM
1,3-Dichlorobenzene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
1,2-Dichlorobenzene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
2-Methylphenol	ND	10		µg/L	1	7/25/2010 11:44:00 PM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Hexachloroethane	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Nitrobenzene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Isophorone	ND	10		µg/L	1	7/25/2010 11:44:00 PM

Approved By: PH

Date: 8-24-10

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Qualifiers: # Accreditation not offered by NYS DOH for this parameter  
 \*\* Value exceeds Maximum Contaminant Value  
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 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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-005

Client Sample ID: MW-7  
 Collection Date: 7/15/2010 11:30:00 AM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>TCL-SEMIVOLATILE ORGANICS BY NYSDEC ASP 2005</b>				<b>8270_ASPTCL_W (SW3520)</b>		Analyst: LD
2-Nitrophenol	ND	10		µg/L	1	7/25/2010 11:44:00 PM
2,4-Dimethylphenol	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/25/2010 11:44:00 PM
2,4-Dichlorophenol	ND	10		µg/L	1	7/25/2010 11:44:00 PM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Naphthalene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
4-Chloroaniline	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Hexachlorobutadiene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/25/2010 11:44:00 PM
2-Methylnaphthalene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/25/2010 11:44:00 PM
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/25/2010 11:44:00 PM
2-Chloronaphthalene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
2-Nitroaniline	ND	24		µg/L	1	7/25/2010 11:44:00 PM
Dimethyl phthalate	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Acenaphthylene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
2,6-Dinitrotoluene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
3-Nitroaniline	ND	24		µg/L	1	7/25/2010 11:44:00 PM
Acenaphthene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
2,4-Dinitrophenol	ND	24		µg/L	1	7/25/2010 11:44:00 PM
4-Nitrophenol	ND	24		µg/L	1	7/25/2010 11:44:00 PM
Dibenzofuran	ND	10		µg/L	1	7/25/2010 11:44:00 PM
2,4-Dinitrotoluene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Diethyl phthalate	ND	10		µg/L	1	7/25/2010 11:44:00 PM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Fluorene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
4-Nitroaniline	ND	24		µg/L	1	7/25/2010 11:44:00 PM
4,6-Dinitro-2-methylphenol	ND	24		µg/L	1	7/25/2010 11:44:00 PM
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/25/2010 11:44:00 PM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Hexachlorobenzene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Pentachlorophenol	ND	24		µg/L	1	7/25/2010 11:44:00 PM
Phenanthrene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Anthracene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Carbazole	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Di-n-butyl phthalate	1	10	J	µg/L	1	7/25/2010 11:44:00 PM
Fluoranthene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Pyrene	ND	10		µg/L	1	7/25/2010 11:44:00 PM

Approved By: DH

Date: 8-24-10

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-005

Client Sample ID: MW-7  
 Collection Date: 7/15/2010 11:30:00 AM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>TCL-SEMIVOLATILE ORGANICS BY NYSDEC ASP 2005</b>						
				<b>8270_ASPTCL_W</b>		<b>(SW3520)</b>
						Analyst: LD
Butyl benzyl phthalate	ND	10		µg/L	1	7/25/2010 11:44:00 PM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Benz(a)anthracene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Chrysene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Bis(2-ethylhexyl)phthalate	2	10	J	µg/L	1	7/25/2010 11:44:00 PM
Di-n-octyl phthalate	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Benzo(b)fluoranthene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Benzo(k)fluoranthene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Benzo(a)pyrene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/25/2010 11:44:00 PM
(3+4)-Methylphenol	ND	10		µg/L	1	7/25/2010 11:44:00 PM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/25/2010 11:44:00 PM
TIC: 9-Octadecenamide, (Z)-	3.5	0		µg/L	1	7/25/2010 11:44:00 PM
TIC: Cyclic octaatomic sulfur	3.2	0		µg/L	1	7/25/2010 11:44:00 PM
TIC: unknown	4.1	0		µg/L	1	7/25/2010 11:44:00 PM
<b>ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260</b>						
				<b>8260ASP_TCL_W</b>		Analyst: LEF
Chloromethane	ND	25		µg/L	5	7/26/2010 8:41:00 PM
Vinyl chloride	ND	25		µg/L	5	7/26/2010 8:41:00 PM
Bromomethane	ND	25		µg/L	5	7/26/2010 8:41:00 PM
Chloroethane	ND	25		µg/L	5	7/26/2010 8:41:00 PM
Acetone	ND	50		µg/L	5	7/26/2010 8:41:00 PM
1,1-Dichloroethene	ND	25		µg/L	5	7/26/2010 8:41:00 PM
Carbon disulfide	ND	25		µg/L	5	7/26/2010 8:41:00 PM
Methylene chloride	ND	25		µg/L	5	7/26/2010 8:41:00 PM
trans-1,2-Dichloroethene	ND	25		µg/L	5	7/26/2010 8:41:00 PM
1,1-Dichloroethane	ND	25		µg/L	5	7/26/2010 8:41:00 PM
2-Butanone	ND	50		µg/L	5	7/26/2010 8:41:00 PM
cis-1,2-Dichloroethene	45	25		µg/L	5	7/26/2010 8:41:00 PM
Chloroform	ND	25		µg/L	5	7/26/2010 8:41:00 PM
1,1,1-Trichloroethane	ND	25		µg/L	5	7/26/2010 8:41:00 PM
Carbon tetrachloride	ND	25		µg/L	5	7/26/2010 8:41:00 PM
Benzene	ND	25		µg/L	5	7/26/2010 8:41:00 PM
1,2-Dichloroethane	ND	25		µg/L	5	7/26/2010 8:41:00 PM
Trichloroethene	ND	25		µg/L	5	7/26/2010 8:41:00 PM
1,2-Dichloropropane	ND	25		µg/L	5	7/26/2010 8:41:00 PM
Bromodichloromethane	ND	25		µg/L	5	7/26/2010 8:41:00 PM

Approved By: PH

Date: 8-24-10

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-005

Client Sample ID: MW-7  
 Collection Date: 7/15/2010 11:30:00 AM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260</b>		<b>8260ASP_TCL_W</b>		Analyst: LEF		
4-Methyl-2-pentanone	ND	50		µg/L	5	7/26/2010 8:41:00 PM
cis-1,3-Dichloropropene	ND	25		µg/L	5	7/26/2010 8:41:00 PM
Toluene	ND	25		µg/L	5	7/26/2010 8:41:00 PM
trans-1,3-Dichloropropene	ND	25		µg/L	5	7/26/2010 8:41:00 PM
1,1,2-Trichloroethane	ND	25		µg/L	5	7/26/2010 8:41:00 PM
2-Hexanone	ND	50		µg/L	5	7/26/2010 8:41:00 PM
Tetrachloroethene	ND	25		µg/L	5	7/26/2010 8:41:00 PM
Dibromochloromethane	ND	25		µg/L	5	7/26/2010 8:41:00 PM
Chlorobenzene	ND	25		µg/L	5	7/26/2010 8:41:00 PM
Ethylbenzene	ND	25		µg/L	5	7/26/2010 8:41:00 PM
m,p-Xylene	ND	25		µg/L	5	7/26/2010 8:41:00 PM
o-Xylene	ND	25		µg/L	5	7/26/2010 8:41:00 PM
Styrene	ND	25		µg/L	5	7/26/2010 8:41:00 PM
Bromoform	ND	25		µg/L	5	7/26/2010 8:41:00 PM
1,1,2,2-Tetrachloroethane	ND	25		µg/L	5	7/26/2010 8:41:00 PM

**NOTES:**

The reporting limits were raised due to matrix interference.

TICS: No compounds were detected.

Sample foamed during purging procedure.

Approved By: PH

Date: 8-24-10

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-006

Client Sample ID: MW-8  
 Collection Date: 7/15/2010 12:30:00 PM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ICP METALS, TOTAL BY NYSDEC ASP 2005</b>						
				<b>200.7WTASP</b>	<b>(E200.7)</b>	Analyst: LJ
Aluminum	199	100		µg/L	1	8/20/2010 6:47:18 PM
Barium	133	50.0		µg/L	1	8/20/2010 6:47:18 PM
Beryllium	ND	3.00		µg/L	1	8/20/2010 6:47:18 PM
Cadmium	ND	5.00		µg/L	1	8/20/2010 6:47:18 PM
Calcium	144000	5000		µg/L	1	8/20/2010 6:47:18 PM
Chromium	ND	10.0		µg/L	1	8/20/2010 6:47:18 PM
Cobalt	ND	20.0		µg/L	1	8/20/2010 6:47:18 PM
Copper	ND	10.0		µg/L	1	8/20/2010 6:47:18 PM
Iron	2870	60.0		µg/L	1	8/20/2010 6:47:18 PM
Magnesium	25300	5000		µg/L	1	8/20/2010 6:47:18 PM
Manganese	665	10.0		µg/L	1	8/20/2010 6:47:18 PM
Nickel	ND	30.0		µg/L	1	8/20/2010 6:47:18 PM
Potassium	ND	5000		µg/L	1	8/20/2010 6:47:18 PM
Silver	ND	10.0		µg/L	1	8/20/2010 6:47:18 PM
Sodium	22600	5000		µg/L	1	8/20/2010 6:47:18 PM
Vanadium	ND	30.0		µg/L	1	8/20/2010 6:47:18 PM
Zinc	375	10.0		µg/L	1	8/20/2010 6:47:18 PM
<b>ASP TOTAL METALS BY ICP-MS</b>						
				<b>200.8ASP</b>	<b>(E200.8)</b>	Analyst: DEY
Antimony	ND	5.0		µg/L	1	8/23/2010 9:41:00 AM
Arsenic	ND	5.0		µg/L	1	8/23/2010 9:41:00 AM
Lead	11	3.0		µg/L	1	8/23/2010 9:41:00 AM
Selenium	ND	3.0		µg/L	1	8/23/2010 9:41:00 AM
Thallium	ND	3.0		µg/L	1	8/23/2010 9:41:00 AM
<b>TOTAL MERCURY WATERS ASP</b>						
				<b>245.2WTASP</b>	<b>(E245.2)</b>	Analyst: ALW
Mercury	ND	0.200		µg/L	1	8/4/2010 11:56:00 AM
<b>TCL-SEMIVOLATILE ORGANICS BY NYSDEC ASP 2005</b>						
				<b>8270_ASPTCL_W</b>	<b>(SW3520)</b>	Analyst: LD
Phenol	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/26/2010 12:27:00 AM
2-Chlorophenol	ND	10		µg/L	1	7/26/2010 12:27:00 AM
1,3-Dichlorobenzene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
1,2-Dichlorobenzene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
2-Methylphenol	ND	10		µg/L	1	7/26/2010 12:27:00 AM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Hexachloroethane	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Nitrobenzene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Isophorone	ND	10		µg/L	1	7/26/2010 12:27:00 AM

Approved By: DH

Date: 8-24-10

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-006

Client Sample ID: MW-8  
 Collection Date: 7/15/2010 12:30:00 PM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>TCL-SEMIVOLATILE ORGANICS BY NYSDEC ASP 2005</b>						
		8270	_ASPTCL_W	(SW3520)		Analyst: LD
2-Nitrophenol	ND	10		µg/L	1	7/26/2010 12:27:00 AM
2,4-Dimethylphenol	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/26/2010 12:27:00 AM
2,4-Dichlorophenol	ND	10		µg/L	1	7/26/2010 12:27:00 AM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Naphthalene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
4-Chloroaniline	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Hexachlorobutadiene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/26/2010 12:27:00 AM
2-Methylnaphthalene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/26/2010 12:27:00 AM
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/26/2010 12:27:00 AM
2-Chloronaphthalene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
2-Nitroaniline	ND	24		µg/L	1	7/26/2010 12:27:00 AM
Dimethyl phthalate	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Acenaphthylene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
2,6-Dinitrotoluene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
3-Nitroaniline	ND	24		µg/L	1	7/26/2010 12:27:00 AM
Acenaphthene	2	10	J	µg/L	1	7/26/2010 12:27:00 AM
2,4-Dinitrophenol	ND	24		µg/L	1	7/26/2010 12:27:00 AM
4-Nitrophenol	ND	24		µg/L	1	7/26/2010 12:27:00 AM
Dibenzofuran	ND	10		µg/L	1	7/26/2010 12:27:00 AM
2,4-Dinitrotoluene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Diethyl phthalate	ND	10		µg/L	1	7/26/2010 12:27:00 AM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Fluorene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
4-Nitroaniline	ND	24		µg/L	1	7/26/2010 12:27:00 AM
4,6-Dinitro-2-methylphenol	ND	24		µg/L	1	7/26/2010 12:27:00 AM
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/26/2010 12:27:00 AM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Hexachlorobenzene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Pentachlorophenol	ND	24		µg/L	1	7/26/2010 12:27:00 AM
Phenanthrene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Anthracene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Carbazole	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Di-n-butyl phthalate	2	10	J	µg/L	1	7/26/2010 12:27:00 AM
Fluoranthene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Pyrene	ND	10		µg/L	1	7/26/2010 12:27:00 AM

Approved By: PH

Date: 8-24-10

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-006

Client Sample ID: MW-8  
 Collection Date: 7/15/2010 12:30:00 PM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>TCL-SEMIVOLATILE ORGANICS BY NYSDEC ASP 2005</b>		<b>8270_ASPTCL_W</b>		<b>(SW3520)</b>		<b>Analyst: LD</b>
Butyl benzyl phthalate	ND	10		µg/L	1	7/26/2010 12:27:00 AM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Benz(a)anthracene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Chrysene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Bis(2-ethylhexyl)phthalate	3	10	J	µg/L	1	7/26/2010 12:27:00 AM
Di-n-octyl phthalate	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Benzo(b)fluoranthene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Benzo(k)fluoranthene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Benzo(a)pyrene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/26/2010 12:27:00 AM
(3+4)-Methylphenol	ND	10		µg/L	1	7/26/2010 12:27:00 AM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/26/2010 12:27:00 AM
TIC: 1-Indanone, 5,6-dimethyl-	2.3	0		µg/L	1	7/26/2010 12:27:00 AM
TIC: Cyclic octaatomic sulfur	5.5	0		µg/L	1	7/26/2010 12:27:00 AM
TIC: Octadec-9-enoic acid	3.3	0		µg/L	1	7/26/2010 12:27:00 AM
TIC: unknown (14.64)	2.2	0		µg/L	1	7/26/2010 12:27:00 AM
TIC: unknown (17.49)	2.1	0		µg/L	1	7/26/2010 12:27:00 AM
TIC: unknown (21.03)	2.2	0		µg/L	1	7/26/2010 12:27:00 AM
TIC: unknown (23.47)	2.2	0		µg/L	1	7/26/2010 12:27:00 AM
<b>ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260</b>		<b>8260ASP_TCL_W</b>				<b>Analyst: LEF</b>
Chloromethane	ND	25		µg/L	5	7/27/2010 1:01:00 PM
Vinyl chloride	240	25		µg/L	5	7/27/2010 1:01:00 PM
Bromomethane	ND	25		µg/L	5	7/27/2010 1:01:00 PM
Chloroethane	ND	25		µg/L	5	7/27/2010 1:01:00 PM
Acetone	ND	50		µg/L	5	7/27/2010 1:01:00 PM
1,1-Dichloroethene	ND	25		µg/L	5	7/27/2010 1:01:00 PM
Carbon disulfide	ND	25		µg/L	5	7/27/2010 1:01:00 PM
Methylene chloride	ND	25		µg/L	5	7/27/2010 1:01:00 PM
trans-1,2-Dichloroethene	10	25	J	µg/L	5	7/27/2010 1:01:00 PM
1,1-Dichloroethane	ND	25		µg/L	5	7/27/2010 1:01:00 PM
2-Butanone	ND	50		µg/L	5	7/27/2010 1:01:00 PM
cis-1,2-Dichloroethene	260	25		µg/L	5	7/27/2010 1:01:00 PM
Chloroform	ND	25		µg/L	5	7/27/2010 1:01:00 PM
1,1,1-Trichloroethane	ND	25		µg/L	5	7/27/2010 1:01:00 PM
Carbon tetrachloride	ND	25		µg/L	5	7/27/2010 1:01:00 PM
Benzene	ND	25		µg/L	5	7/27/2010 1:01:00 PM

Approved By: PH

Date: 8-24-10

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-006

Client Sample ID: MW-8  
 Collection Date: 7/15/2010 12:30:00 PM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260</b>		<b>8260ASP_TCL_W</b>				Analyst: LEF
1,2-Dichloroethane	ND	25		µg/L	5	7/27/2010 1:01:00 PM
Trichloroethene	ND	25		µg/L	5	7/27/2010 1:01:00 PM
1,2-Dichloropropane	ND	25		µg/L	5	7/27/2010 1:01:00 PM
Bromodichloromethane	ND	25		µg/L	5	7/27/2010 1:01:00 PM
4-Methyl-2-pentanone	ND	50		µg/L	5	7/27/2010 1:01:00 PM
cis-1,3-Dichloropropene	ND	25		µg/L	5	7/27/2010 1:01:00 PM
Toluene	ND	25		µg/L	5	7/27/2010 1:01:00 PM
trans-1,3-Dichloropropene	ND	25		µg/L	5	7/27/2010 1:01:00 PM
1,1,2-Trichloroethane	ND	25		µg/L	5	7/27/2010 1:01:00 PM
2-Hexanone	ND	50		µg/L	5	7/27/2010 1:01:00 PM
Tetrachloroethene	ND	25		µg/L	5	7/27/2010 1:01:00 PM
Dibromochloromethane	ND	25		µg/L	5	7/27/2010 1:01:00 PM
Chlorobenzene	ND	25		µg/L	5	7/27/2010 1:01:00 PM
Ethylbenzene	ND	25		µg/L	5	7/27/2010 1:01:00 PM
m,p-Xylene	ND	25		µg/L	5	7/27/2010 1:01:00 PM
o-Xylene	ND	25		µg/L	5	7/27/2010 1:01:00 PM
Styrene	ND	25		µg/L	5	7/27/2010 1:01:00 PM
Bromoform	ND	25		µg/L	5	7/27/2010 1:01:00 PM
1,1,2,2-Tetrachloroethane	ND	25		µg/L	5	7/27/2010 1:01:00 PM

**NOTES:**

The reporting limits were raised due to the high concentration of target compounds.  
 TICS: No compounds were detected.

Approved By: PH

Date: 8-24-10

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-007

Client Sample ID: Dup at MW-1  
 Collection Date: 7/15/2010 2:30:00 PM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ICP METALS, TOTAL BY NYSDEC ASP 2005</b>						
				<b>200.7WTASP</b>	<b>(E200.7)</b>	Analyst: LJ
Aluminum	118000	100		µg/L	1	8/20/2010 7:01:10 PM
Barium	1380	50.0		µg/L	1	8/20/2010 7:01:10 PM
Beryllium	6.61	3.00		µg/L	1	8/20/2010 7:01:10 PM
Cadmium	20.7	5.00		µg/L	1	8/20/2010 7:01:10 PM
Calcium	737000	5000		µg/L	1	8/20/2010 7:01:10 PM
Chromium	176	10.0		µg/L	1	8/20/2010 7:01:10 PM
Cobalt	110	20.0		µg/L	1	8/20/2010 7:01:10 PM
Copper	288	10.0		µg/L	1	8/20/2010 7:01:10 PM
Iron	216000	60.0		µg/L	1	8/20/2010 7:01:10 PM
Magnesium	135000	5000		µg/L	1	8/20/2010 7:01:10 PM
Manganese	10500	10.0		µg/L	1	8/20/2010 7:01:10 PM
Nickel	267	30.0		µg/L	1	8/20/2010 7:01:10 PM
Potassium	21600	5000		µg/L	1	8/20/2010 7:01:10 PM
Silver	ND	10.0		µg/L	1	8/20/2010 7:01:10 PM
Sodium	63200	5000		µg/L	1	8/20/2010 7:01:10 PM
Vanadium	196	30.0		µg/L	1	8/20/2010 7:01:10 PM
Zinc	895	10.0		µg/L	1	8/20/2010 7:01:10 PM
<b>ASP TOTAL METALS BY ICP-MS</b>						
				<b>200.8ASP</b>	<b>(E200.8)</b>	Analyst: DEY
Antimony	ND	5.0		µg/L	1	8/23/2010 9:41:00 AM
Arsenic	14	5.0		µg/L	1	8/23/2010 9:41:00 AM
Lead	230	3.0		µg/L	1	8/23/2010 9:41:00 AM
Selenium	6.4	3.0		µg/L	1	8/23/2010 9:41:00 AM
Thallium	11	3.0		µg/L	1	8/23/2010 9:41:00 AM
<b>TOTAL MERCURY WATERS ASP</b>						
				<b>245.2WTASP</b>	<b>(E245.2)</b>	Analyst: ALW
Mercury	0.679	0.200		µg/L	1	8/4/2010 11:56:00 AM
<b>TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005</b>						
				<b>8270_ASPTCL_W</b>	<b>(SW3520)</b>	Analyst: LD
Phenol	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Bis(2-chloroethyl)ether	ND	10		µg/L	1	7/26/2010 2:35:00 AM
2-Chlorophenol	ND	10		µg/L	1	7/26/2010 2:35:00 AM
1,3-Dichlorobenzene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
1,4-Dichlorobenzene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
1,2-Dichlorobenzene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
2-Methylphenol	ND	10		µg/L	1	7/26/2010 2:35:00 AM
N-Nitrosodi-n-propylamine	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Hexachloroethane	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Nitrobenzene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Isophorone	ND	10		µg/L	1	7/26/2010 2:35:00 AM

Approved By: PJH

Date: 8-24-10

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD

Client Sample ID: Dup at MW-1

Lab Order: U1007294

Collection Date: 7/15/2010 2:30:00 PM

Project: 153 Fillmore Ave

Lab ID: U1007294-007

Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005</b>				<b>8270_ASPTCL_W</b>	<b>(SW3520)</b>	Analyst: LD
2-Nitrophenol	ND	10		µg/L	1	7/26/2010 2:35:00 AM
2,4-Dimethylphenol	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Bis(2-chloroethoxy)methane	ND	10		µg/L	1	7/26/2010 2:35:00 AM
2,4-Dichlorophenol	ND	10		µg/L	1	7/26/2010 2:35:00 AM
1,2,4-Trichlorobenzene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Naphthalene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
4-Chloroaniline	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Hexachlorobutadiene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
4-Chloro-3-methylphenol	ND	10		µg/L	1	7/26/2010 2:35:00 AM
2-Methylnaphthalene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Hexachlorocyclopentadiene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
2,4,6-Trichlorophenol	ND	10		µg/L	1	7/26/2010 2:35:00 AM
2,4,5-Trichlorophenol	ND	10		µg/L	1	7/26/2010 2:35:00 AM
2-Chloronaphthalene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
2-Nitroaniline	ND	24		µg/L	1	7/26/2010 2:35:00 AM
Dimethyl phthalate	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Acenaphthylene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
2,6-Dinitrotoluene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
3-Nitroaniline	ND	24		µg/L	1	7/26/2010 2:35:00 AM
Acenaphthene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
2,4-Dinitrophenol	ND	24		µg/L	1	7/26/2010 2:35:00 AM
4-Nitrophenol	ND	24		µg/L	1	7/26/2010 2:35:00 AM
Dibenzofuran	ND	10		µg/L	1	7/26/2010 2:35:00 AM
2,4-Dinitrotoluene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Diethyl phthalate	ND	10		µg/L	1	7/26/2010 2:35:00 AM
4-Chlorophenyl phenyl ether	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Fluorene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
4-Nitroaniline	ND	24		µg/L	1	7/26/2010 2:35:00 AM
4,6-Dinitro-2-methylphenol	ND	24		µg/L	1	7/26/2010 2:35:00 AM
N-Nitrosodiphenylamine	ND	10		µg/L	1	7/26/2010 2:35:00 AM
4-Bromophenyl phenyl ether	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Hexachlorobenzene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Pentachlorophenol	ND	24		µg/L	1	7/26/2010 2:35:00 AM
Phenanthrene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Anthracene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Carbazole	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Di-n-butyl phthalate	2	10	J	µg/L	1	7/26/2010 2:35:00 AM
Fluoranthene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Pyrene	ND	10		µg/L	1	7/26/2010 2:35:00 AM

Approved By: *PH*

Date: *8-24-10*

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-007

Client Sample ID: Dup at MW-1  
 Collection Date: 7/15/2010 2:30:00 PM  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>TCL-SEMIVOL ORGANICS BY NYSDEC ASP 2005</b>		<b>8270_ASPTCL_W</b>		<b>(SW3520)</b>		Analyst: LD
Butyl benzyl phthalate	ND	10		µg/L	1	7/26/2010 2:35:00 AM
3,3'-Dichlorobenzidine	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Benz(a)anthracene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Chrysene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Bis(2-ethylhexyl)phthalate	5	10	J	µg/L	1	7/26/2010 2:35:00 AM
Di-n-octyl phthalate	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Benzo(b)fluoranthene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Benzo(k)fluoranthene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Benzo(a)pyrene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Indeno(1,2,3-cd)pyrene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Dibenz(a,h)anthracene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Benzo(g,h,i)perylene	ND	10		µg/L	1	7/26/2010 2:35:00 AM
(3+4)-Methylphenol	ND	10		µg/L	1	7/26/2010 2:35:00 AM
Bis(2-chloroisopropyl)ether	ND	10		µg/L	1	7/26/2010 2:35:00 AM
TIC: 1,2-Benzenedicarboxylic acid, bis(2-meth	2.6	0		µg/L	1	7/26/2010 2:35:00 AM
TIC: Cyclic octaatomic sulfur	5.3	0		µg/L	1	7/26/2010 2:35:00 AM
TIC: unknown	2.1	0		µg/L	1	7/26/2010 2:35:00 AM
<b>ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260</b>		<b>8260ASP_TCL_W</b>				Analyst: LEF
Chloromethane	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
Vinyl chloride	3	5.0	J	µg/L	1	7/27/2010 1:53:00 AM
Bromomethane	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
Chloroethane	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
Acetone	ND	10		µg/L	1	7/27/2010 1:53:00 AM
1,1-Dichloroethene	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
Carbon disulfide	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
Methylene chloride	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
1,1-Dichloroethane	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
2-Butanone	ND	10		µg/L	1	7/27/2010 1:53:00 AM
cis-1,2-Dichloroethene	13	5.0		µg/L	1	7/27/2010 1:53:00 AM
Chloroform	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
Carbon tetrachloride	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
Benzene	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
1,2-Dichloroethane	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
Trichloroethene	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
1,2-Dichloropropane	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM

Approved By: PH

Date: 8-24-10

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD

Client Sample ID: Dup at MW-1

Lab Order: U1007294

Collection Date: 7/15/2010 2:30:00 PM

Project: 153 Fillmore Ave

Lab ID: U1007294-007

Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260</b>		<b>8260ASP_TCL_W</b>		Analyst: LEF		
Bromodichloromethane	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/27/2010 1:53:00 AM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
Toluene	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
2-Hexanone	ND	10		µg/L	1	7/27/2010 1:53:00 AM
Tetrachloroethene	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
Dibromochloromethane	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
Chlorobenzene	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
Ethylbenzene	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
m,p-Xylene	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
o-Xylene	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
Styrene	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
Bromoform	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	7/27/2010 1:53:00 AM

**NOTES:**

TICS: No compounds were detected.

Approved By: *PH*

Date: *8-24-10*

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-008

Client Sample ID: ULI Trip Blank  
 Collection Date: 7/15/2010  
 Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260</b>		<b>8260ASP_TCL_W</b>		Analyst: LEF		
Chloromethane	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
Vinyl chloride	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
Bromomethane	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
Chloroethane	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
Acetone	ND	10		µg/L	1	7/27/2010 2:32:00 AM
1,1-Dichloroethene	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
Carbon disulfide	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
Methylene chloride	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
1,1-Dichloroethane	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
2-Butanone	ND	10		µg/L	1	7/27/2010 2:32:00 AM
cis-1,2-Dichloroethene	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
Chloroform	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
Carbon tetrachloride	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
Benzene	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
1,2-Dichloroethane	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
Trichloroethene	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
1,2-Dichloropropane	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
Bromodichloromethane	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/27/2010 2:32:00 AM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
Toluene	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
2-Hexanone	ND	10		µg/L	1	7/27/2010 2:32:00 AM
Tetrachloroethene	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
Dibromochloromethane	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
Chlorobenzene	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
Ethylbenzene	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
m,p-Xylene	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
o-Xylene	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
Styrene	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
Bromoform	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	7/27/2010 2:32:00 AM

**NOTES:**

TICS: No compounds were detected.

Approved By: PH

Date: 8-24-10

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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: 24-Aug-10

CLIENT: Stearns & Wheler GHD  
 Lab Order: U1007294  
 Project: 153 Fillmore Ave  
 Lab ID: U1007294-009

Client Sample ID: Holding Blank  
 Collection Date: 7/16/2010 12:00:00 PM

Matrix: WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
<b>ASP/CLP TCL VOLATILES IN WATER BY METHOD 8260</b>		<b>8260ASP_TCL_W</b>		Analyst: LEF		
Chloromethane	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
Vinyl chloride	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
Bromomethane	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
Chloroethane	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
Acetone	ND	10		µg/L	1	7/27/2010 3:11:00 AM
1,1-Dichloroethene	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
Carbon disulfide	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
Methylene chloride	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
trans-1,2-Dichloroethene	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
1,1-Dichloroethane	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
2-Butanone	ND	10		µg/L	1	7/27/2010 3:11:00 AM
cis-1,2-Dichloroethene	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
Chloroform	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
1,1,1-Trichloroethane	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
Carbon tetrachloride	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
Benzene	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
1,2-Dichloroethane	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
Trichloroethene	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
1,2-Dichloropropane	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
Bromodichloromethane	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
4-Methyl-2-pentanone	ND	10		µg/L	1	7/27/2010 3:11:00 AM
cis-1,3-Dichloropropene	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
Toluene	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
trans-1,3-Dichloropropene	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
1,1,2-Trichloroethane	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
2-Hexanone	ND	10		µg/L	1	7/27/2010 3:11:00 AM
Tetrachloroethene	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
Dibromochloromethane	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
Chlorobenzene	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
Ethylbenzene	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
m,p-Xylene	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
o-Xylene	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
Styrene	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
Bromoform	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM
1,1,2,2-Tetrachloroethane	ND	5.0		µg/L	1	7/27/2010 3:11:00 AM

**NOTES:**

TICS: No compounds were detected.

Approved By: PH

Date: 8-24-10

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

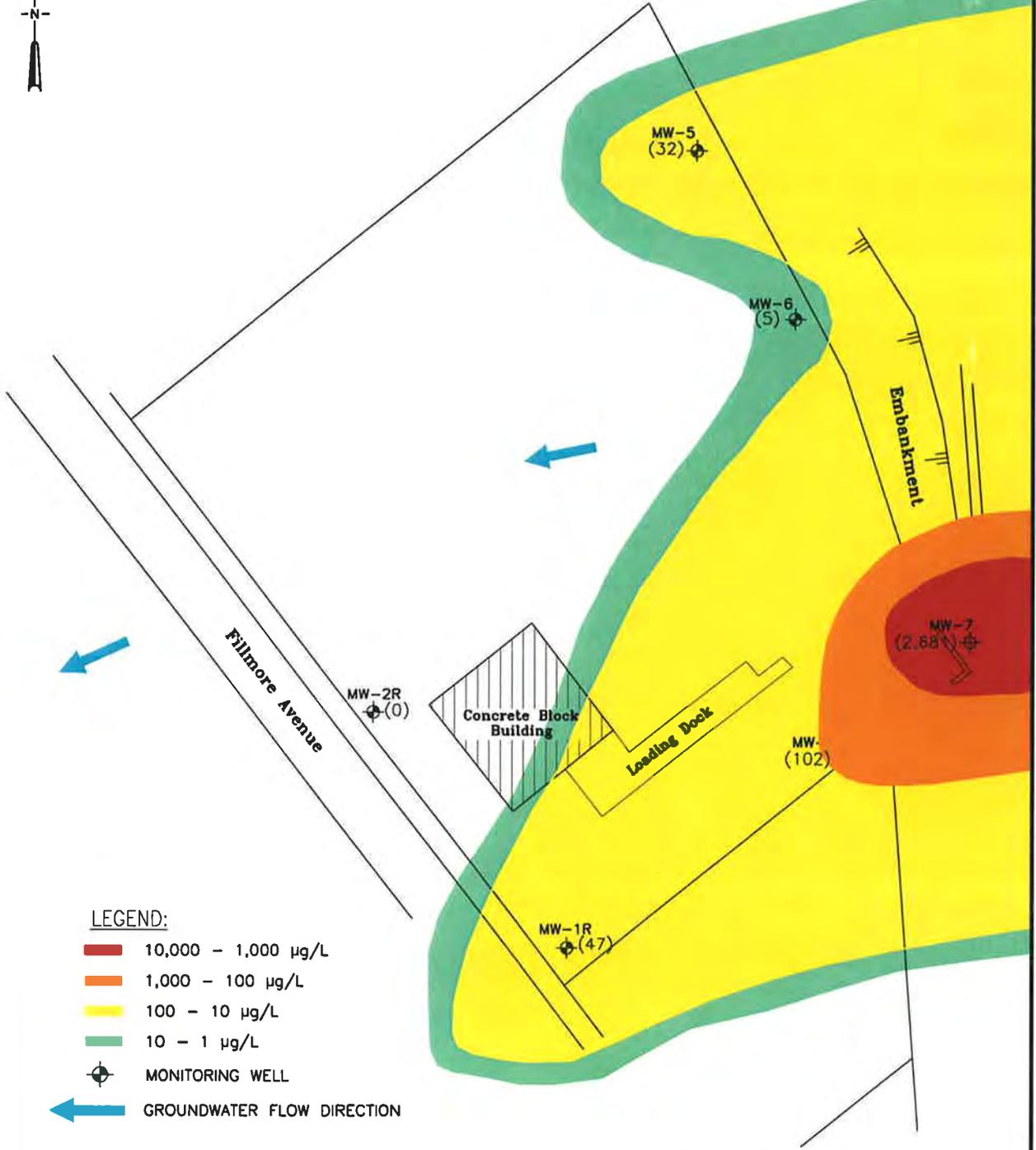
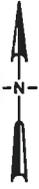
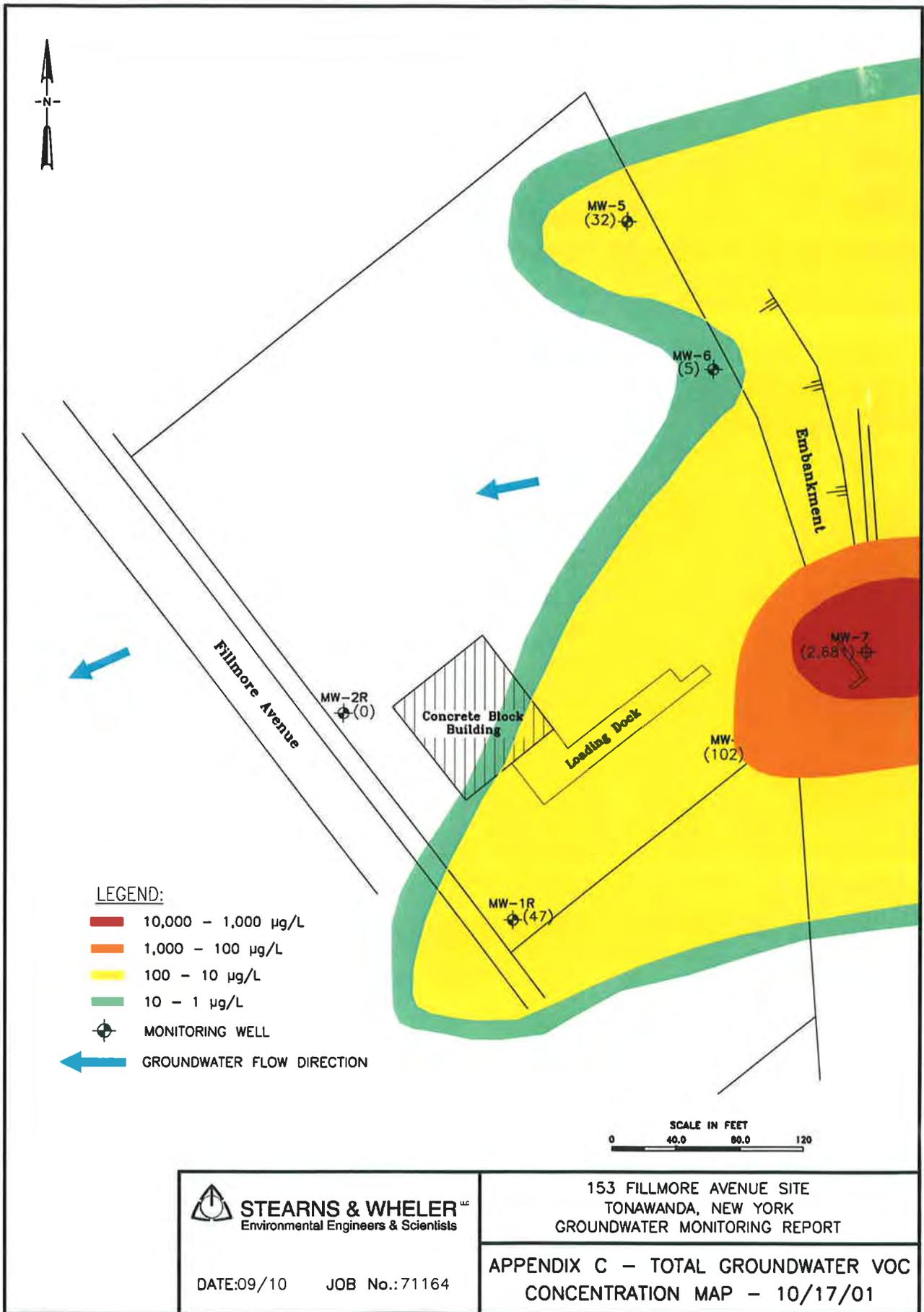


# **APPENDIX C**

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## **Historical Groundwater Total VOC Concentration Figures**



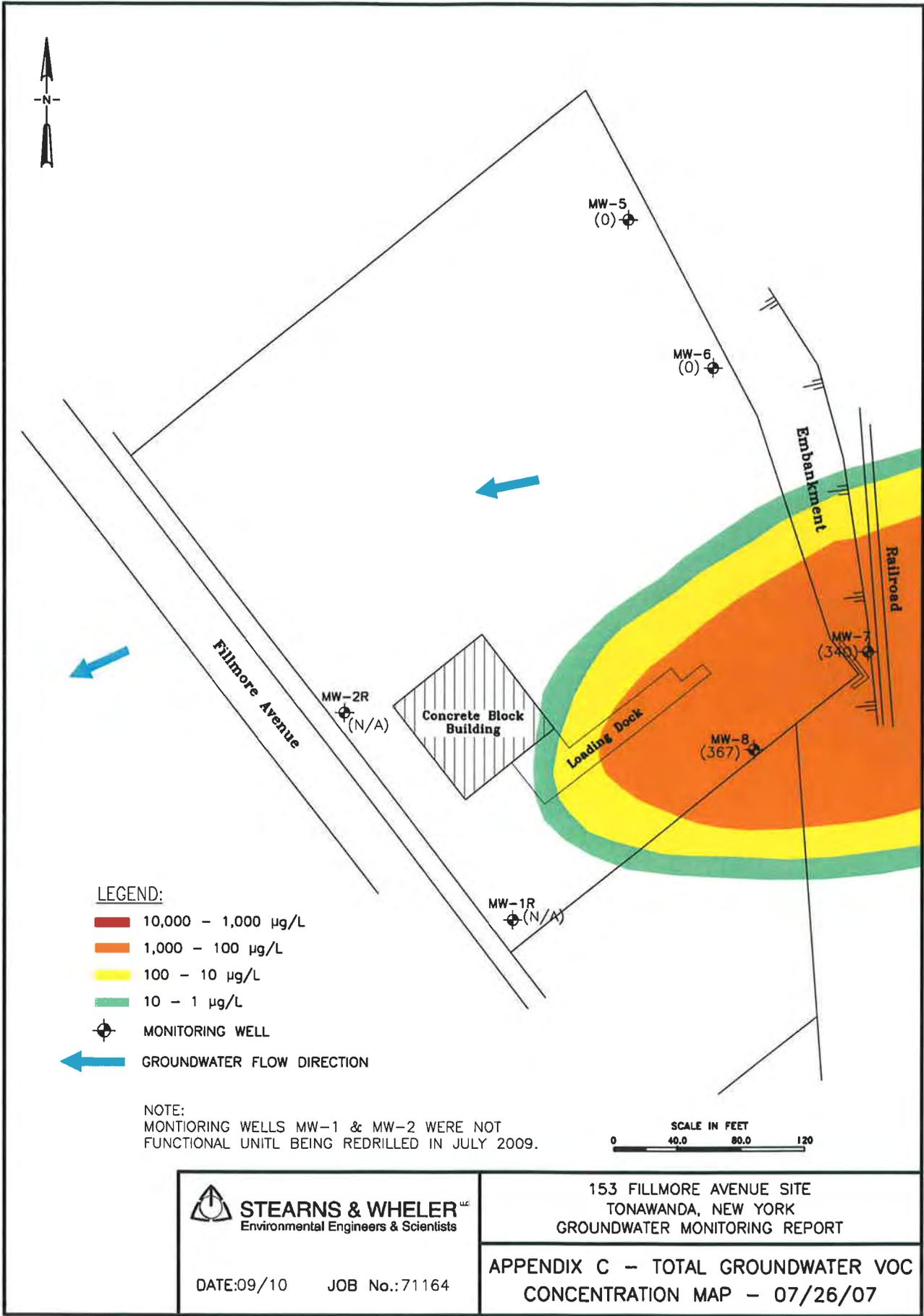


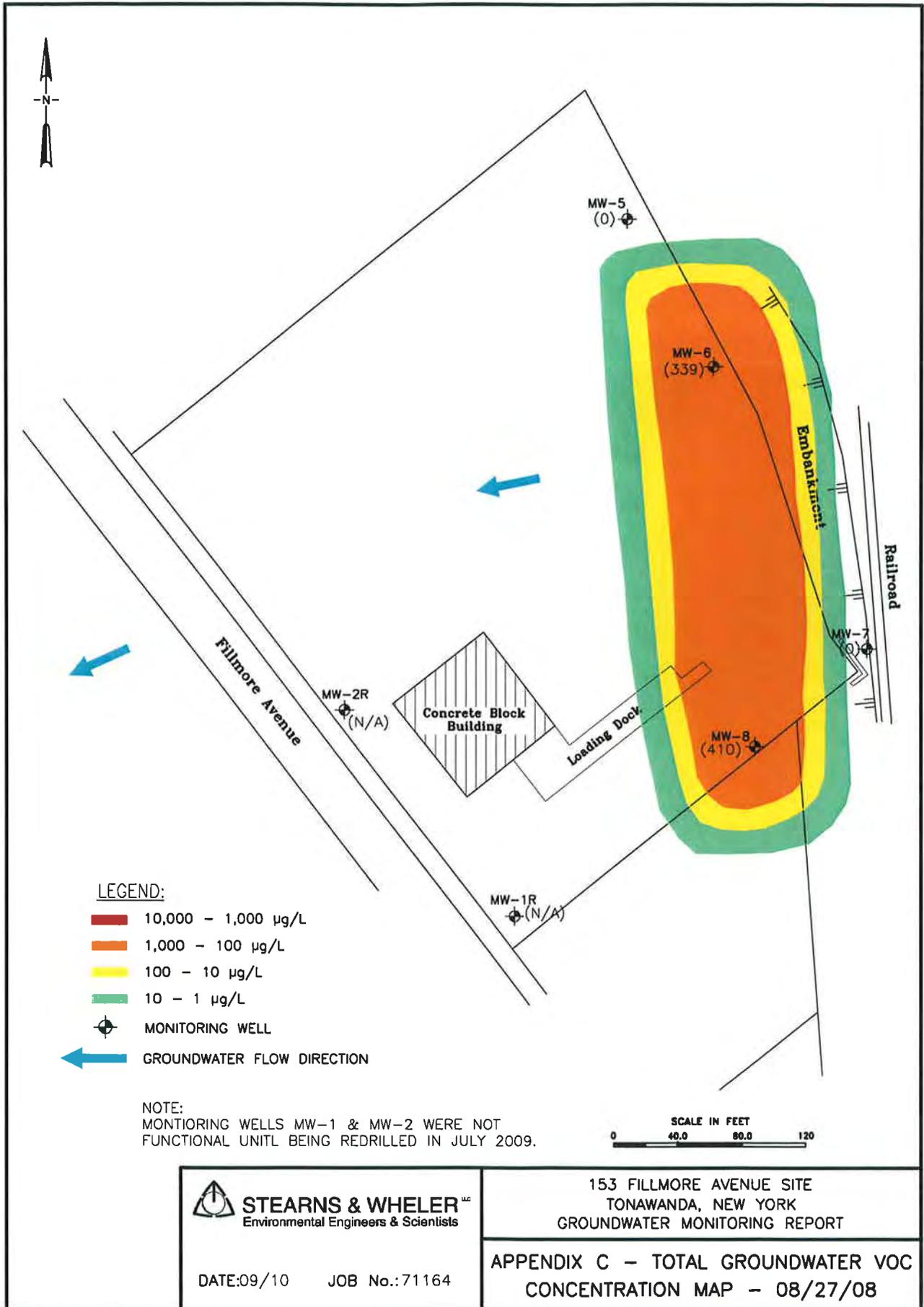
 **STEARNS & WHEELER**<sup>INC</sup>  
Environmental Engineers & Scientists

DATE:09/10      JOB No.:71164

153 FILLMORE AVENUE SITE  
TONAWANDA, NEW YORK  
GROUNDWATER MONITORING REPORT

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



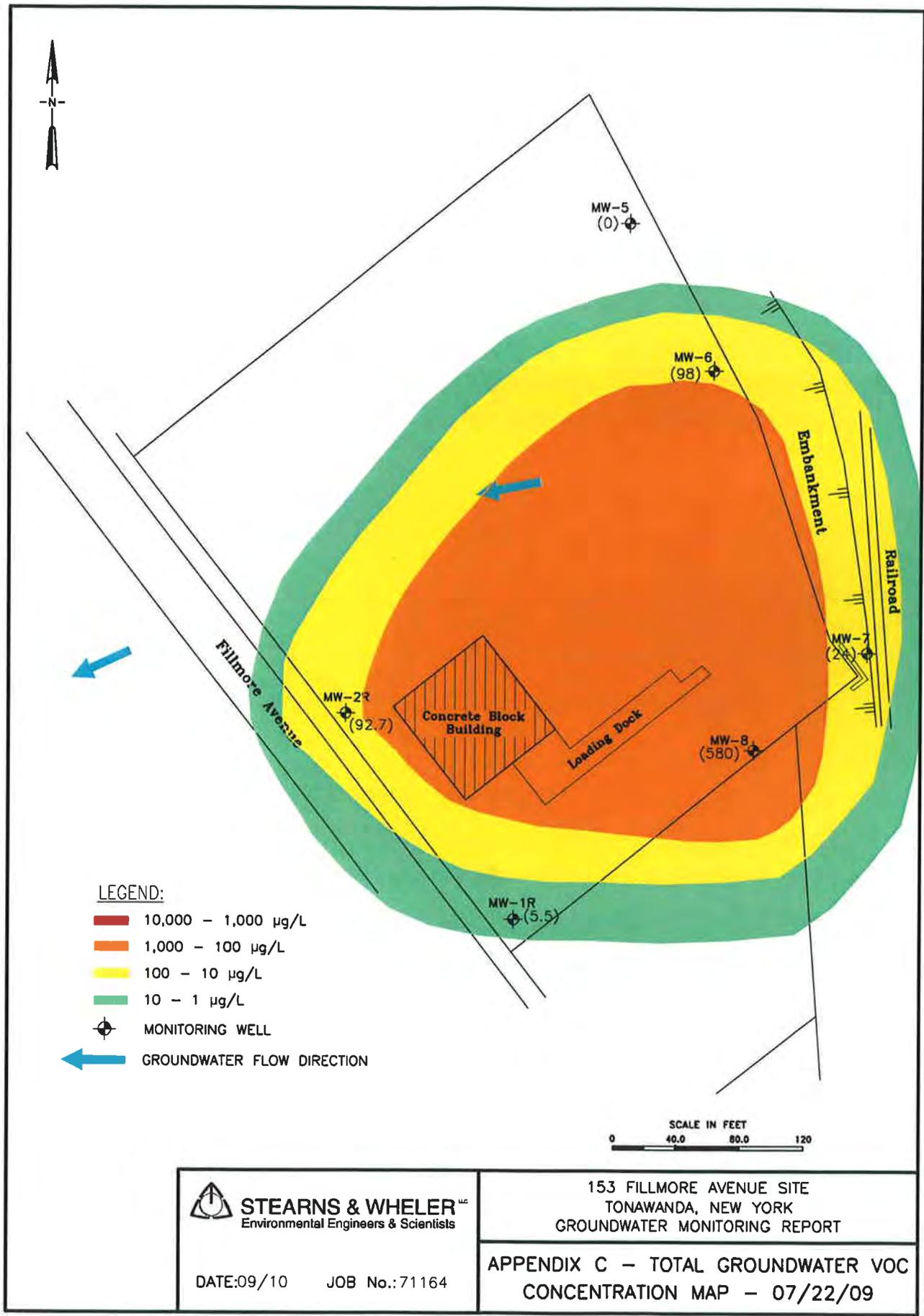



**STEARNS & WHEELER**<sup>INC</sup>  
 Environmental Engineers & Scientists

DATE:09/10      JOB No.:71164

153 FILLMORE AVENUE SITE  
 TONAWANDA, NEW YORK  
 GROUNDWATER MONITORING REPORT

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



**LEGEND:**

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

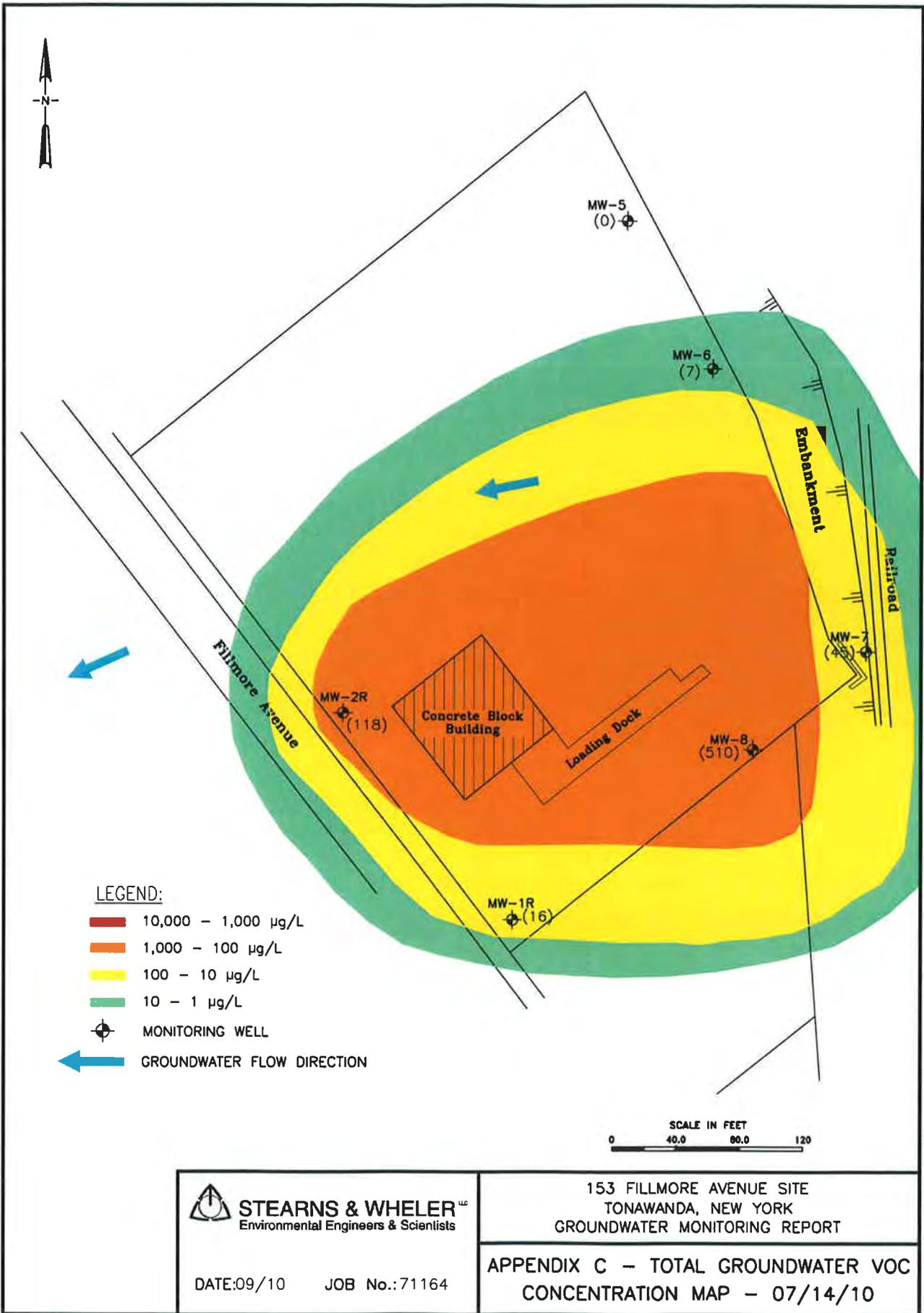

**STEARNS & WHEELER**<sup>INC</sup>  
 Environmental Engineers & Scientists

DATE: 09/10      JOB No.: 71164

153 FILLMORE AVENUE SITE  
 TONAWANDA, NEW YORK  
 GROUNDWATER MONITORING REPORT

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



**LEGEND:**

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

MONITORING WELL

GROUNDWATER FLOW DIRECTION

SCALE IN FEET  
0 40.0 80.0 120



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

DATE:09/10

JOB No.:71164

153 FILLMORE AVENUE SITE  
TONAWANDA, NEW YORK  
GROUNDWATER MONITORING REPORT

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

# **APPENDIX D**

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## **Data Usability Summary Report**



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

## **Data Usability Summary Report**

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

153 Fillmore Ave.  
Upstate Laboratories SDG#SW19  
October 12, 2010  
Sampling date: 07/15/2010

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

153 Fillmore Ave.  
SDG# SW19

## **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#SW19, Upstate laboratories # U1007294, submitted to Vali-Data of WNY, LLC on September 1, 2010. 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.

### **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.

### **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 13.6°C which is outside the

153 Fillmore Ave.

SDG# SW19

acceptance window ( $4 \pm 2$  Degrees °C) thus all target analytes in the samples should be qualified as estimated. The pH of MW-2 was outside QC limit, thus all detects should be qualified as estimated and non-detects as unusable.

**INTERNAL STANDARD (IS)**

All criteria were met.

**SURROGATE SPIKE RECOVERIES**

All criteria were met.

**METHOD BLANK**

All criteria were met.

**FIELD DUPLICATE SAMPLE PRECISION**

All criteria were met.

**LABORATORY CONTROL SAMPLES**

All criteria were met.

**MS/MSD**

All criteria were met.

**COMPOUND QUANTITATION**

All criteria were met.

**INITIAL CALIBRATION**

All criteria were met.

**CONTINUING CALIBRATION**

All criteria were met.

**GC/MS PERFORMANCE CHECK**

All criteria were met.

**SEMIVOLATILE ORGANIC COMPOUNDS**

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

- Data Completeness
- Narrative and Data Reporting Forms
- Chain of Custody and Traffic Reports
- Holding Times
- Internal Standard (IS) Area Performance
- Surrogate Spike Recoveries
- Method Blank
- Field Duplicate Sample Precision
- Laboratory Control Samples

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SDG# SW19

- 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, Internal Standards, Surrogate Spike Recoveries, 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 areas of some of the internal standards on Form 8C are incorrectly recorded due to a software issue. This does not affect the data because the actual IS was used in the calculations.

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

All criteria were met.

#### **HOLDING TIMES**

All holding times were met. (See VOC, above)

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

All criteria were met except the area of 1,4-Dichlorobenzene-d<sub>4</sub> was outside QC limits, low, in samples MW-2, MW-5, MW-8, MW-8MS/SD, MW-2RE and MW-5RE. The area of Naphthalene-d<sub>8</sub> was outside QC limits, low, in samples MW-2, MW-8, MW-8MS/SD, MW-2RE and MW-5RE. The area of Acenaphthene-d<sub>10</sub> was outside QC limits, low in samples MW-2, MW-8, MW-8MS/SD, MW-2RE and MW-5RE. All associated target analytes should be qualified as estimated or undetected estimated in these samples. (See Narrative and Reporting Forms, above)

#### **SURROGATE SPIKE RECOVERIES**

All criteria were met except the %Rec was outside QC limits for all surrogates in MW-2RE, due to dilution, so no further action is required.

The %Rec was outside QC limits, below 10%, for all surrogates in MW-2. All detected target analytes should be qualified as estimated and non-detects should be qualified as unusable.

The %Rec of Terphenyl-d<sub>14</sub> was outside QC limits in sample MW-1 and Dup@MW-1. The %Rec of 2-Fluorobiphenyl was outside QC limits in sample MW-1. The base/neutral target analytes in MW-1 should be qualified as estimated or undetected estimated. No further action is required for Dup@MW-1 because ASP allows for one surrogate to be outside QC limits per fraction.

**METHOD BLANK**

All criteria were met.

**FIELD DUPLICATE SAMPLE PRECISION**

All criteria were met except Di-n-butylphthalate was detected in Dup@MW-1 and not in MW-1.

**LABORATORY CONTROL SAMPLES**

All criteria were met except Bis(2-ethylhexyl)phthalate was detected above the MDL, below the MRL and is qualified as estimated.

**MS/MSD**

All criteria were met except the %Rec of 2,4-Dinitrotoluene and 4-Nitrophenol were outside QC limits, high in MW-1MSD.

**COMPOUND QUANTITATION**

All criteria were met. (see Narrative and Reporting Forms, above)

**INITIAL CALIBRATION**

All criteria were met except the %RSD of Benzo (b) fluoranthene was outside the ASP QC limits. 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 Dibenzo (a,h)anthracene in continuing calibration performed on 7/25/10 at 17:57 and Pyrene in continuing calibration performed on 7/26/10 at 14:03 were 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 in continuing calibration performed on 7/26/10 at 14:03 was outside ASP outer QC limits and should be qualified as estimated in all associated samples, blanks and spikes.

**GC/MS PERFORMANCE CHECK**

All criteria were met.

**METALS**

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

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

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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, Laboratory Control Samples, MS/MSD, Duplicate, Serial Dilution and Calibration.

#### **DATA COMPLETENESS**

All criteria were met.

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

All criteria were met except one of the analysis run logs reported all samples run at the same time. This does not affect the usability of the data.

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

All criteria were met.

#### **HOLDING TIMES**

All holding times were met. The pH of MW-2 was outside QC limit, thus all detects should be qualified as estimated and non-detects as unusable. (see VOC, above)

#### **METHOD BLANK**

All criteria were met.

#### **LABORATORY CONTROL SAMPLE**

All criteria were met except the %Rec of Sb was outside QC limits, high and the %Rec of Ag was outside QC limits, low. Samples with detects of Sb should be qualified as estimated. Ag should be qualified as estimated or undetected estimated in the samples.

#### **MS/MSD**

All criteria were met except the %Rec of Fe and Zn were outside QC limits, low, in MW-1MS. The %Rec of these metals remained outside QC limits in the post digest sample. The %Rec of Zn was <30% so Zn should be qualified as unusable in MW-1. Fe should be qualified as estimated in MW-1. These target analytes were qualified with an 'N' by Upstate laboratories to indicate the variance from QC limits.

#### **DUPLICATE**

All criteria were met except the %RPD of Pb and Zn were outside QC limit and are qualified with an '\*\*'.

#### **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 Al, Ba, Ca, Co, Cu, Fe, Pb, Mg, Mn, Ni, V and Zn were outside QC limits. The concentrations of Al, Ca, Fe, Pb, Mn and Zn were >50x MDL so these target analytes were

153 Fillmore Ave.

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qualified with an 'E' in the samples.

#### **COMPOUND QUANTITATION**

All criteria were met.

#### **CALIBRATION**

All criteria were met except Sb, Pb, Tl, K and Na were not spiked in ICP. These target analytes should be qualified as estimated.

The %Rec of Sb was outside QC limits, > 125%, in continuing calibration 1-4, thus should be qualified as unusable in all associated samples.

The %Rec of As was outside QC limits, high, in continuing calibration 2 and 3, thus all associated detects should be qualified as estimated.

#### **MERCURY**

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

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

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

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

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

#### **DATA COMPLETENESS**

All criteria were met.

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

All criteria were met except one of the analysis run logs reported all samples run at the same time. This does not affect the usability of the data. Some of the raw data was illegible. Updated pages are attached.

#### **CHAIN OF CUSTODY**

All criteria were met.

**HOLDING TIMES**

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

**METHOD BLANK**

All criteria were met.

**LABORATORY CONTROL SAMPLES**

No laboratory control sample was performed. The ICV was within QC limits.

**MS/MSD**

All criteria were met except the %Rec of Hg was outside QC limits, high and qualified in the samples with an 'N'.

**DUPLICATE**

All criteria were met.

**FIELD DUPLICATE**

All criteria were met.

**COMPOUND QUANTITATION**

All criteria were met.

**CALIBRATION**

All criteria were met.

# **APPENDIX E**

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## **Part 375 Soil Cleanup Objectives**



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

(b) Restricted use soil cleanup objectives.

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

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

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

Contaminant	CAS Number	Protection of Public Health				Protection of Ecological Resources	Protection of Ground-water
		Residential	Restricted-Residential	Commercial	Industrial		
delta-BHC	319-86-8	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	0.04 <sup>g</sup>	0.25
Dibenzofuran	132-64-9	14	59	350	1,000 <sup>c</sup>	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 <sup>i</sup>	24 <sup>i</sup>	200 <sup>i</sup>	920 <sup>i</sup>	NS	102
Endosulfan II	33213-65-9	4.8 <sup>i</sup>	24 <sup>i</sup>	200 <sup>i</sup>	920 <sup>i</sup>	NS	102
Endosulfan sulfate	1031-07-8	4.8 <sup>i</sup>	24 <sup>i</sup>	200 <sup>i</sup>	920 <sup>i</sup>	NS	1,000 <sup>e</sup>
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
<b>Semivolatiles</b>							
Acenaphthene	83-32-9	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	20	98
Acenaphthylene	208-96-8	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	107
Anthracene	120-12-7	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	1,000 <sup>c</sup>
Benz(a)anthracene	56-55-3	1 <sup>f</sup>	1 <sup>f</sup>	5.6	11	NS	1 <sup>f</sup>
Benzo(a)pyrene	50-32-8	1 <sup>f</sup>	1 <sup>f</sup>	1 <sup>f</sup>	1.1	2.6	22
Benzo(b)fluoranthene	205-99-2	1 <sup>f</sup>	1 <sup>f</sup>	5.6	11	NS	1.7
Benzo(g,h,i)perylene	191-24-2	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	1,000 <sup>c</sup>
Benzo(k)fluoranthene	207-08-9	1	3.9	56	110	NS	1.7
Chrysene	218-01-9	1 <sup>f</sup>	3.9	56	110	NS	1 <sup>f</sup>
Dibenz(a,h)anthracene	53-70-3	0.33 <sup>e</sup>	0.33 <sup>e</sup>	0.56	1.1	NS	1,000 <sup>c</sup>
Fluoranthene	206-44-0	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	1,000 <sup>c</sup>
Fluorene	86-73-7	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	30	386
Indeno(1,2,3-cd)pyrene	193-39-5	0.5 <sup>f</sup>	0.5 <sup>f</sup>	5.6	11	NS	8.2
m-Cresol	108-39-4	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.33 <sup>e</sup>
Naphthalene	91-20-3	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	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 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.33 <sup>e</sup>
p-Cresol	106-44-5	34	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.33 <sup>e</sup>
Pentachlorophenol	87-86-5	2.4	6.7	6.7	55	0.8 <sup>e</sup>	0.8 <sup>e</sup>
Phenanthrene	85-01-8	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	1,000 <sup>e</sup>
Phenol	108-95-2	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	30	0.33 <sup>e</sup>
Pyrene	129-00-0	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	1,000 <sup>e</sup>
<b>Volatiles</b>							
1,1,1-Trichloroethane	71-55-6	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.68
1,1-Dichloroethane	75-34-3	19	26	240	480	NS	0.27
1,1-Dichloroethene	75-35-4	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.33
1,2-Dichlorobenzene	95-50-1	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	1.1
1,2-Dichloroethane	107-06-2	2.3	3.1	30	60	10	0.02 <sup>f</sup>
cis-1,2-Dichloroethene	156-59-2	59	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.25
trans-1,2-Dichloroethene	156-60-5	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.19
1,3-Dichlorobenzene	541-73-1	17	49	280	560	NS	2.4
1,4-Dichlorobenzene	106-46-7	9.8	13	130	250	20	1.8
1,4-Dioxane	123-91-1	9.8	13	130	250	0.1 <sup>e</sup>	0.1 <sup>e</sup>
Acetone	67-64-1	100 <sup>a</sup>	100 <sup>b</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	2.2	0.05
Benzene	71-43-2	2.9	4.8	44	89	70	0.06
Butylbenzene	104-51-8	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	12
Carbon tetrachloride	56-23-5	1.4	2.4	22	44	NS	0.76
Chlorobenzene	108-90-7	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	40	1.1
Chloroform	67-66-3	10	49	350	700	12	0.37
Ethylbenzene	100-41-4	30	41	390	780	NS	1
Hexachlorobenzene	118-74-1	0.33 <sup>e</sup>	1.2	6	12	NS	3.2
Methyl ethyl ketone	78-93-3	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	100 <sup>a</sup>	0.12

**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 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	0.93
Methylene chloride	75-09-2	51	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	12	0.05
n-Propylbenzene	103-65-1	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	3.9
sec-Butylbenzene	135-98-8	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	11
tert-Butylbenzene	98-06-6	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	NS	5.9
Tetrachloroethene	127-18-4	5.5	19	150	300	2	1.3
Toluene	108-88-3	100 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	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 <sup>a</sup>	100 <sup>a</sup>	500 <sup>b</sup>	1,000 <sup>c</sup>	0.26	1.6

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

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

**Footnotes**

- <sup>a</sup> The SCOs for residential, restricted-residential and ecological resources use were capped at a maximum value of 100 ppm. See TSD section 9.3.
- <sup>b</sup> The SCOs for commercial use were capped at a maximum value of 500 ppm. See TSD section 9.3.
- <sup>c</sup> The SCOs for industrial use and the protection of groundwater were capped at a maximum value of 1000 ppm. See TSD section 9.3.
- <sup>d</sup> The SCOs for metals were capped at a maximum value of 10,000 ppm. See TSD section 9.3.
- <sup>e</sup> For constituents where the calculated SCO was lower than the contract required quantitation limit (CRQL), the CRQL is used as the SCO value.
- <sup>f</sup> 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.
- <sup>g</sup> This SCO is derived from data on mixed isomers of BHC.
- <sup>h</sup> 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.
- <sup>i</sup> This SCO is for the sum of endosulfan I, endosulfan II, and endosulfan sulfate.
- <sup>j</sup> This SCO is the lower of the values for mercury (elemental) or mercury (inorganic salts). See TSD Table 5.6-1.