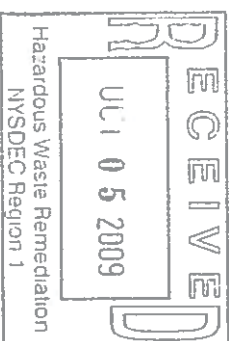




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September 29, 2009

Mr. John Sheehan, Project Manager
New York State Dept. of Environmental Conservation
Division of Environmental Remediation, Region One
Stony Brook University
50 Circle Road
Stony Brook, New York 11790-3409



Reference: 175 Roger Avenue LLC, Inwood, Nassau County
Index # A1-0543-0406, Site # C130164

SCANNED

Dear Mr. Sheehan:

Please find enclosed a copy of the Remedial Investigation Report for the above referenced Brownfield Project. This report is being provided for placement in the document repository at NYSDEC Region 1 Headquarters in Stony Brook, New York.

If you have any questions or need any additional information, please do not hesitate to contact me at 631-451-0617 or email at jed.myers@atcassociates.com.

Very truly yours,
ATC Associates, Inc.

A handwritten signature in black ink, appearing to read "Jed Myers".

Jed A. Myers, Ph.D.
Senior Project Manager



**NYSDEC BROWNFIELD CLEANUP PROGRAM
REMEDIAL INVESTIGATION REPORT
175 ROGER AVENUE
INWOOD, NEW YORK 11096**

**INDEX # A1-0543-0406
SITE # C130164**

VOLUME I

Prepared For:

**175 ROGER AVENUE LLC
17 State Street, 9th Floor
New York, New York 10004**

July 8, 2009

**Prepared by:
ATC Associates Inc.
104 East 25th Street
New York, NY 10010**

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July 26, 2007 Laboratory Groundwater Analytical – AmeriSci Job Number 0708-00012
July 26, 2007 Laboratory Groundwater Analytical – AmeriSci Job Number 0707-00238
August 1, 2007 Laboratory Groundwater Analytical – AmeriSci Job Number 0708-00015
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August 7, 2007 Laboratory Groundwater Analytical – AmeriSci Job Number 0708-00051
August 14, 2007 Laboratory Groundwater Analytical – AmeriSci Job Number 0708-00120
August 29 & 30, 2007 Laboratory Air Analytical – STL Burlington Job Number NY121709

VOLUME III – 2008 LABORATORY ANALYTICAL REPORTS

- May 20, 22, 23, 27 & 28, 2008 Laboratory Soil Analytical – AmeriSci Job Number 0805-00273
May 29 & 30 and June 2, 3 & 4, 2008 Laboratory Soil Analytical – AmeriSci Job Number 0806-00072
June 5, 2008 Laboratory Groundwater Analytical – AmeriSci Job Number 0806-00061
June 9, 2008 Laboratory Groundwater Analytical – AmeriSci Job Number 0806-00118
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June 24, 2008 Laboratory Air Analytical – TestAmerica Job Number NY126207

EXECUTIVE SUMMARY

On December 9, 2005, 175 Roger Avenue LLC submitted a Brownfield Cleanup Application for 175 Roger Avenue, Inwood, New York ("Site"). The application was submitted to the New York State Department of Environmental Conservation (NYSDEC) under the New York State Brownfield Cleanup Program. The NYSDEC deemed the application complete on April 4, 2006 and the Brownfield Cleanup Agreement was executed on November 8, 2006. The Site is listed under the Brownfield program as Index # A1-0543-0406 and Site # C130164.

Historically the Site has been used for sheet metal fabrication, warehouse space and automotive repair operations. The Site is approximately 5 acres in size and is improved with an approximately 155,000 square foot, one-story, warehouse building, which is connected to the local sewer and potable water supply systems. The Site was developed in three stages from 1954 through 1967. The Site was used as a "Sheet Metal Fabrication" factory since at least 1961. Rockaway Metal Products occupied the Site from approximately 1971 until circa 1987. The Site was used as a warehouse by various tenants from 1990 through 2004, including the most recent tenant, Long Island Party Rentals. In 2000 the Site was also formerly occupied by Gunter Auto Shop, an auto repair shop.

From the late 1970's through 1987, Rockaway Metal Products, Inc. manufactured sheet metal office cabinets and partitions. As part of daily operations, spent solvents, paint products and waste oil were collected in 55-gallon drums and temporarily stored in an outdoor drum storage area located along the north side of the Site building, east of the loading docks. Subsequently, the drummed liquids were transferred to a permanently stationed steel, 5,000-gallon tanker trailer located on the north exterior of the building, near the underground storage tanks (USTs). On September 4, 1987, Rockaway Metal Products filed for bankruptcy and abandoned the Site. On June 15 and 16, 1992, USEPA personnel conducted a site inspection and discovered the following: approximately 235-240 55-gallon deteriorated and leaking drums, a 5,000-gallon tanker trailer in poor condition, dry wells that appeared to contain sludge materials and USTs that contained potentially flammable liquids. Significant staining was also noted along the northern and southern portion of the Site as a result of the leaking drums and poor housekeeping. From August 1993 through April 1995, approximately 240 55-gallon drums of waste materials were removed from the site. The tanker trailer, one 1,000-gallon heating oil UST located beneath the sidewalk of Gates Avenue on the southeast portion of the Site and UST piping and dispenser systems were also removed from the Site. One 5,000-gallon heating oil UST, one 1,000-gallon xylene and one 1,000-gallon "Solvesso" (a petroleum based solvent) UST were abandoned in place.

A Phase II Environmental Site Assessments (ESA) of the Site was conducted by ATC in May/June 2005. As part of the Phase II ESA, thirty (30) manual soil borings were advanced throughout the Site to depths ranging from 0.5 to 5 feet below ground surface (bgs). Elevated levels of volatile organic compounds (VOCs) were detected in the vicinity of the abandoned USTs. Ten of the thirty soil borings were converted to monitoring wells and sampled. Several VOCs and semi-volatile organic compounds (SVOCs) were detected in the groundwater in the area of the abandoned USTs. Chlorinated VOCs were measured in the groundwater near the southeast corner of the Site building, along Gates Avenue, in excess of NYSDEC groundwater standards. Metals were detected in the groundwater throughout the Site and within in the sediments of each of the Site's nine (9) drywells. VOCs and SVOCs were detected above regulatory levels in the sediment sample from only one of the nine drywells tested. No VOCs, SVOCs or metals were detected at concentrations exceeding regulatory standards in soil samples

collected adjacent to the drywells. In addition, no organic vapors were detected in soil gas samples collected from five locations beneath the concrete slab of the Site building.

In July/August 2007 and May/June 2008, a Site remedial investigation (RI) was completed in accordance with the approved Brownfield Remedial Investigation Workplan (RIWP) dated April 20, 2007 and the RIWP Addendum dated April 30, 2008. The objectives of the RI were to: (1) further characterize previously documented soil and groundwater contamination; (2) delineate the vertical and horizontal extent of petroleum and chlorinated solvent groundwater plumes; (3) assess groundwater flow direction and tidal influence; (4) collect additional site characterization data to evaluate potential remedial options; and (5) evaluate soil vapor intrusion.

The scope of this remedial investigation included the following tasks:

- A site reconnaissance of the building interior to locate potential areas of concern.
- An assessment of the construction details of nine exterior drywells and five existing monitoring wells.
- Verification of the presence of a suspect gasoline underground storage tank (UST) in the southwestern portion of the Site.
- A survey of existing monitoring wells for location and elevation.
- A synoptic round of groundwater level measurements to assess local groundwater flow direction and the influence of tidal conditions on the groundwater levels.
- The installation of nine (9) additional monitoring wells and the collection of groundwater samples from the nine new wells, twelve (12) existing monitoring wells and eleven (11) direct push locations to further delineate the horizontal extent of the petroleum and chlorinated groundwater plume.
- Installation of sixteen (16) direct push deep borings to investigate the vertical extent of a potential chlorinated plume. At each boring location, soil samples were collected at 5 to 10-foot intervals to characterize soil lithology and for laboratory analyses. Following soil characterization, groundwater samples were collected at increasing depths every 5 to 10 feet until confining clay was encountered at approximately 35-feet below grade.
- The performance of slug tests to estimate the hydraulic conductivity and transmissivity of the hydrogeologic units intersecting the monitoring well network.
- Collection and analysis of groundwater samples for dissolved iron and manganese, nitrate, sulfate, methane, alkalinity and total organic carbon to evaluate monitored natural attenuation during the remedy selection. In addition, field parameters measured included dissolved oxygen, oxidation-reduction potential, pH, temperature and conductivity.
- Installation of seventeen (17) soil borings and the collection of soil samples to verify soil sampling results from the 2005 Phase II investigation.
- The collection and analysis of one sediment sample from Drywell 3 to verify drywell sampling results from the 2005 Phase II investigation.
- The collection and analysis of five (5) soil vapor samples near the perimeter of the Site, five (5) sub-slab vapor samples from beneath the on-Site building, and two indoor air and one outdoor air samples to evaluate potential on-Site soil vapor intrusion issues.
- The collection and analysis of four (4) soil vapor samples, three southeast of the Site and one north, across Roger Avenue, to evaluate potential off-Site vapor intrusion issues.
- Evaluation of the data and preparation of this Remedial Investigation Report (RIR).

Based on the results of this remedial investigation, and the intended future use of the Site and surrounding properties, the following areas of concern were identified:

Impacted Soil

Based on soil boring results, petroleum soil impact in excess of NYSDEC Unrestricted Use Soil Cleanup Objectives (UUSCO) was found to be limited to the general area surrounding the previously abandoned USTs. This area is approximately 15,000 square feet and appears to extend beneath a portion of the Site building.

VOCs (acetone, 1,2,4-trimethylbenzene, and xylene) and metals (cadmium, chromium, lead, mercury, nickel and zinc) were found in excess of NYSDEC UUSCO levels in sediment samples retrieved from Drywell 3. The 2005 Phase II investigation results showed metal impact to the remaining eight Drywells in excess of NYSDEC UUSCO levels.

Petroleum Hydrocarbon Groundwater Plume

A petroleum hydrocarbon plume appears to be centered beneath the location of the abandoned USTs. This is consistent with the soil concentrations found in this area of the Site. The plume appears to extend towards the southeast beneath the Site building, and off-Site beyond the south, east and north property lines. Off-Site impact appears to be generally limited to depths greater than 20 feet below grade surface (bgs) and is slightly above NYSDEC groundwater standards and guidance values.

Chlorinated Hydrocarbon Groundwater Plume

A chlorinated hydrocarbon plume is present beneath a large portion of the Site. The source of this chlorinated plume is unknown, but elevated concentrations were measured near the location of the abandoned USTs and former paint spraying booth. The highest concentrations, ranging from 592 ug/L to 22,245 ug/L, were measured at 20 to 30 feet bgs, above a clay confining layer present at 35 feet bgs. The plume appears to extend beyond the Site boundaries towards the south-southeast and northwest, as shown by the concentrations measured in perimeter groundwater samples.

Soil Vapor

Perchloroethylene (PCE) and trichloroethylene (TCE) were measured in sub-slab vapor and soil vapor samples collected along the eastern portion of the Site and off-Site to the southeast and north in excess of New York State Department of Health (NYSDOH) Air Guidance Values (AGVs). These vapor concentrations are consistent with the likely location of the chlorinated groundwater plume beneath the Site. The results suggest potential soil vapor intrusion impact off-site towards the southeast and north.

ATC compared sub-slab vapor concentrations to indoor air concentrations within the Site building. This comparison revealed that generally, concentrations detected in sub-slab vapor were greater than those in indoor air. Additionally, in accordance with the NYSDOH Guidance Matrix 1 and Matrix 2, a comparison was made of sub-slab vapor concentrations and indoor air concentrations for TCE (Matrix 1) and PCE (Matrix 2). These Matrices indicate the action to be taken depending on the contaminant concentrations found in sub-slab vapor and indoor air. Following the NYSDOH Guidance, the comparison of sub-slab vapor to indoor air concentrations of TCE (Matrix 1) indicates that the action to be taken is "monitor/mitigate." The comparison for PCE (Matrix 2) indicates that the action to be taken is "mitigate."

1.0 INTRODUCTION

This Brownfield Remedial Investigation Report (RIR) summarizes the results of the site investigation completed at 175 Roger Avenue, Inwood, New York. This investigation was completed in accordance with the approved Remedial Investigation Work Plan (RIWP) dated April 6, 2007 developed under the NYSDEC Brownfield program (Index #A1-0543-0406, Site #C130164), and a RIWP Addendum dated April 30, 2008 that was developed in response to NYSDEC comments to the July 2007 investigation results.

The objectives of that investigation were to:

1. Further characterize previously documented soil and groundwater contamination.
2. Delineate the vertical and horizontal extent of petroleum and chlorinated solvent groundwater plumes.
3. Assess groundwater flow direction and tidal influence.
4. Evaluate soil vapor intrusion.
5. Collect additional site characterization data to evaluate potential remedial options.

2.0 SITE HISTORY AND DESCRIPTION

2.1 Site Location and Description

The Site address is 175 Roger Avenue, Inwood, Nassau County, New York (Figure 1). According to the Town of Hempstead Tax Assessor, the Site is also identified as Section 40, Lot L, Blocks 5, 55, 56, 57, 59, 117, 2579 and 2585. The Site is located at the southwest corner of the intersection of Roger Avenue and Gates Avenue in a primarily commercial and residential area. The Site is bordered to the north by Roger Avenue, followed by a parking lot (former Shell terminal) to the northwest, a gravel/soil recycling facility and Sony Pictures and Entertainment to the northeast. Further north is the Negro Bar Channel, a waterway to Jamaica Bay. South of the Site are residential properties followed by Bayview Avenue. The Site is bordered to the east by Gates Avenue, followed by commercial buildings occupied by D. Daniels Sanitation and MGR Equipment Corporation. Immediately west of the Site is Expeditors, a freight and cargo company.

The Site consists of an approximately 5 acre parcel of land that is currently developed with an approximately 155,000 square foot, one-story, vacant warehouse building with a partial mezzanine (Figure 2). The partial mezzanine area was formerly used as office space. The Site was constructed in several stages from 1954 through 1967. The flooring on the ground level is constructed of poured concrete. Older sections of the building are constructed with masonry, with a wooden roof deck supported by wood joists. Newer sections of the building are constructed with steel frame and masonry, with steel roof joists and corrugated metal decking. The Site also contains a former paint spraying room. A loading area with three bays is located along Gates Avenue on the southeast portion of the Site. A garage door associated with a former auto repair shop tenant is located on the northern portion of the Site along Roger Avenue. A third garage door associated with a loading area is located on western most portion of the Site. The Site is currently heated via gas powered overhead space heaters. However, the building was formerly heated by fuel oil processed by a dual phased boiler system. Two exhaust fans are located on the roof of the building. Interior finishes of the office area include carpeting, two-foot by two-foot and two-foot by four-foot ceiling tiles, and painted

and/or wallpapered dry wall. Interior finishes of the warehouse area consist of concrete floors, drywall or concrete walls, and unfinished metal ceilings. The remainder of the Site consists of asphalt or concrete paved driveway/parking areas and grass. Utilities available to the Site include electricity, natural gas, municipal water, and sanitary sewer services.

2.2 Site Physical Setting

2.2.1 Site Topography

The USGS 7.5 Minute Topographic Map (*Far Rockaway - New York* Quadrangle, dated 1965, photorevised 1983) indicates the Site is approximately 10 feet above mean sea level and slopes downward to the northwest, with less than five feet of topographic relief between the northern and southern boundaries. The Site is located approximately 550 feet south of the Negro Bar Channel, which eventually drains into Jamaica Bay (*Figure 1*).

2.2.2 Site Geology

All of Long Island, including Nassau County, is part of the Atlantic Coastal Plain Physiographic Province. The Site is located in the southern section of Nassau County which is composed of flat plains sloping gently to the south. The surficial deposits consist of glacial material that accumulated during the Pleistocene Epoch. Bedrock beneath Nassau County is found at relatively deep depths and consists of Cretaceous sedimentary layers. The bedrock floor dips in a general southeastern direction to depths of 1,000 feet in the eastern portions of Long Island

In a roughly north-south cross section, the geology of Long Island can be characterized as a wedge-shaped layer of Cretaceous and Pleistocene unconsolidated sediments, thickening to the south-southeast. Several impermeable clay layers are in this sediment, generally creating three distinct aquifers beneath Long Island, forming an aquifer system. Potable water is primarily withdrawn from the deepest of these aquifers. Groundwater is the sole source of drinking water for Nassau and Suffolk Counties. In the area of the Site, the thickness of sediments is approximately 1,200 feet. The uppermost unconsolidated unit consists of Pleistocene glaciofluvial sediments derived from melt-water of the retreating glaciers, as well as recent shore and salt marsh deposits. These deposits are generally stratified, moderately to well sorted sands and gravels. A marine clay confining layer is present at approximately 35 feet below ground surface (bgs). These deposits constitute the Upper Glacial Aquifer.

The Pleistocene sediments are underlain by the Gardiners Clay confining layer at approximately 70 feet bgs. Beneath the Gardiners Clay is the Magothy Aquifer that occurs at approximately 110 - 120 feet bgs in the vicinity of the Site. A portion of the Jameco Aquifer may be overlying the Magothy Formation in this portion of Long Island at approximately 70 feet bgs.

The upper five feet of soil beneath the Site generally consist of brown to yellow, fine to medium sands, with some gravel and trace silt.

2.2.3 Site Hydrogeology

Four major water bearing units are likely present beneath the Site: (1) the Upper Glacial Aquifer (2) the Magothy Aquifer; (3) the Janeco Aquifer; and (4) the Lloyd Aquifer. The Magothy and Lloyd aquifers are separated by the Raritan Confining Unit. The Gardiners Clay constitutes the confining layer between the Magothy and the overlying Upper Glacial Aquifer. The Janeco and Magothy aquifers are separated based upon sedimentological differences. The aquifer of concern at the Site is the Upper Glacial Aquifer. This aquifer is composed of alluvium of recent age, as well as stratified sediments composed largely of outwash sand and gravel deposited by streams from retreating glaciers. This formation locally contains beds of clay. The Magothy aquifer occurs at approximately 110 feet bgs at the Site.

Groundwater beneath the Site was encountered at 4.5 to 5 feet bgs in on-Site monitoring wells. The groundwater in the upper aquifer is expected to be brackish and representative of the saltwater bays and inlets that surround the Site. As such, the groundwater is not likely to be potable.

In the 2005 ATC Phase II investigation, groundwater flow direction at the Site was estimated to be towards the southeast. However, as part of this investigation, groundwater beneath the Site appears to flow both northwest and southeast across the Site towards both Motts Basin and Negro Bar Channel, which are located approximately 400 feet south and 150 feet north of the Site, respectively. The difference in flow direction may be due to seasonal fluctuations and/or tidal influences. Furthermore, during the 2005 investigation, excavation and construction activities were occurring to the north across Roger Avenue, which may have impacted groundwater flow directions.

According to information provided by Environmental Data Resources, Inc. (EDR), Milford, CT, the Site contains no areas classified as wetlands. Furthermore, the Site is covered with concrete, asphalt and surrounded by paved roadways and sidewalks. On-Site drywells collect surface water runoff from paved driveways and parking lots.

Potable water is supplied to the Site and surrounding area by Long Island Water. No public water supply wells are located within one mile of the Site.

2.2.4 Soils

According to the United States Department of Agriculture Soil Survey as reported by EDR, soils in the vicinity of the Site are classified as urban land. Urban land consists of areas where at least 85 percent of the land surface is covered with asphalt, concrete or other impervious building materials. Naturally occurring soils in the area beneath the urban land soils consist of glacial outwash characterized by coarse to fine gravel and sand.

2.3 Surrounding Land Use and Sensitive Receptors

The Site is located within a mixed commercial and residential area. Residential properties border the Site to the South and are present along Bayview Avenue. Lawrence Elementary School #2 is located approximately 0.45 miles northeast of the Site at 1 Donahue Avenue, Inwood, NY. No other schools are located within ½ mile of the Site.

The following parks and recreational areas are located within ½ mile of the Site.

PARK AND RECREATIONAL AREAS WITHIN ½ MILE OF SITE			
PARK OR RECREATIONAL AREA	LOCATION	DISTANCE FROM SITE	DIRECTION FROM SITE
Terrace Garden Park	27 Merril Place and Carvel Place Inwood, NY	0.45 miles	southeast
Inwood Park	End of Bayview Avenue Inwood, NY	0.25 miles	southwest
Inwood Country Club	Across Negro Bar Channel	0.25 miles	north

*Remedial Investigation Report
175 Roger Avenue
Inwood, New York*

2.4 Surrounding Contaminated Sites and Spills

The NYSDEC Leaking Storage Tank Incident Reports (LTANKS) database was researched to identify listings within one-half mile of the Site (EDR provided LTANKS database updated September 14, 2006).

A total of 22 reported LTANK listings were identified within a one-half mile radius of the Site. Eighteen of these incidents have been assigned a "case closed" regulatory status and are considered to be resolved to the satisfaction of the NYSDEC. The remaining incidents are summarized in the table below.

LEAKING STORAGE TANK INCIDENT REPORTS (LTANKS)			
ADDRESS	DISTANCE/ DIRECTION	ESTIMATED GRADIENT	STATUS/AVAILABLE DATA
Powertest 95 Sheridan Blvd. Inwood, NY	1,374 feet/ East southeast	Crossgradient	Tank test failure reported on 11/3/86. Four tanks removed, DEC investigating. NYSDEC case number 8604965
Gas Station 213 Sheridan Blvd. Inwood, NY	1,690 feet/East northeast	Upgradient	Tank test failure reported on 4/16/98. File remarks state that "leak appears to be in vent pipe. Tank will be pumped out, uncovered on 4/20/98 and retested". NYSDEC case number 9800700
Wechter Petroleum Corp. 1 Sheridan Blvd. Inwood, NY	2,102 feet/South southeast	Crossgradient	Wechter is a major oil storage facility. Tank failure reported on 7/8/83. The material spilled is reported to be #2 Fuel Oil. File remarks state that "recovery continuing. 132 site wells installed. 489.25 gallons recovered". NYSDEC case number 8201877
Redem Housing 1468 Beach Channel Drive Queens, NY	2,271 feet/ South southeast	Crossgradient	Material spilled is reported to be #4 Fuel Oil. File remarks state that "TRC Environmental was installing groundwater monitoring well to allow NYCHA to test tanks with Horner EZY 3. During drilling operations they found oil". NYSDEC case number 9510331

*Remedial Investigation Report
175 Roger Avenue
Inwood, New York*

A review of spills reported to the NYSDEC, as provided by EDR and updated through September 14, 2006, revealed ten (10) reported releases identified within a one-eighth mile of the Site. Of these incidents, eight (8) have received a "case closed" regulatory status and are considered to be resolved to the satisfaction of the NYSDEC. The remaining two incidents are summarized below.

SPILLS REPORTED TO THE NYSDEC			
ADDRESS	DISTANCE/ DIRECTION	ESTIMATED GRADIENT	STATUS/AVAILABLE DATA
Eagle Oil 180 Roger Avenue Inwood, NY	225 feet/ East	Upgradient or Crossgradient	Spill reported on 8/1/05 with the following file remarks – "During recent remedial activities at 200 Roger Avenue, petroleum contamination was observed along the property boundary with 180 Roger Avenue. Endpoint samples taken from the excavation wall confirm the presence of COCs consistent with fuel oil. Will require additional investigatory activities on 180 Roger to properly assess. Will send letter with requirements". NYSDEC case number 0551061
Gates St/Bayview Ave. Inwood, NY	474 feet/South southeast	Upgradient or Crossgradient	Spill reported on 2/28/02 with the following file remarks – "Acampora spoke with Mike (line crew) who said there was floating product on the groundwater (depth 5-feet). Pole is located on east side of Gates Avenue and 30-50 feet north of Bayview ". NYSDEC case number 0111316.

The northwest adjacent property, at 200 Roger Avenue, was formerly the Eastern Shell Petroleum Products Company. According to representatives from PW Grosser Consultants, approximately 15,000-20,000 tons of petroleum contaminated soil has been removed from the property. The NYSDEC issued a closure letter indicating no further action was required for the site on July 24, 2006.

3.0 HISTORICAL ENVIRONMENTAL REVIEW

Historical documentation reviewed for the Site indicates that the Site was built in three stages from 1954 through 1967. The Site was used as a "Sheet Metal Fabrication" factory since at least 1961. Rockaway Metal Products occupied the Site from approximately 1971 until circa 1987. In 1987, Rockaway Metal Products abandoned the Site and left hazardous waste materials improperly stored and disposed of onsite. The Site was used as a warehouse by various tenants from 1990 through 2004, including the most recent tenant, Long Island Party Rentals. In 2000 the Site was also occupied by Gunter Auto Shop, an auto repair shop.

Aerial photographs from 1954 to 1994 obtained from EDR were review by ATC to evaluate Site history and development, and to assess whether there is any evidence of past activities at or adjacent to the Site which may have the potential to cause an environmental impact to the Site. The following table summarizes the descriptions and interpretations from the aerial photographic review.

AERIAL PHOTOGRAPH SUMMARY

Year	Comments
1954	<p>Property: The Site appears to be developed with a warehouse structure.</p> <p>Surrounding Area: Adjacent properties to the west and south appear to be residences, the north and northwest adjacent properties appear to be an oil terminal which contains a tank farm with large aboveground storage tanks, and vacant parcels of land appear east of the Site.</p>
1966	<p>Property: The Site appears to be developed with two warehouse structures. A vacant parcel of land appears along the western portion of the Site.</p> <p>Surrounding Area: Surrounding properties appear similar to the 1954 aerial photograph, with the exception of commercial/warehouse type structures that appears east of the Site.</p>
1975	<p>Property: The Site appears to be developed with three warehouse structures and a parking area on the western portion of the property.</p> <p>Surrounding Area: The west adjacent property appears to be partially developed with a warehouse structure and partially vacant, residences border the Site to the south, the north adjacent property appears to be developed with a warehouse structure, however, the northwest adjacent property still appears to be a oil terminal which contains a tank farm with large aboveground storage tanks.</p>
1984	<p>Property: The Site appears similar to the 1975 aerial photograph. In addition, there appears to be container storage area along the northern perimeter of the third warehouse structure. A large tanker trailer appears to be located along the western edge of the original warehouse structure</p> <p>Surrounding Area: Surrounding properties appear similar to the 1975 aerial photograph.</p>
1994	<p>Property: The Site remains similar to the 1984 aerial photograph.</p> <p>Surrounding Area: The surrounding properties appear similar to the 1984 aerial photograph. In addition, a second warehouse structure appears to be developed west of the Site.</p>

ATC received and reviewed historic Sanborn Fire Insurance Maps for the years 1909, 1940, 1950, 1961 and 1972. The results of the ATC review of historical Sanborn fire insurance maps are presented in the following table:

YEAR	FIRE INSURANCE MAPS
1909	<p>Property: The Site is depicted partially vacant and partially developed with a one story cement block building used for manufacturing purposes.</p> <p>Surrounding Property: Surrounding properties are depicted as vacant parcels of land interspersed with few residences. An oyster house, a packing house, a coal shed and a soft coal pile is depicted northwest of the Site.</p>
1940	<p>Property: The Site is depicted similar to the 1909 Sanborn map.</p> <p>Surrounding Property: The surrounding properties appear more densely developed with residential and commercial properties. The Hewlett Brothers and Eastern Shell Petroleum Products fuel oil tank farm with aboveground storage tanks appear north and northwest of the Site across Roger Avenue, respectively. A parcel of land that is owned by Moses R. Cornwall, located adjacent northeast of the Site is also depicted with as a tank farm with large, fuel oil aboveground storage tanks.</p>
1950	<p>Property: The Site is depicted similar to the 1940 Sanborn map</p> <p>Surrounding Property: Surrounding properties are depicted similar to the 1940 Sanborn map.</p>

*Remedial Investigation Report
175 Roger Avenue
Inwood, New York*

FIRE INSURANCE MAPS	
YEAR	
1961	Property: The Site appears to be developed with a one-story warehouse building that is labeled "Sheet Metal Fabrication". The Site also appears to be developed with a partial two-story warehouse building abutting the south side of the Sheet Metal Fabrication building. A one-story storage shed is located west of the Sheet Metal Fabrication building. Surrounding Property: Surrounding properties appear similar to the 1950 Sanborn map, however, the northwest fuel oil tank farm is identified as the "Oil Coastal Company of NY" and the northeast fuel oil tank farm is identified as LJ Bennett, Inc. A parking lot associated with a Knitting Mill is depicted east of the Site across Gates Avenue.
1972	Property: The Site is depicted similar to the 1961 Sanborn map; however, a one-story warehouse building extension has been added to the western portion of the existing buildings. The extension was constructed in 1967. The Site is depicted with current improvements. Surrounding Property: Surrounding properties remain similar to the 1961 Sanborn map. However, a new building associated with the Knitting Mill east of the Site is depicted on this Sanborn map and the LJ Bennett fuel oil tank farm is no longer apparent northeast of the Site across Roger Avenue. It is depicted as one-story warehouse building with a partial mezzanine built in 1970.

ATC reviewed two prior environmental reports for the Site. These include the following:

"Phase I Environmental Site Assessment of Long Island Party Rentals, 175 Roger Avenue, Inwood, New York", dated June 19, 2005, prepared by ATC (the "2005 ESA").

The 2005 ESA was conducted when the prior tenant, Long Island Party Rentals, occupied the Site. At that time, ATC observed multiple containers of cleaning chemicals, spray paints, and maintenance supplies throughout the Site. No evidence of leaks or spills was observed in the vicinity of these materials. ATC also observed 55-gallon drums located within a fenced area on the exterior of the building. ATC was unable to identify the contents of these drums. Several roofing debris piles and used tires were observed throughout the rear parking area on the western portion of the Site. ATC also observed several piles of garbage consisting of pieces of wood, used tires, plastic containers, furniture, wooden pallets, and pieces of metal located in an area labeled "hazardous material storage area" on the northwest exterior portion of the Site. Several roll-off dumpsters containing trash were also observed on the western portion of the Site.

The Site was identified on the Federal CERCLIS database, as a Resource Conservation and Recovery Act (RCRA) small quantity hazardous waste generator, a Chemical Bulk Storage (CBS) facility, on the Facility Index System (FINDS) and as an Underground Storage Tank (UST) facility. According to files reviewed at the United States of Environmental Protection Agency (USEPA), from the late 1970's through 1987, Rockaway Metal Products, Inc. (former Site tenant) leased the Site from 175 Inwood Associates for the manufacturing and enamel spray-painting of sheet metal office cabinets and partitions. As part of daily operations, spent solvents, paint products and waste oil were collected in 55-gallon drums and temporarily stored in an outdoor drum storage area. Subsequently, the drummed liquids were transferred to a permanently stationed steel, 5,000-gallon tanker trailer located on the exterior of the building. On September 4, 1987, Rockaway Metal Products filed for bankruptcy and abandoned the Site. On June 15 and 16, 1992, USEPA personnel conducted a site inspection and discovered the following: approximately 235-240 55-gallon deteriorated and leaking drums, 22 pressurized cylinders of propane, oxygen, and acetylene in good condition, six propane tanks, a 5,000-gallon tanker trailer in poor condition, dry wells that appeared to contain sludge materials and USTs that contained potentially flammable liquids. Significant staining was also noted along the northern and southern portion of the Site as a result of the leaking drums and poor

housekeeping. From August 1993 through April 1995, approximately 240 55-gallon drums of waste materials were removed from the site. The tanker trailer, one 1,000-gallon heating oil UST located beneath the sidewalk of Gates Avenue on the southeast portion of the Site and UST piping and dispenser systems were also removed from the Site. One 5,000-gallon heating oil UST, one 1,000-gallon xylene and one 1,000-gallon "Solvesso" (a petroleum based solvent) UST was abandoned in place. According to the regulatory agency database and the USEPA representative, the CERCLIS Site Status lists the Site as cleaned up and no further action is warranted pertaining to the removal of hazardous waste stored at the Site. The Site is also listed on the NYSDEC Spills database for a waste oil release of unknown volume. This incident received a "case closed" regulatory status on February 8, 1995

Information reviewed at the USEPA also indicates that 17 groundwater monitoring wells were installed throughout the exterior of the Site. Information reviewed at the USEPA also indicates that groundwater monitoring wells MW-1, MW-3 and MW-12 were sampled in May and June 1994 by PT & L Environmental Services, Inc. All groundwater samples were analyzed for volatile organic compounds (VOCs), base neutral compounds (BNs) and priority pollutant metals (PPM). Analytical results from both sampling rounds indicate that PPM such as arsenic, cadmium, chromium, copper, lead, and zinc were detected above groundwater quality standards for Class GA water.

Information reviewed at the USEPA also indicated that the Nassau County Department of Health (NCDOH) inspectors collected samples from two (2) drywells closest to a drum storage area. Analytical results indicated that xylene and lead was detected at 610 ppb and 240 ppb, respectively. In June 1994, one composite sediment sample was collected by PT & L Environmental Services, Inc from five drywells (identified as 1, 5, 7, 8 and 9). The composite sample was analyzed for Toxic Compound Leaching Characteristics, RCRA characteristics, total polychlorinated biphenyls, and total petroleum hydrocarbons (TPH). The TCLP analyses detected lead at 2.5 milligrams per kilogram (mg/kg) and TPH was detected at 18,900 mg/kg.

The Site is listed on the UST and Chemical Bulk Storage database. According to the regulatory agency database, two (2) m-xylene 1,000-gallon USTs that were installed in 1994 are registered to the Site. In addition, one 1,000-gallon gasoline and two (2) empty USTs are also registered to the Site. According to NCDOH field notes, the two (2) 1,000-gallon xylene USTs and a 5,000-gallon fuel oil UST were abandoned in place in June 1995. A 1,000-gallon fuel oil UST was removed in June 1995. No documentation regarding soil and/or groundwater sampling during abandonment/removal of the USTs and distribution lines was provided to ATC. No further information pertaining to the gasoline UST was available for review.

"Site Investigation, Long Island Party Rentals, 175 Roger Avenue, Inwood, New York", dated June 27, 2005, prepared by ATC.

The Subsurface Site Investigation was conducted throughout the Site to assess if the various potential on-site areas of environmental concern documented in the 2005 ESA had adversely impacted soil and ground water quality at the Site. In addition, a geophysical investigation was performed to assess the presence of USTs remaining beneath the Site.

Based on the Phase 1 ESA, up to five (5) historic USTs are associated with the Site. In order to investigate the status of the reported USTs, ATC performed an electro-magnetic and ground penetrating radar (EM-GPR) Survey at the Site (*Figure 2*). The EM-GPR survey identified the following:

- One anomaly consisting of disturbed soil was observed on the sidewalk of the southeast portion of the Site, along Gates Avenue. This anomaly measured approximately four feet by six feet and is consistent with the location of a former 1,000-gallon fuel oil UST.
- One rectangular anomaly was observed partially beneath the floor of the former auto repair shop, located along Roger Avenue. This anomaly measured approximately four feet by five feet and is consistent with a 1,000-gallon "Solvesso" (a petroleum based solvent) UST that was reportedly abandoned in place in 1995.
- One rectangular anomaly was observed in front of the former auto repair shop, along Roger Avenue. This anomaly measured approximately four feet by five feet and is consistent with a 1,000-gallon xylene UST that was reportedly abandoned in place in 1995.
- One rectangular anomaly was observed beneath a concrete pad located adjacent west of the former auto body repair shop. This anomaly measured approximately six feet by twenty-four feet and is consistent with a 5,000-gallon fuel oil UST that was reportedly abandoned in place in 1995.
- Several circular anomalies were observed in front of the former auto body repair shop and along the northern portion of the Site. These anomalies measured approximately 3 feet in diameter.

In addition, the EM-GPR Survey identified the water main line, two (2) electrical lines, and several inactive pipe lines associated with the USTs. The water main enters the Site building from the corner of Roger Avenue and Gates Avenue. A water line is also located along the northern perimeter of the Site. Two electrical lines were identified from Roger Avenue and cross over the suspected former 1,000-gallon xylene UST. Inactive pipe lines were identified parallel to each other off of the southwest corner of the concrete pad. These lines are suspected to be associated with the 5,000-gallon fuel oil that was reportedly abandoned in 1995.

Twenty-two (22) soil borings were advanced throughout the Site via hand augering methodology. The soil borings were advanced to depths ranging from 0.5 to 5 feet below ground surface (bgs). Soil samples, collected from selected intervals, were submitted for laboratory analysis. All soils were characterized for lithology and inspected for visual and olfactory evidence of contamination. Additionally, all soils were field screened with a photoionization detector (PID) for the presence of any volatile organics. Select soil samples submitted to the laboratory was analyzed for volatile organic compounds (VOC) under EPA Method 8260, semi-volatile organic compounds (SVOCs) under EPA Method 8270 and Priority Pollutant (PP) Metals under EPA Method 6010. Groundwater was encountered throughout the Site at approximately 5 feet bgs. The results of this soil investigation are summarized below by areas of environmental concern identified in the ESA or as a result of the EM-GPR survey.

Former 1,000-gallon Fuel Oil UST

One soil boring was advanced through the center of an anomaly that was consistent with a former 1,000-gallon fuel oil UST which was reportedly removed in 1995. This anomaly is located on the sidewalk of the southeast portion of the Site, along Gates Avenue. This soil boring was advanced to a depth 5 feet bgs where groundwater was encountered. No VOCs or SVOCs were detected above the laboratory method detection limits. Several PP Metals were detected, however, these concentrations were below the NYSDEC Technical and Administrative Guidance Memorandum #4046- Determination of Soil Cleanup Objectives and Cleanup Levels Recommended Soil Cleanup Objectives (TAGM RSCO) and the "Eastern USA Background" levels defined in the NYSDEC TAGM.

1,000-gallon "Solvesso" UST

Three soil borings were advanced within the vicinity of the anomaly that was consistent with the reportedly abandoned 1,000-gallon "Solvesso" UST, located partially beneath the floor of the former auto body repair shop on the northern portion of the Site. Laboratory analytical results indicate that no VOCs or SVOCs were detected above the laboratory method detection limits in two of the soil samples. However, VOCs above TAGM RSCO levels were measured in the soil sample retrieved from directly above the former tank.

Zinc was detected above the TAGM RSCO level in all three soil samples, ranging from 67 parts per million (ppm) to 161 ppm. Mercury was detected above the TAGM RSCO level, but below the Eastern USA Background levels in the sample retrieved directly above the UST. No other PP Metals were detected above their applicable regulatory criteria.

1,000-gallon Xylene UST

Two soil borings were advanced within the vicinity of the anomaly that was consistent with the location of a reportedly abandoned 1,000-gallon xylene UST. No VOCs or SVOCs were detected above the laboratory method detection limits. Several PP Metals were measured; however, these concentrations were detected below the TAGM RSCO levels.

5,000-gallon Fuel Oil UST

Three soil borings were advanced within the vicinity of the anomaly that is consistent with the location of a reportedly abandoned 5,000-gallon fuel oil UST, located beneath a concrete slab adjacent west of the former auto body repair shop. No VOCs or SVOCs were detected above the laboratory detection limits, with the exception of acetone that was measured below the regulatory criteria. No PP Metals were detected above the TAGM RSCO levels.

Drum Storage Area

Approximately 235-240 55-gallon deteriorated and leaking drums were previously stored along the northwestern exterior wall of the building. The 55-gallon drums were used to store hazardous materials that were associated with historic site operations. Four soil borings were advanced in this area. No VOCs or SVOCs were detected above the TAGM RSCO levels. No PP Metals were detected above their applicable regulatory criteria in these borings.

EM/GPR Anomalies

The EM/GPR survey detected three circular anomalies on the northern portion of the Site. Three soil borings were advanced within the vicinity of these anomalies. No VOCs or SVOCs were detected above the TAGM RSCO levels. PP Metals including zinc, copper and mercury were detected above TAGM RSCO levels at two boring locations. However, with the exception of zinc, the PP metal soil concentrations were within typical Eastern USA Background levels.

Remaining Portions of the Site

Five additional soil borings were advanced throughout the Site to evaluate overall soil quality. No VOCs, SVOCs or PP Metals were detected above the TAGM RSCO levels in any of the soil samples collected.

Nine (9) drywells (DW-1 through DW-9) are located throughout the northwest portion of the Site (*Figure 2*). ATC collected nine sludge samples from the bottom of each drywell from depths ranging from 5 to 8 feet bgs. Additionally, one soil boring was installed adjacent to eight of the nine drywells

(DW-1 through DW-8) to assess if these drywells have impacted soil quality beneath the Site. Soil borings were advanced to depths of approximately 4.5-5 feet bgs. Sediment and soil samples were analyzed for total petroleum hydrocarbons (TPH), VOCs, SVOCs and RCRA Metals.

Drywell Sludge

TPH concentrations ranged from 1.09 ppm in DW-9 to 17.6 ppm in DW-3 (Table 2). No VOCs or SVOC were detected above the NYSDEC TAGM RSCOs in samples collected from DW-1, DW-2, and DW-4 through DW-9. VOCs, including isopropyl benzene (6,010 µg/kg), n-propylbenzene (15,100 µg/kg) and 1,2,4-trimethylbenzene (49,300 µg/kg) were detected in the sample collected from DW-3. SVOCs including bis (2-ethylhexyl) phthalate (56,000 µg/kg) and 2-methyl naphthalene (48,000 µg/kg) were also detected above TAGM RSCO levels in drywell DW-3.

RCRA Metals including arsenic, cadmium, chromium, lead, mercury and selenium were detected above TAGM RSCO levels in all the drywell sludge samples analyzed.

Soil Borings Adjacent to Drywells

No elevated TPH or SVOCs were detected in any of the soil samples collected from DW-1 through DW-8. Additionally, no VOCs or RCRA Metals were detected above TAGM RSCO levels in any of these soil samples.

Five existing 2-inch PVC monitoring wells (MW-11 through MW-15) were located on the northern portion of the Site (*Figure 4*). On May 18, 2005 ATC gauged and surveyed those monitoring wells. Depth to groundwater ranged from 4.58 to 5.65 feet bgs and the groundwater gradient indicated south-southeasterly flow direction.

Ten (10) soil borings were converted to groundwater monitoring wells in order to evaluate groundwater quality throughout the Site. The monitoring wells were installed using hollow stem auger drilling techniques to depths of approximately 20-25 feet bgs. The wells were constructed of 2" diameter, Schedule 40 PVC with a flush mounted cover and lockable casing. The screened portion of the well was packed with #2 Morie Sand. The remaining annular space was sealed with grout. Following installation the monitoring wells were developed.

Well MW-1 was installed within the vicinity of a former 1,000-gallon fuel oil UST that was reportedly removed in 1995. MW-2 was installed within the vicinity of a 1,000-gallon UST that was reportedly abandoned in 1995. MW-3 was installed within the vicinity of a 1,000-gallon xylene UST that was reportedly abandoned in 1995. MW-4 and MW-6 was installed within the vicinity of a 5,000-gallon fuel oil UST that was reportedly abandoned in 1995. MW-7 was installed within the vicinity of the former drum storage. Wells MW-5, MW-8, MW-9, and MW-10 were installed on the northeast corner, the eastern portion, the southwest portion and the southern portion of the Site (*Figure 4*).

All monitoring wells were gauged and sampled on May 26-27, 2005. Groundwater depths ranged from 3.62 feet bgs in MW-1 to 5.32 feet bgs in MW 7. No liquid-phase petroleum was detected on the water table. Groundwater samples were submitted to the laboratory for VOCs, SVOC, and PP Metals analyses in accordance with EPA Methods 8260, 8270 and 7000, respectively.

Groundwater analytical results suggested that chlorinated solvents including cis-1,2-dichloroethylene, tetrachloroethylene, trichloroethylene and vinyl chloride are present above the NYSDEC Division of Water Technical and Operational Guidance Series Memo (TOGS) Groundwater Quality Standards in the groundwater samples collected from MW-1, MW-2, MW-3 and MW-6. Additional VOCs including

ethylbenzene, n-propylbenzene, toluene, 1,2,4-trimethylbenzene, 1,3,5 trimethylbenzene, o-xylene, m and p xylene were detected above NYSDEC TOGS Groundwater Quality Standards in MW-2, MW-3, MW-4, MW-6, MW-7 and MW-10. SVOCs including 2-methylnaphthalene, 2 methylphenol, and naphthalene were detected above NYSDEC TOGS Groundwater Quality Standards in MW-2, MW-3, and MW-6. PP Metals were detected above NYSDEC TOGS Groundwater Quality Standards in all of the monitoring wells except MW-7 and MW-12.

In order to assess if VOCs vapors were present beneath the slab of the Site building, a soil-gas investigation was completed. The investigation consisted of 5 soil borings each to a depth of approximately 1-3 feet bgs. One-inch temporary vapor monitoring point was installed into each boring. On June 8, 2005, ATC utilized a low volume personal air monitoring pump, manifolded to dedicated high density polyethylene tubing to withdraw air from each monitoring point. Approximately five (5) well volumes of air were purged from each monitoring point. The air samples were collected using charcoal tubes and then sent to a NYSDOH ELAP certified laboratory for analysis of VOCs in accordance with TO-14.

Laboratory analytical results indicate that no organic vapors were detected above the laboratory method detection limits in any of the soil gas samples collected.

4.0 INVESTIGATION METHODS

4.1 Introduction

Prior to beginning subsurface investigation activities, a reconnaissance of the building interior was conducted to locate potential areas of concern that included sumps or drywells, areas of chemical staining, areas of former degreasing operations and former painting booths. In addition, a reconnaissance of the nine exterior drywells and five existing monitoring wells installed prior to 2005 (MW-10 through MW-15) was completed. The drywells were investigated to assess construction details including depth to bottom, closed or open bottom and depth of standing water. The monitoring wells were investigated to obtain construction details including diameter, depth and, if possible, screen interval.

Test pits were excavated on July 20, 2007 to verify the presence of suspect gasoline UST(s) in the southwestern area of the Site (*Figure 3*). Each test pit was excavated to a depth of approximately 4 to 5 feet bgs. No visual evidence of the UST(s) was found in this area of the Site. The soils consisted of brown, fine to medium sand with no visual evidence of petroleum. Soil gas was field screened for volatile petroleum compounds using a portable photoionization detector (PID) and no instrument response was found within the area of the test pits. A yellow, plastic coated, steel pipe was uncovered near two surface bollards within Test Pit #2 that appeared to be a former natural gas line. This pipe was traced towards the Site building and found to terminate underground at Test Pit #1.

4.2 Horizontal Delineation of Petroleum and Chlorinated Groundwater Plume – July 2007

On July 26, 2007 ATC utilize a hydraulic direct push probe to collect six (6) groundwater samples for the horizontal delineation of the petroleum and chlorinated plumes (*Figure 4*). Three (3) of the borings (BW-1, BW-2 and BW-3) were advanced along Gates Avenue (along the eastern portion of the Site), one (1) soil boring (BW-4) was advanced in the vicinity of Cerro Street (along the southern portion of the Site) and two (2) along Bayview Avenue (BW-5 and BW-6) (to the south off the Site). Continuous

soil quality field screening was conducted at all boring locations. Field screening included identifying visual or olfactory evidence of contamination, and use of a portable PID to obtain qualitative measurements of volatile organic vapors. Complete boring logs are presented in Appendix A.

Each boring was advanced approximately 10-feet below the existing water table, with a sampling depth ranging from 12 to 16 feet below ground surface (bgs). Once the probe rods were driven to the desired depth, the rods are raised, exposing a 3.5-foot retractable screen. The groundwater sample was then retrieved with a peristaltic pump and dedicated high-density polyethylene (HDPE) tubing. Groundwater samples were collected into the appropriate glassware, placed in a cooler at 4°C and submitted for laboratory analysis of VOC in accordance with EPA Method 8260 NYSDEC category B deliverables and for Total Dissolved Solids (TDS).

Groundwater samples were collected from thirteen (13) existing Site wells. Monitoring wells MW-10, MW-11, MW-12 could not be located. Prior to sampling, each well was gauged for depth to water and purged a minimum of 5 well volumes using dedicated HDPE tubing and a peristaltic pump. Turbidity, dissolved oxygen, pH, temperature, Eh, specific conductance and salinity were monitored pre-purge, pre-sampling and post-sampling using a water quality instrument and flow through cell. Groundwater samples were collected into the appropriate glassware, placed in a cooler at 4°C and submitted for laboratory analysis of VOCs in accordance with EPA Method 8260 NYSDEC category B deliverables and for Total Dissolved Solids (TDS).

4.3 Vertical Delineation of Chlorinated Solvent Plume – July 2007

On July 31, 2007 borings DW-1 and DW-2 were completed, using direct push technology, to vertically delineate the extent of chlorinated impacted groundwater in the vicinity of monitoring wells MW-1 and MW-2/3 (*Figure 4*). Continuous soil samples were collected using a 4-foot discrete stainless steel soil sampler to characterize the lithology and assess if any confining layers were present. A significant clay layer was encountered at 35 feet bgs at both boring locations; therefore, both borings were terminated at that depth to assure that the confining layer was not compromised. The final lithology sample was collected directly above the confining layer. Boring logs can be found in *Appendix A*.

At each boring location, soil samples were collected for laboratory analyses at 8-feet, 15-feet, 22-feet, 27-feet and 34-feet bgs. Each sample was collected into the appropriate container, placed in a cooler at 4°C, and submitted to a New York State Department of Health (NYSDOH) ELAP certified laboratory for analysis of VOCs by EPA Method 8260 and for Total Organic Carbon. All analyses to be performed in accordance with NYSDEC Category B deliverable package.

Following soil characterization activities, the probe rods were equipped with a stainless steel retractable discrete sampler for vertical groundwater delineation. At both boring locations the rods were advanced to a depth of 35 feet bgs. Once at the bottom depth, the geoprobe rods were raised exposing a retractable 3.5-foot screen. Dedicated polyethylene tubing with a check valve on the end was then inserted within the Geoprobe rods to the depth of the screen. Once the groundwater sample was collected from that select interval, the rods were raised approximately 5 to 10-feet and an additional groundwater sample was collected with dedicated polyethylene tubing. Groundwater samples were collected in this manner at 35-feet bgs, 30-feet bgs, 20-feet bgs and 12-feet bgs. Groundwater samples were field screened for dissolved oxygen, pH, conductivity, temperature, oxidation-reduction potential (ORP) and salinity.

Each sample was collected into the appropriate containers, placed in a cooler at 4°C, and submitted for laboratory analysis of chlorinated solvents in accordance with EPA Method 8260 NYSDEC Category B deliverable and for Total Dissolved Solids (TDS).

4.4 Additional Horizontal and Vertical Groundwater Delineation – June 2008

In June 2008, fourteen (14) soil borings were advanced using a hydraulic direct push probe to further delineate the horizontal and vertical extent of the petroleum and chlorinated plumes (*Figure 5*). Eight (8) borings (BD-5, BD-6, and MW-17 through MW-22) were advanced within the Site building; one (1) boring (BD-7) was completed at the northeast corner of the Site; another boring (BD-4) was advanced near the northern property line, along Roger Avenue; one boring (MW-12R) was finished in the northwest corner of the Site near the former location of MW-12; one (1) boring (BD-3) was completed off-site, north of Roger Avenue; one (1) boring (MW-23) was advanced near the eastern property line, along Gates Avenue; and another boring (MW-10R) was completed along the south property line near the former location of MW-10. Continuous soil quality field screening was conducted at all boring locations. Field screening included identifying visual or olfactory evidence of contamination, and use of a portable PID to obtain qualitative measurements of volatile organic vapors.

Each boring was advanced to a depth of approximately 35-feet bgs at the depth of the previously identified clay confining layer. Continuous soil cores were collected using a 4-foot discrete stainless steel soil sampler, and precautions were taken not to breach the confining layer. The purpose of these activities was to characterize the lithology and confirm the presence of the confining layer. At each boring location, the soil sample with the highest instrument response was selected for laboratory analysis. If there were no elevated PID readings, the sample just above the water table was selected for laboratory analysis. Each soil sample was collected into the appropriate container, placed in a cooler at 4°C, and submitted to a New York State Department of Health (NYSDOH) ELAP certified laboratory for analysis of volatile organic compounds (VOCs) by EPA Method 8260 (Category B deliverable package). Complete boring logs are present in *Appendix A*.

Following soil characterization activities, an additional boring was advanced at each location for vertical groundwater delineation. A stainless steel retractable discrete sampling probe was advanced via geoprobe technology to the top of the clay confining layer at depth of approximately 35-feet (bgs). Once at the bottom depth, the geoprobe rod was raised exposing a retractable 4-foot discrete screen. Dedicated poly tubing with a check valve on the end was inserted within the geoprobe rods to the depth of the screen, and a groundwater sample was collected from that selected interval. Once the groundwater sample was collected, the rods were raised approximately 5 to 10-feet and an additional groundwater sample was collected as described above. Groundwater samples were collected in this manner at 35-foot bgs, 30-foot bgs, 20-foot bgs and 10-foot bgs. Groundwater samples were field screened for dissolved oxygen, pH, conductivity, temperature and oxidation-reduction potential (ORP).

Groundwater samples were collected into the appropriate containers, placed in a cooler at 4°C, and submitted for laboratory analysis of VOCs in accordance with EPA Method 8260 (Category B deliverable) and for Total Dissolved Solids (TDS). In addition, groundwater samples collected at 30-foot bgs and 10-foot bgs were analyzed for dissolved iron and manganese, nitrate, sulfate, methane, alkalinity and total organic carbon.

4.5 Additional Well Installation and Monitoring Well Sampling – June 2008

Nine (9) of the borings were completed as monitoring wells MW-10R, MW-12R, and MW-17 through MW-23 (*Figure 5*). Each well was constructed of 2-inch PVC with a 1.5-foot, 20-slot screen, with a final depth of approximately 18-feet bgs. The annular space was backfilled with number 2 well gravel to 1-foot above the screen. A 1-foot thick bentonite seal was placed above the well gravel and remaining annular space filled with concrete. Each well was finished at grade with a flush, bolt-down manhole set in concrete. Well construction details are present in *Table 1*.

On June 18 and 19, 2008, all monitoring wells, both existing and new, were sampled for Priority Pollutant (PP) Metals and VOCs. In addition, select wells (MW-2, MW-3, MW-4, MW-5, MW-6, MW-8, MW-9, MW-10R, MW-12R, MW-14, MW-15, MW-17, MW-19, MW-19D, MW-21, MW-22, MW-23 and MW-24D) were sampled for semi-volatile organic compounds (SVOCs). Prior to sampling, each well was purged 3 to 5 well volumes using dedicated HDPE tubing and peristaltic pump. Air sensitive parameters such as dissolved oxygen, pH, temperature, Eh, specific conductance and salinity were monitored using a water quality instrument and flow through cell. Both non-filtered and filter (.45 micron) PP Metal samples were retrieved for analysis.

Groundwater samples were collected into the appropriate glassware, placed in a cooler at 4°C and submitted to a NYSDOH ELAP certified laboratory for VOC analysis per EPA Method 8260, SVOCs (Base Neutrals) in accordance with EPA Method 8270, Priority Pollutant (PP) Metals and for Total Dissolved Solids (TDS). All VOC, SVOC and PP Metal analyses were performed in accordance with a NYSDEC Category B deliverable package.

4.6 Dense Non-Aqueous Phase Liquid (DNAPL) Evaluation – June 2008

The July 2007 investigation suggested the possibility of DNAPL on-Site with the most likely location beneath the abandoned UST. Total chlorinated hydrocarbon concentrations measured at vertical groundwater sampling location DW-1 at 30 feet bgs, just above the clay confining layer, was 21,821µg/L (*Figure 12*). Total chlorinated hydrocarbon groundwater concentrations measured at other locations on-Site were at least two to three orders of magnitude less.

To evaluate the presence of DNAPL on-Site two deep monitoring wells were installed in June 2008. Deep monitoring well MW-24D was installed near the location of the abandoned USTs (*Figure 13*). The other deep well (MW-19D) was nested with shallow monitoring well MW-19 near the former paint spraying booth. Each well was constructed of 2-inch PVC such that a 5-foot, 20-slot screen interval was set just above the clay confining layer at approximately 35-feet bgs. The annular space was backfilled with Number 2 well gravel to 1-foot above the screen. A 1-foot thick bentonite seal shall be placed above the well gravel and remaining annular space filled with bentonite-cement grout. Each well was finished at grade with a flush, bolt-down manhole set in concrete. Well construction details can be found in *Table 1*.

On June 26, 2008, both monitoring wells were gauged for the presence of DNAPL using an interface probe capable of detecting the presence of DNAPL.

4.7 Groundwater Flow Direction and Tidal Influence Survey

All existing monitoring wells were surveyed by a New York State Registered Land Surveyor to determine exact spatial orientation and casing elevations. This information was used to assess groundwater flow direction at both low and high tides.

To assess tidal influence on depth to groundwater at the Site, water table elevations were recorded over a 24 hour period or complete tidal cycle within monitoring well MW-15. On August 9, 2007, ATC submerged a Level Troll 700 water level monitoring probe below the water table within MW-15 to a sufficient depth where it would remain submerged. The probe was secured and left in the well for 24 hours where it recorded the changes in pressure once every minute. ATC returned to the Site on August 10, 2007 to collect the equipment and retrieve the data from the probe.

4.8 Hydraulic Conductivity Tests

On August 9, 2007 slug tests were performed on monitoring wells MW-1, MW-3, MW-9 and MW-15 to estimate the hydraulic conductivity and transmissivity of the hydrogeologic units intersecting the monitoring well network. Both rising and falling head slug tests were performed by placing a Level Troll 700 water level monitoring probe below the water table within each to a sufficient depth where it would remain submerged. For the falling head test, a 2-foot long slug was placed into the well and water level data recorded until the water table return to the original static level. For the rising head test, the slug was then removed from the well and water level data recorded until the water table rose back to the original static level.

Since MW-7 could not be located prior to the August 2007 slug tests, additional slug tests were performed on MW-7 along with MW-19, MW-21 and MW-22 on June 26, 2008. Both rising and falling head slug tests were performed as described above.

4.9 Biodegradation Indicator Compound Collection and Analysis

In order to evaluate monitored natural attenuation (MNA) during remedy selection, groundwater samples collected in July and August 2007 from the existing wells, geoprobe locations BW-1 through BW-5 and from vertical delineation borings DW-1 and DW-2 were analyzed for additional parameters. Each sample was analyzed for dissolved iron and manganese, nitrate, sulfate, methane, alkalinity and total organic carbon. In addition, the following field parameters were measured: dissolved oxygen, oxidation-reduction potential, pH, temperature, and conductivity.

To further evaluate MNA as a possible remedial option, addition samples were collected in June 2008 at 30 ft., 20 ft. and 10 ft. bgs from vertical delineation borings BD-3 through BD-7, MW-10R, MW-12R, and MW-17 through MW-23. Each sample was analyzed as above.

4.10 Contaminant Fate and Transport Modeling

To evaluate the fate and transport, and possible natural attenuation, of the petroleum and chlorinated hydrocarbon groundwater plumes, two analytical solute transport models were utilized. BIOSCREEN, version 1.3 was used to model the petroleum hydrocarbon plume. The chlorinated hydrocarbon plume was modeled using BIOCHLOR, version 2.2. Both models are public domain models available from the Center for Subsurface Modeling Support, U.S. Environmental Protection Agency, Ada Oklahoma.

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The models are used primarily as screening tools to simulate remediation by natural attenuation of dissolved hydrocarbons at fuel/solvent release sites. The models can be used to simulate solute transport without decay and with biodegradation modeled as a first-order process or, for BIOSCREEN, as an "instantaneous" biodegradation reaction.

BIOSCREEN is based on the Domenico analytical solute transport model with two options for simulating natural biodegradation: first-order decay and instantaneous reaction limited by the availability of electron acceptors. The model can be run assuming a constant source or declining source term and will predict the maximum extent of plume migration. Based on available Site characterization data, and estimated parameters, the following input values were used to model the hydrocarbon plume. Actual input values are shown on the Model output included in *Appendix B*.

PARAMETER	VALUE	SOURCE
Hydraulic Conductivity	2.3 x 10 ⁻⁴ cm/sec	Slug Test Results
Hydraulic Gradient	0.0035 ft/ft to the southeast 0.0064 ft/ft to the northwest	<ul style="list-style-type: none"> Groundwater Elevations Measured at MW-2 and MW-21 on 6/18/08 Groundwater Elevations Measured at MW-2 and MW-12R on 6/18/08
Porosity	0.25	Estimated from typical values for a fine sand to silt
Dispersion	Longitudinal – 13.8 ft Transverse – 1.4 ft Vertical – 13.5 ft	Based on estimated plume length of 300 feet and Xu and Eckstein dispersivity formula
Adsorption (retardation factor)	1.88	<ul style="list-style-type: none"> Calculated based on estimated soil bulk density of 1.7 kg/l, Reported values of K_{oc} Organic carbon fraction estimated at 0.001
Biodegradation -- instantaneous reaction	Electron Acceptor concentration delta: O ₂ = 2.99 mg/l; NO ₃ = 1.26 mg/l; and SO ₄ = 2 mg/l Observed Fe ²⁺ = 15 mg/l Observed CH ₄ = 0 mg/l	August 2007 groundwater sampling event for monitoring wells MW-8 and source area well MW-2
Modeled Area Length	Motts Basin – 1,000 feet Negro Bar Channel – 550 feet	Estimated distance to point of concern
Modeled Area Width	250 feet	Estimated plume width
Simulation Time	1000 years	Steady state flow
Source Thickness	10 feet	Groundwater and soil sampling results
Source Concentration	Divided into four, 40-foot zones with the following concentrations: Zone 1 = 4.04 mg/l Zone 2 = 17.7 mg/l Zone 3 = 124.6 mg/l Zone 4 = 17.7 mg/l Zone 5 = 4.04 mg/l	Based on groundwater sampling results and lump BTEX monitoring data

The model was then run to assess the equilibrium hydrocarbon concentrations at Motts Basin located approximately 1,000 feet southeast and at Negro Bar Channel located 550 feet northwest of the Site. As a conservative approach, a steady state, constant source was assumed for each model run.

BIOCHLOR also is based in the Domenico analytical solute transport model with the ability to model one dimensional advection, three dimensional dispersion, linear adsorption and biotransformation via reductive dechlorination. Reductive dechlorination is the dominant biodegradation process at most chlorinated solvent sites and is assumed to follow a sequential first-order decay process. The model can be run assuming a constant source or declining source option that is determined using temporal site data. Based on available Site characterization data and estimated parameters the following input values were used to model the chlorinated plume. Actual input values are shown on the Model output included in *Appendix B*.

PARAMETER	VALUE	SOURCE
Hydraulic Conductivity	2.3 x 10 ⁻⁴ cm/sec	Slug Test Results
Hydraulic Gradient	0.0035 f/f to the southeast 0.0064 f/f to the northwest	Groundwater Elevations Measured at MW-2 and MW-21 on 6/18/08 Groundwater Elevations Measured at MW-2 and MW-12R on 6/18/08
Porosity	0.25	Estimated from typical values for a fine sand to silt
Dispersion	Longitudinal – 43 f Transverse – 0.1 f Vertical – 1x10 ⁻⁹⁹ ft	<ul style="list-style-type: none"> • Based on estimated plume length of 430 feet • 0.01 x log_e dispersivity • Vertical dispersivity is zero since depth of source is approx. depth to confining layer
Adsorption (retardation factor)	1.9	Calculated based on estimated soil bulk density of 1.7 kg/l, average partition coefficient of 127 l/kg and organic carbon fraction of 0.001
Biodegradation	PCE → TCE 0.197 TCE → DCE 0.177 DCE → VC 0.048 VC → ethene 0.022	Based on calibration to field data using a simulation time of 33 years (estimated time to suspected release)
Modeled Area Length	Motts Basin – 1,000 feet Negro Bar Channel – 550 feet	Estimated distance to point of concern
Modeled Area Width	450 feet	Estimated plume width
Simulation Time	1000 years	Steady state flow
Source Thickness	31 feet	Based on geologic logs and monitoring data
Source Concentration	Source Widths (ft) Area 1 Area 2 Area 3 100 200 450 Source Concentrations (mg/l) Area 1 Area 3 Area 3 PCE 15.0 5.747 3.492 TCE 6.1 2.323 1.426 DCE 2.624 1.790 1.799 VC 0.094 0.129 0.133	Based on groundwater sampling results and lump BTEX monitoring data Modeled source area as variable source

PARAMETER	VALUE	SOURCE
Measured Aqueous Concentrations	Distance from source (ft) 0 77 136 219 280 PCE 15.0 13.0 .037 .009 .033 TCE 6.1 2.9 .81 .008 .015 DCE 2.62 2.93 3.34 1.2 0.1 VC 0.1 .024 0.26 .024 .015	<ul style="list-style-type: none"> • Based on groundwater concentrations measured in June 2008 at MW-19, BD-5, MW-21, BD-6 and MW-22 at 30 feet bgs • MW-19 assumed to be at source

The model was then run to assess the equilibrium chlorinated concentrations at Mottis Basin located approximately 1,000 feet southeast and at Negro Bar Channel located 550 feet northwest of the Site if no engineering control or source area remediation is implemented. As a conservative approach, a steady state, constant source was assumed for each model run.

4.11 Characterization of Previously Identified Areas of Concern

In order to verify previous soil sampling results, seventeen (17) additional soil samples were collected in July 2007. Soil sample were collected from the bottom of the drywell DW-3, near the location of the former USTs and from inside the site building (*Figure 5*).

Subsequent to clearing via hand auger or air knife to depths of approximately 4-foot bgs, each soil boring was advanced to a depth of 10-foot bgs, refusal, or groundwater whichever was encountered first. Continuous soil quality field screening was performed at all boring locations. Field screening included identifying visual or olfactory evidence of petroleum impact, and use of a portable PID to obtain qualitative measurements of volatile organic vapors. At each boring location, the soil sample with the highest PID reading was selected for laboratory analysis. If no instrument response was present, the sample collected at the groundwater interface was selected for analysis. Complete boring logs can be found in *Appendix A*.

Each soil sample was collected into the appropriate container, placed in a cooler at 4°C, and submitted to a New York State Department of Health (NYSDOH) ELAP certified laboratory for analysis of VOCs by EPA Method 8260, SVOCs by EPA Method 8270 and PP Metals by EPA Method 6010. All analyses to be performed in accordance with NYSDEC Category B deliverable package.

4.12 Soil Vapor Intrusion – August 2007

To evaluate potential exposures a soil vapor intrusion investigation was completed on August 28-30, 2007. This investigation was completed in accordance with New York State Department of Health (NYSDOH) *Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006*.

Five sub-slab vapor samples were collected from beneath the on-site building (*Figure 6*). The sampling locations were biased towards potential areas of concern identified during site reconnaissance including a sump, elevator shaft, boiler room and former painting booths. A concrete coring drill was used to facilitate the sub-slab soil gas collection from within the first 2-inches of the sub-slab material in accordance with the NYSDOH guidance document.

Five soil vapor samples were collected near the site perimeter at the locations shown on *Figure 6*. At each soil vapor sampling location, a 6-inch, 0.0057-inch pore diameter, stainless steel screen implant was installed approximately 1-foot above the existing water table using direct push technology. The implant was fitted with a 3/16-inch diameter, laboratory grade, polyethylene tubing that extended to the surface. The annular space was backfilled with glass beads to 1-foot above the screen, with the remainder of the borehole backfilled with bentonite slurry to grade. The vapor probe was completed at grade with a flush, bolt-down 6-inch, manhole set in concrete.

Soil vapor and sub-slab vapor samples were collected using 6-liter SUMMA canisters at a flow rate not to exceed 0.2 liters per minute in accordance with the NYSDOH guidance document. Vapor samples were analyzed for volatile organic compounds in accordance with EPA Method TO-15. The method detection limit used for the vapor samples was 1.0 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). All SUMMA canisters used in the investigation were certified clean by the laboratory. After collection, the SUMMA canisters were submitted to NYSDOH ELAP certified laboratory for analysis.

As part of the soil vapor intrusion investigation, indoor and outdoor air samples were collected for laboratory analysis. Two (2) indoor air samples and one (1) outdoor air sample were collected. Sampling locations are shown on *Figure 6*.

Indoor and outdoor air samples were collected using 6-liter SUMMA canisters with an 8-hour sampling period in accordance with the NYSDOH guidance document. Air samples were analyzed for volatile organic compounds per EPA Method TO-15. The method detection limit used for the indoor and outdoor air samples was $0.25 \mu\text{g}/\text{m}^3$ for at least carbon tetrachloride and trichloroethylene; it was $1.0 \mu\text{g}/\text{m}^3$ for other compounds. All SUMMA canisters used in the investigation were certified clean by the laboratory. After collection, the SUMMA canisters were submitted to NYSDOH ELAP certified laboratory for analysis.

4.13 Soil Vapor Sampling – June 2008

Based on the August 2007 soil vapor intrusion results, an additional soil vapor investigation was completed in June 2008 to evaluate potential off-site exposures towards the southeast and northwest. This investigation was completed in accordance with *NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York, October 2006*.

Four soil vapor samples (SVP-6 through SVP-9) were collected at the locations shown on *Figure 6*. At each soil vapor sampling location, a 6-inch, 0.0057-inch pore diameter, stainless steel screen implant was installed approximately 1-foot above the existing water table using direct push technology. The implant was fitted with a 3/16-inch diameter, laboratory grade, polyethylene tubing that extended to the surface. The annular space was backfilled with glass beads to 1-foot above the screen, with the remainder of the borehole backfilled with bentonite slurry to grade. Each vapor probe was completed at grade with a flush, bolt-down 6-inch, manhole set in concrete.

Soil vapor samples were collected on June 24, 2008 using 6-liter SUMMA canisters at a flow rate not to exceed 0.2 liters per minute in accordance with the NYSDOH guidance document. Vapor samples were analyzed for volatile organic compounds in accordance with EPA Method TO-15, with a detection limit of 1.0 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). All SUMMA canisters used in the investigation were certified clean by the laboratory. After collection, the SUMMA canisters were submitted to NYSDOH ELAP certified laboratory for analysis.

5.0 FINDINGS

5.1 Site Reconnaissance

As shown in *Table 2*, an examination of the nine drywells located throughout the Site (*Figure 2*) indicates that they are constructed of 9-foot diameter concrete rings with an open bottom. Depth to bottom ranged from 5 to 7 feet bgs. Standing water was found in four out of the nine drywells. The bottom sediment ranged from a white to black sand.

To obtain construction information on the five monitoring wells (MW-11, MW-12, MW-13, MW-14, and MW-15), the wells were surveyed for construction details on July 10, 2007. At that time, monitoring wells MW-11 and MW-12 could not be located, but an additional well not previously identified was located and labeled MW-16. All the wells were constructed of 2-inch diameter PVC with total depths ranging from 8 to 15 feet bgs. The exact position of the screen interval could not be determined (*Table 1*).

5.2 Groundwater Gauging, Flow Direction and Tidal Influence Survey

During the August 2007 gauging event, depth to groundwater throughout the Site ranged from 4 to 5.5 feet bgs. In June 2008, with nine additional monitoring wells, depth to groundwater ranged from 3.7 to 5.9 bgs. Based on the August 2007 gauging data and the available monitoring well network, a groundwater divide appeared to run beneath the Site building, with an apparent groundwater flow direction towards both the northwest and southeast (*Table 3.1 and Figure 4*). To confirm this divide, additional monitoring wells were installed and gauged in June 2008. This gauging event confirmed the present of a groundwater divide centered along the location of the abandoned USTs with groundwater flow towards the northwest and south-southeast (*Table 3.2 and Figure 7*).

No DNAPL was measured in either deep monitoring well MW-19D or MW-24D on June 26, 2008 using an interface probe capable of measuring DNAPL layers as thin as 1 mm.

Water table elevations appear to be tidally influence as shown from the 0.06 to 0.19 foot fluctuations in depth to groundwater with the low and high tides in all but two of the Site wells (*Table 3.1*). However, the tidal fluctuation did not appear to significantly affect the overall groundwater flow direction. To further confirm the tidal influence, water table elevations were recorded over a 24 hour period or complete tidal cycle within monitoring well MW-15. On August 9, 2007 through August 10, 2007, depth to groundwater within MW-15 ranged from 4.6 feet to 4.9 feet (*Figure 8 and Appendix C*). According to tidal information obtained from the National Oceanographic and Atmospheric Administration (NOAA), the periods of highest and lowest groundwater elevations correlated to the times of the high and low tides at nearby John F. Kennedy International Airport (JFK). With the exception of the data retrieved from the last three hours, the depth to groundwater appeared to change at the same frequency as the fluctuations in the tide. The data collected from the late morning on August 10, 2007 does not conform to the changes in the tides. However, this anomaly is likely due to a rain event that occurred during that time period. Therefore, it is reasonable to conclude that groundwater beneath the Site is influenced by tidal fluctuations.

5.3 Hydraulic Conductivity Test

For each well, the rising head portion of the slug test was utilized to evaluate hydraulic conductivity and transmissivity of the hydrogeologic units intersecting the monitoring well network. Using the Bouwer and Rice Method, the average Site hydraulic conductivity is 2.28×10^{-4} cm/sec, with a range of 5.305×10^{-4} cm/sec (MW-1) to 4.23×10^{-5} cm/sec (MW-9). Average Site transmissivity is 2.1×10^{-5} m²/sec and ranged from 5.012×10^{-5} m²/sec (MW-1) to 3.786×10^{-6} m²/sec (MW-19). The slug test data and evaluation are present in *Appendix D*.

5.4 Previously Identified Areas of Concern

As shown in *Tables 4 and 5*, soil sampling results confirm the Phase II results obtained in 2005. Soil impact appears to be limited to the area immediately surrounding the abandoned USTs. VOCs were measured above the NYSDEC Unrestricted Use Soil Cleanup Objective (UUSCO) at exterior boring locations SB-05 SB-06, and at boring locations SB-12, SB-14 and SB-15 located beneath the floor of the former auto repair shop and adjacent warehouse. Acetone was measured above the NYSDEC UUSCO value at boring locations SB-01, SB-04 and SB-16; however, the acetone was also detect in the method blank and is a likely laboratory contaminate and not indicative of Site conditions.

The laboratory results suggest the presence of SVOCs above NYSDEC UUSCO values only at boring locations SB-05 and SB-14 (*Table 5*).

No metals were detected above the NYSDEC UUSCO values at any boring location. However, the detection limit for selenium was slightly above the NYSDEC UUSCO value of 3.9 mg/kg at boring locations SB-01, SB-02, SB-05, SB-07, SB-08, SB-10, SB-13, SB-14 and SB-15 (*Table 6*). Typical background selenium concentrations in eastern United States soils ranged from 0.1 mg/kg to 3.9 mg/kg.

The sediment sample retrieved from Drywell 3 (*Figure 2*) show the presence of VOCs trimethylbenzene and acetone above the NYSDEC UUSCO values (*Table 4*). In addition, several metals were detected above the NYSDEC UUSCO values including cadmium, chromium, copper, lead, mercury, nickel and zinc (*Table 6*).

5.5 Horizontal Delineation of Petroleum and Chlorinated Groundwater Plume

Petroleum hydrocarbons were detected in the groundwater above NYDEC groundwater quality standards and guidance values at sampling locations BD-3, BD-4, BD-5, BD-6, MW-01, MW-02, MW-03, MW-04, MW-05, MW-06, MW-12R, MW-13, MW-15, MW-16, MW-19, MW-19D, MW-20, MW-21, MW-23 and MW-24D, with elevated levels centered near the location of the abandoned USTs (*Figures 9 through 11; Tables 7 through 9*). Off-site to the south, no petroleum constituents were detected in the groundwater at shallow probe locations BW-03 through BW-06. The petroleum hydrocarbon plume appears to be centered along the northeast section of the Site and extends off-site to the northeast and southwest at depths greater than 20 feet bgs.

Semi-volatile organic compounds (SVOCs) were detected above groundwater standards and guidance values at monitoring locations near the abandoned USTs (*Table 10*). Naphthalene ranged from 13 ug/L to 160 ug/L at monitoring wells MW-2, MW-3, MW-6 and MW-19; 3&4-methyl phenol was measured at 23 ug/L at MW-2; and, 2,4-dichlorophenol was detected at 7 ug/L at MW-4.

Chlorinated hydrocarbons vinyl chloride, methylene chloride, cis-1,2-dichloroethylene, trichloroethylene and tetrachloroethylene were detected above NYSDEC groundwater standards throughout the Site, except for monitoring well locations MW-05, MW-08 and MW-09 (*Figures 12 through 14; Tables 7 through 9*). The chlorinated hydrocarbon plume is widespread throughout the Site, with elevated concentrations found near the abandoned USTs and former paint spraying booth. The plume appears to extend off-Site to the southeast and northwest. Although the chlorinated hydrocarbon plume appears to be center in the area of the abandoned USTs, the precise location of the source unknown, and the possibility of an off-site source exists.

5.6 Vertical Delineation of Petroleum Hydrocarbon and Chlorinated Solvent Plume

The petroleum hydrocarbon plume appears to be concentrated in the upper shallow (< 10 feet bgs) zone in the area of the abandoned USTs. This is evident from the elevated concentrations measured at monitoring well locations MW-02, MW-03, MW-04, MW-06, MW-15 and MW-19; as well as, concentrations measured at probe location DW-01 (*Figures 9 through 11; Tables 8 & 9*). As the distance from the former USTs increases, the overall groundwater hydrocarbon concentrations decreases, but the ratio of the concentrations at depths > 20 feet bgs compared to shallower depths increases. This suggests a diving petroleum hydrocarbon plume with groundwater flow towards the northwest and southeast. The off-Site petroleum hydrocarbon concentrations appear to be elevated at depths greater than 20 feet bgs.

Dissolved chlorinated hydrocarbon concentrations increase with depth throughout the Site and appear to be concentrated just above the clay confining layer at 35 feet bgs (*Figure 14 and Table 9*). Total chlorinated hydrocarbon concentrations at 30 feet bgs ranged from 23, 617 ug/L at MW-19 to 1 ug/L at BD-7. At the southeast corner of the Site the total chlorinated hydrocarbon concentration at 20 feet bgs was 1,358 ug/L (MW-22) and at off-Site location BD-3 it was measured at 2,264 ug/L at 30 feet bgs.

5.7 Priority Pollutant Metal Concentrations in Groundwater

Detectable concentrations of priority pollutant metals (PP-Metals) were measured in samples retrieved from on-Site monitoring wells in June 2008 (*Table 11*). Concentrations above the above NYDEC groundwater quality standards and guidance values were found in 14 out of the 24 monitoring wells sampled. Lead was detected above the groundwater standard in the unfiltered sample retrieved from monitoring wells MW-15 (0.0424 mg/L) and MW-16 (0.0690 mg/L). Thallium was measured above groundwater standards in both the filtered and unfiltered samples retrieved from monitoring wells MW-3, MW-6, MW-14, MW-15, MW-16, MW-21 and MW-23; ranging from 0.0270 mg/L to 0.0550 mg/L. Thallium was detected above groundwater standards in only the filtered samples retrieved from monitoring wells MW-2, MW-19, MW-19D, MW-20, MW-22 and MW-24D; ranging from 0.0200 mg/L to 0.0299 mg/L. Selenium was measured above groundwater standards at MW-6, MW-15 and MW-16, ranging from 0.0280 mg/L to 0.0202 mg/L. Arsenic was found above groundwater standards in only the filtered samples retrieved from MW-6 and MW-19 at 0.0282 mg/L and 0.0270 mg/L, respectively.

5.8 Biodegradation Indicator Compound Collection and Analysis

Biodegradation indicating compounds were measure in groundwater samples retrieved from the monitoring well network and from the shallow and deep groundwater probe locations. The results are summarized in *Tables 12 through 16*. As shown in *Figure 15*, there is a general pattern of electron acceptor depletion (dissolved oxygen and nitrate) and metabolic by-product concentration (dissolved iron and methane) in the areas of high VOCs concentrations. In addition, as the distance downgradient of monitoring well location MW-19 increases, the dissolved concentrations of perchloroethylene and trichloroethylene decrease while those of dichloroethylene, which is greater than 80 percent cis- 1,2-dichloroethylene, and vinyl chloride increases suggesting that reductive dechlorination is occurring in that area of the Site (*Figure 16*). Also, as shown in *Figure 16*, the concentrations of dissolved oxygen, nitrate and sulfate are depressed, while those of methane and ferrous iron are increased near the location of MW-19, suggesting an anaerobic condition favorable to reductive dechlorination. These results suggest that natural attenuation is occurring to some extent on Site.

5.9 Groundwater pH Measurements

Excluding one outlier, groundwater pH measurements throughout the Site ranged from 5.02 to 8.77. The average pH measured in the shallow probe locations in July 2007 was 6.44 (*Table 12*). Within the monitoring well network, the average pH was measured at 6.41 in August 2007 (*Table 13*) and at 7.70 in June 2008 with 11 additional wells included in the measurements (*Table 16*). The average groundwater pH measurements with depth at the vertical groundwater delineation probe locations were: 7.42 @ 10 feet bgs, 6.93 @ 20 feet bgs, 6.98 @ 30 feet bgs and 7.67 @ 35 feet bgs (*Tables 14 and 15*).

A pH of 9.97 was recorded for a groundwater sample retrieve from monitoring well MW-17 on June 18, 2008 (*Table 16*). This value is significantly outside the pH range of the remaining 104 recorded measurements for the Site. In addition, a pH of 7.64 was recorded for a groundwater sample collected at 10 feet bgs at the location of MW-17 on June 11, 2008 (*Table 15*). Therefore, this outlier may be related to a field transcription error and/or equipment malfunction.

5.10 Soil Vapor Intrusion

The New York State Department of Health (NYSDOH) has established exposure guidelines, Air Guidance Values (AGVs) for indoor air quality; however New York State has not promulgated soil vapor and sub-slab vapor standards. To evaluate concentrations of contaminants in soil vapor and sub-slab vapor, the analytical results were compared to the NYSDOH AGVs. Detected concentrations of VOCs present in the soil vapor sub-slab vapor samples were also compared to the background levels of VOCs in air (NYSDOH Fuel Oil 2003 Upper Limit, USEPA Building Assessment and Survey Evaluation [BASE] 90th Percentile Value, and Health Effects Institute [HEI] Relationship of Indoor, Outdoor and Personal Air [RIOPA] 95th Percentile Value) published in the NYSDOH Guidance Document (NYSDOH Background Levels).

The laboratory analytical results revealed detectable concentrations of VOCs in each of the soil vapor and sub-slab vapor samples collected. *Table 17* presents a summary of VOC analytical laboratory results.

Tetrachloroethene (PCE) was detected in six of the nine soil vapor samples, including the four samples collected off-Site in June 2008 and in all five sub-slab vapor samples at concentrations ranging from 8.8 to 8,100 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$). All but two samples had concentrations above the NYSDOH AGV of 100 $\mu\text{g}/\text{m}^3$. Trichloroethene (TCE) was detected in three soil vapor samples and three sub-slab vapor samples at concentrations ranging from 0.91 to 170 $\mu\text{g}/\text{m}^3$. All but one sample had concentrations above the NYSDOH AGV of 5 $\mu\text{g}/\text{m}^3$. Additionally, acetone, 2-butanone (MEK), ethylbenzene, 4-ethyltoluene, toluene, 1,2,4-trimethylbenzene, 1,3,5-trimethylbenzene, m- and p-xylene, and o-xylene were detected at concentrations in exceedence of their respective NYSDOH Background Levels.

To evaluate concentrations of contaminants in indoor and outdoor air samples, the analytical results were compared to the NYSDOH AGVs. Detected concentrations of VOCs present in the indoor and outdoor air samples were also compared to the following background levels of VOCs; NYSDOH Fuel Oil 2003 Upper Limit; USEPA Building Assessment and Survey Evaluation (BASE) 90th Percentile Value; and Health Effects Institute (HEI) Relationship of Indoor, Outdoor and Personal Air (RIOPA) 95th Percentile Value (NYSDOH Background Levels). The aforementioned background levels are published in the NYSDOH Guidance Document.

The laboratory analytical results revealed that with the exception of the trip blank, detectable concentrations of VOCs were present in each of the samples collected. None of the detected concentrations exceed the NYSDOH AGVs or NYSDOH Background Levels. *Table 18* presents a summary of VOC analytical laboratory results in indoor and outdoor air samples.

6.0 CONTAMINANT FATE AND TRANSPORT

The purpose of this section is to: 1) identify the source of the contaminant, 2) identify pathways through which chemicals detected in the various environmental media may be transported, and; 3) estimate the potential for migration of these compounds to points of exposure. The environmental pathways evaluated as potential routes of migration include air, soils, and groundwater. Based in the results of this investigation and the Site Investigation, prepared by ATC, dated June 27, 2005, the primary compounds or compound groups evaluated for these routes are aromatic hydrocarbons and chlorinated hydrocarbons.

6.1 Contaminant Source

Based upon the contaminant mass distribution discussed in Section 4.0, it is likely that the former USTs located near the northwest corner of the Site building, and possibly the former paint spraying booth, are the primary sources of the hydrocarbon impact detected in the Site groundwater. An additional source of groundwater impact is possibly Drywell #3. The source of the dissolved hydrocarbon contamination is likely related to historical operations on-Site, the Eagle Oil Fuel Oil Tank Farm across Roger Avenue or to the general water quality of the Negro Bar Channel and Motts Basin located near the Site.

6.2 Potential Routes of Migration

The potential migration pathways were evaluated relative to Site conditions and features observed during the field investigations.

6.2.1 Air Route

Migration of Site related VOCs can occur by volatilization at or near the soil surface. This process could be enhanced by low barometric pressure, high winds, and high temperatures. A Sub-slab soil vapor investigation indicated the presence of VOCs beneath the slab of the Site building, within the soils along the east property line and off-Site to the south-southeast and north. Therefore, the air route appears to be a potential route of chemical migration. However, there are no basements associated with the Site building, and no construction plans involve the use of basements. There is little potential for transport of particulate matter (i.e., wind borne dust) since the Site is paved, or improved with the Site building.

6.2.2 Groundwater Migration

Groundwater beneath the Site appears to flow southeast toward Motts Basin, which is located approximately 1,000-feet south-southeast, and northwest towards Negro Bar Channel that is located 550-feet north of the Site. There are no known potable groundwater wells within one mile of the Site. VOCs were detected throughout the Site with elevated concentrations in the northeastern portion of the Site, near Roger Avenue. Chlorinated hydrocarbons were detected in groundwater samples collected from most of the Site. Relatively low concentrations of petroleum hydrocarbons were measured on the southern portion of the Site. Based upon the contaminant distribution and the assumed groundwater flow directions, the most likely discharge areas that may be impacted by the compounds of concern are Motts Basin and Negro Bar Channel.

Therefore, groundwater migration appears to be a potential route of chemical migration. Groundwater modeling using both BIOSCREEN and BIOCHLOR indicated that only vinyl chloride will potentially impact Motts Basin at a concentration of 35 ug/L. Other chlorinated compounds and petroleum hydrocarbons will naturally attenuate prior to reaching Motts Basin. Both models suggest that groundwater may potentially discharge into Negro Bar Channel with a total dissolved petroleum hydrocarbon concentration of 1,610 ug/L, trichloroethylene at 2 ug/L, dichloroethylene at 360 ug/L and vinyl chloride at 1,414 ug/L. However, these concentrations were calculated assuming a constant source and are likely to overestimate the impact. See *Appendix B* for complete modeling results.

Given the likely contaminant mass, general industrial/commercial nature of the surrounding area, and significant dilution likely to occur as a result of the mixing of a relatively low volume of groundwater discharging to the basin and channel in relation to the volume of water flowing within basin and channel, groundwater migration is not likely to significantly impact the basin or channel above background concentrations.

6.2.3 Surface Soil Route

Except for minor areas where the pavement has deteriorated, essentially the entire Site is either paved or improved with structures. In addition, with the exception of the former UST area, no significant unsaturated soil contamination has been detected. The contaminants are found mostly within the saturated soils and groundwater. As a result, surface soil route does not appear to be a significant route of chemical migration.

6.3 Persistence

6.3.1 Petroleum Hydrocarbons

Petroleum hydrocarbons are relatively mobile and non-persistent in many shallow soil environments, but tend to be more persistent in deeper soils and groundwater. Petroleum hydrocarbon compounds tend to volatilize relatively rapidly from shallow soil and surface water. Half-lives in soil range on the order of several days to several weeks. Persistence in groundwater tends to be much longer, with half-lives ranging from several days to two years.

Organic carbon partition coefficients are expected to be moderate to low in the fine to medium sand horizon at shallow depths. The clay deposit at approximately 35 feet bgs is expected to have moderate to high partition coefficients. Based upon the Site hydrogeology, it is expected that the petroleum hydrocarbons may preferentially fractionate to the clays present at 35 feet bgs, resulting a longer persistence in this horizon. However, soil samples retrieved in the area of the USTs did not indicate significant vertical migration of the petroleum hydrocarbons with depth. The marine clay deposit is likely to act as a confining unit, preventing the vertical migration of the petroleum hydrocarbons. Petroleum hydrocarbons in the groundwater above this confining layer are expected to fractionate into the dissolved phase and degrade relatively rapidly.

6.3.2 Chlorinated Hydrocarbons

Chlorinated hydrocarbons are relatively mobile and non-persistent in many shallow soil environments, but tend to be more persistent in deeper soils and groundwater. These compounds tend to volatilize relatively rapidly from shallow soil and surface water. Half-lives in soil range on the order of several days to several weeks. Persistence in groundwater tends to be much longer, with half-lives ranging from several days to two years.

Organic carbon partition coefficients are expected to be moderate to low in the fine to medium sand horizon at shallow depths. The clay deposit at approximately 35 feet bgs is expected to have moderate to high partition coefficients. Based upon the Site hydrogeology, it is expected that the chlorinated hydrocarbons may preferentially fractionate to the clays, resulting a longer persistence in this horizon. However, this marine clay deposit is likely to act as a confining unit, preventing the further vertical migration of the chlorinated hydrocarbons. Chlorinated hydrocarbons in the groundwater above this confining layer are expected to fractionate into the dissolved phase and degrade via reductive dechlorination.

6.4 Migration

Of the four potential migration routes identified in Section 6.2, both air and groundwater appear to be potential routes of chemical migration.

7.0 QUALITATIVE HEALTH EXPOSURE ASSESSMENT

As part of the Remedial Investigation, ATC has conducted a Qualitative Health Exposure Assessment (QEA) to evaluate potential exposures to chemicals of potential concern (COPCs) in on-Site and off-Site media. The QEA consisted of evaluating human health and ecological exposures as appropriate.

The objectives of this QEA are as follows

- ◆ Identify COPCs in the environmental medium (soil, air and water) at the point of exposure
- ◆ Identify potential human and ecological receptors and exposure scenarios based upon current and reasonably anticipated future land use, both on-Site and off-Site;
- ◆ Qualitatively evaluate the risk to human health and the environment based upon the chemicals of concern, exceedances of the human health guidance values, and exposure scenarios.

7.1 Public Health Evaluation

7.1.1 Toxicity Assessment

The toxicity assessment consisted of the selection of COPCs for the various environmental media based on the results of this remedial investigation. The soil and groundwater sample laboratory analytical results were compared to the UUSCO and the TOGS. Those contaminants that exceeded these values were further considered as COPCs. The COPCs were further evaluated for frequency of detection, location of sample detection, and fate and transport properties to further limit the list of COPCs.

The COPCs are listed in the analytical result tables of this report. Several VOCs were detected in the groundwater samples collected as part of this study above the NYSDEC groundwater standard and guidance values. Several VOCs were detected in soil samples from the location of the former USTs and from Drywell #3 in excess of the NYSDEC UUSCO levels. Seven (7) metals were detected in bottom sediment samples from Drywell #3 above listed UUSCO levels and four (4) metals were detected in groundwater samples above groundwater standards and guidance values.

7.1.2 Exposure Assessment

The Site is situated in an urban area characterized by commercial and residential development. It consists of an approximately 5 acre parcel of land that is currently developed with an approximately 155,000 square foot, one-story, warehouse building. The Site is zoned for commercial/industrial improvements. The general land use in the area is commercial with residential housing to the south along Bayview Avenue. Much of the developed area is paved or capped with concrete. Groundwater in the area is not used for potable water. The NYSDEC classifies groundwater in the area as Class GA. Although Class GA Waters are identified as a source of potable water, the aquifer in this area is likely brackish and would not support potable water use.

The following list the receptors, media, and potential exposure routes at the Site.

1. Current Conditions

Under current conditions, the following receptors are likely to be exposed to the contamination at the Site. The primary pathway, route, and media through which exposure may occur are also identified.

- Any on-Site construction or commercial worker could be exposed to CPOCs through dermal contact with impacted soil and groundwater, inhalation of vapors and/or ingestion of soil/groundwater during any excavation activities, which extend to the water table.
- Off-Site commercial workers and/or nearby residents could be exposed to CPOCs through vapor intrusion, and dermal contact and/or ingestion of groundwater during any excavation activities that extend to the water table

2. Future Conditions: Short Term Construction Activity

Under future conditions, construction activity may occur at the Site. This construction activity may involve soil excavation, paving, building demolition, installation of piles and structures. The following receptors could potentially be exposed to contamination at the site during such construction activities. The primary pathway, route and media through which exposure could occur are also identified.

- A construction worker and/or commercial worker could be exposed to subsurface soil and groundwater by dermal contact, accidental ingestion of particulates/groundwater during excavation that extend to the water table, and by inhalation of vapors.

3. Future Conditions: Long Term

Commercial and residential development characterizes the area around the Site. Local land use trends are towards commercial use of the Site. Based on this assumption, following are the likely receptors that may be exposed to contamination at the Site. The primary pathway, route and media through which exposure is likely to occur are also identified.

- An on-Site commercial worker could be exposed to accumulated vapors within buildings.
- On-Site commercial worker or unauthorized personnel could be exposed to surface soil by dermal contact and by inhalation of vapors or ingestion of soil and groundwater during any excavation activities which extend to the water table.
- Off-Site commercial workers and/or nearby residents could be exposed to accumulated vapors within buildings and by dermal contact and/or ingestion of groundwater during any excavation activities that extend to the water table

7.1.3 Risk Characterization

There is a risk of contaminant exposure at the Site through: (1) dermal contact with impacted soils and/or ingestion of airborne soil particulates generated during excavation activities, and (2) through the inhalation of accumulated vapors within buildings. Exposure through Site groundwater is unlikely since groundwater in the area is not used as a potable source of drinking water, except for possible ingestion and/or dermal contact of groundwater during construction activities.

Off-Site contaminant exposure is possible through the inhalation of vapors with buildings south-southeast and north of the Site. Exposure through groundwater is unlikely since groundwater in the area surrounding the Site is not used as a potable source of drinking water. Limited exposure to construction workers is possible through ingestion and/or dermal contact of groundwater during construction activities.

ATC recommends that an air monitoring program be undertaken during any future Site construction activities that penetrate the subsurface. In addition, proper worker safety protocols should be followed. A vapor mitigation system should be part of any new on-Site building construction intended for human occupancy. Should the existing building be renovated, a vapor mitigation system should be installed prior to occupancy.

7.2 Fish and Wildlife Resources Impact Analysis

The Site is located in an urban area. The Site and adjacent properties are developed with buildings and paved surfaces with little vegetation. The nearest ecological receptors are Motts Basin, located approximately 1,000 feet south-southeast of the Site, and Negro Bar Channel, located approximately 550 feet north-northwest of the Site. Based upon the findings in section 6.2.2 that only vinyl chloride is likely to impact Motts Basin at a concentration of 35 ug/L, and given the industrial and commercial nature of the area surrounding the basin, it is unlikely that the COPCs will impact the water quality of Motts Basin above background levels. Negro Bar Channel is likely to be impacted by both petroleum hydrocarbons and chlorinated solvents. However, that area of the channel has historically been used as a fuel terminal and the immediate area surrounding the channel is of an industrial and commercial nature.

8.0 CONCLUSIONS

This section presents a discussion of the conclusions associated with this Site remedial investigation completed in August 2007 and June 2008. The conclusions presented take into consideration the contaminant fate and transport discussed in Section 6.0, the Qualitative Health Exposure Assessment presented in Section 7.0, and the intended future use of the Site.

Upon approval of this remedial investigation report by the NYSDEC, 175 Roger Avenue LLC intends to proceed with the development of a Remedial Action Work Plan and Alternative Analysis to address the potential areas of concern outlined below.

8.1 Potential Areas of Concern

Based on the results of this investigation, the following areas of concern were identified.

Impacted Soil

Based on soil boring results, petroleum soil impact in excess of NYSDEC USSCO was found to be limited to the general area surrounding the previously abandoned USTs. This area is approximately 15,000 square feet and appears to extend beneath a portion of the Site building.

VOCs (acetone, 1,2,4-trimethylbenzene, and xylene) and metals (cadmium, chromium, lead, mercury, nickel and zinc) were found in excess of NYSDEC USSCO levels in sediment samples retrieved from Drywell 3. The Phase II investigation completed in 2005 showed metal impact to the remaining eight Drywells in excess of NYSDEC USSCO levels.

Petroleum Hydrocarbon Groundwater Plume

A petroleum hydrocarbon plume appears to be centered beneath the location of the abandoned USTs. This is consistent with the soil concentrations found in this area of the Site. The plume appears to extend towards the southeast beneath the Site building, and off-Site beyond the south, east and north property lines. Off-Site impact appears to be generally limited to depths greater than 20 feet below grade surface (bgs) and is slightly above NYSDEC groundwater standards and guidance values.

Chlorinated Hydrocarbon Groundwater Plume

A chlorinated hydrocarbon plume is present beneath a large portion of the Site. The source of this chlorinated plume is unknown, but elevated concentrations were measured near the location of the abandoned USTs and former paint spraying booth. The highest concentrations, ranging from 592 ug/L to 22,245 ug/L, were measured at 20 to 30 feet bgs, above a clay confining layer present at 35 feet bgs. The plume appears to extend beyond the Site boundaries towards the south-southeast and northwest as shown by the concentrations measured in perimeter groundwater samples, ranging from 592 ug/L @ 20 ft. bgs to 22,245 ug/L @ 30 ft. bgs.

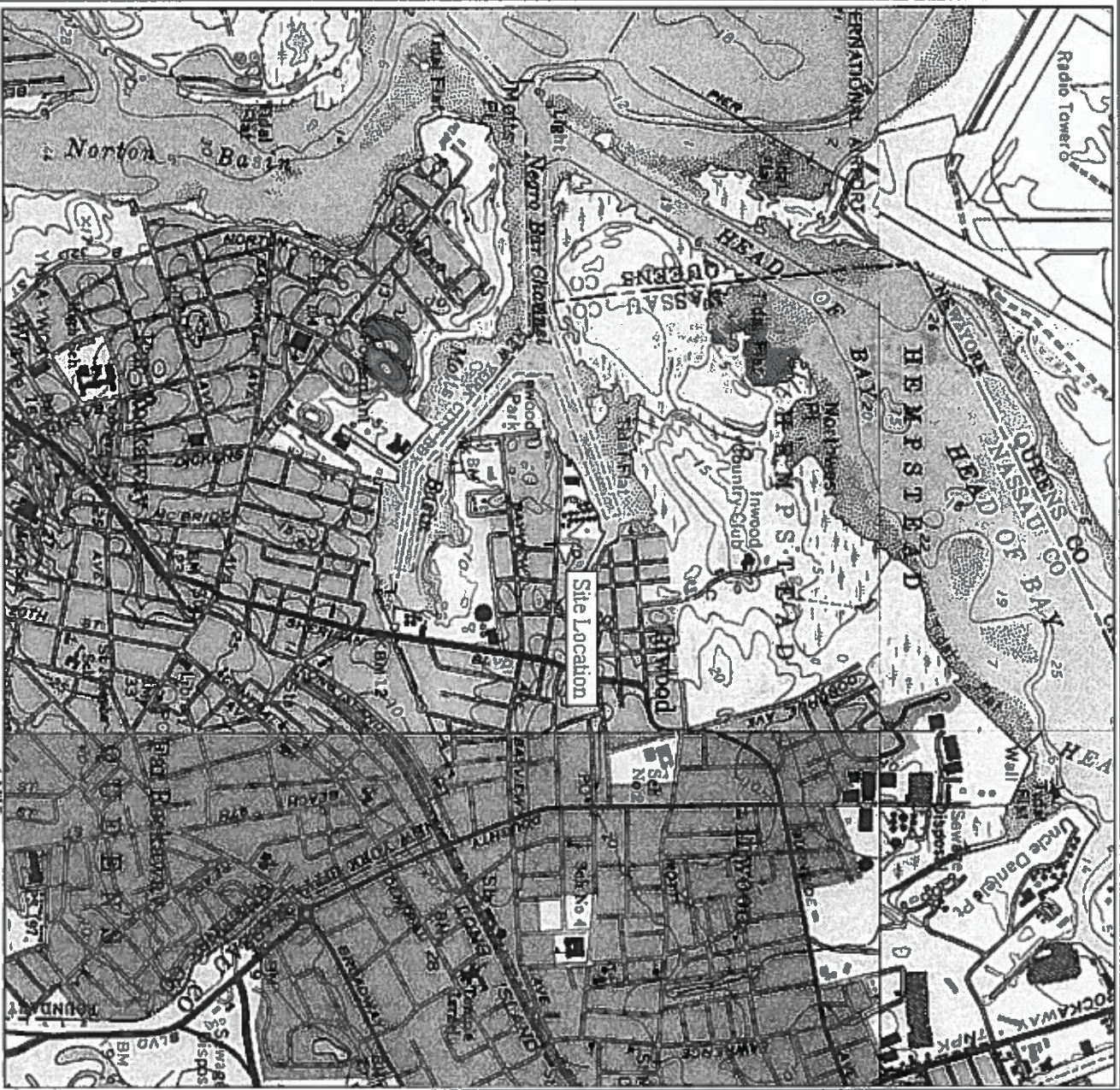
Soil Vapor

Perchloroethylene (PCE) and trichloroethylene (TCE) were measured in sub-slab vapor and soil vapor samples collected along the eastern portion of the Site and off-Site to the southeast and north in excess of New York State Department of Health (NYSDOH) Air Guidance Values (AGVs). These vapor concentrations are consistent with the likely location of the chlorinated groundwater plume beneath the Site. The results suggest potential soil vapor intrusion impact off-site towards the southeast in the area of nearby residences and the commercial property to the north.

ATC compared sub-slab vapor concentrations to indoor air concentrations within the Site building. This comparison revealed that generally, concentrations detected in sub-slab vapor were greater than those in indoor air. Additionally, in accordance with the NYSDOH Guidance Matrix 1 and Matrix 2, a comparison was made of sub-slab vapor concentrations and indoor air concentrations for TCE (Matrix 1) and PCE (Matrix 2). These Matrices indicate the action to be taken depending on the contaminant concentrations found in sub-slab vapor and indoor air. Following the NYSDOH Guidance, the comparison of sub-slab vapor to indoor air concentrations of TCE (Matrix 1) indicates that the action to be taken is "monitor/mitigate." The comparison for PCE (Matrix 2) indicates that the action to be taken "mitigate."

*Remedial Investigation Report
175 Roger Avenue
Inwood, New York*

FIGURES



MAIN 137°
 0 1000 FEET 0 500 1000 METERS
 MILE
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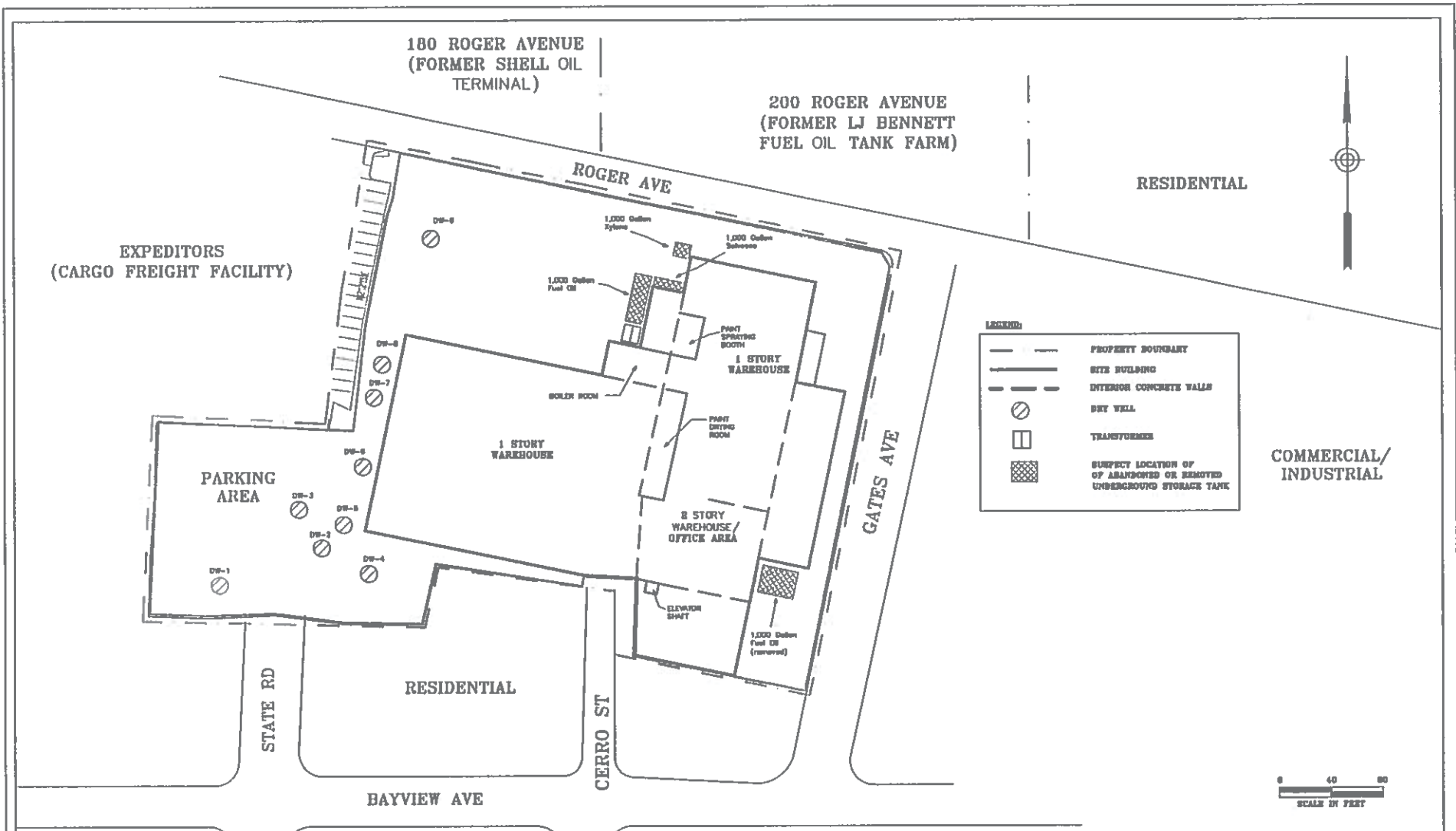
FIGURE 1 – SITE LOCATION MAP



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 104 East 25th Street, 8th Floor
 New York, NY 10010-2917
 Phone (212) 353-8280 • Fax (212) 979-8447

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CLIENT: 175 Roger Avenue, LLC
SITE: 175 Roger Avenue
 Inwood, NY 11096
PROJECT #:
SCALE: As indicated



CLIENT:
 175 ROGER AVENUE, LLC
 17 STATE STREET, 19TH FLOOR
 NEW YORK, NY 10004

SITE ADDRESS:
 175 ROGER AVENUE
 INWOOD, NY 11096

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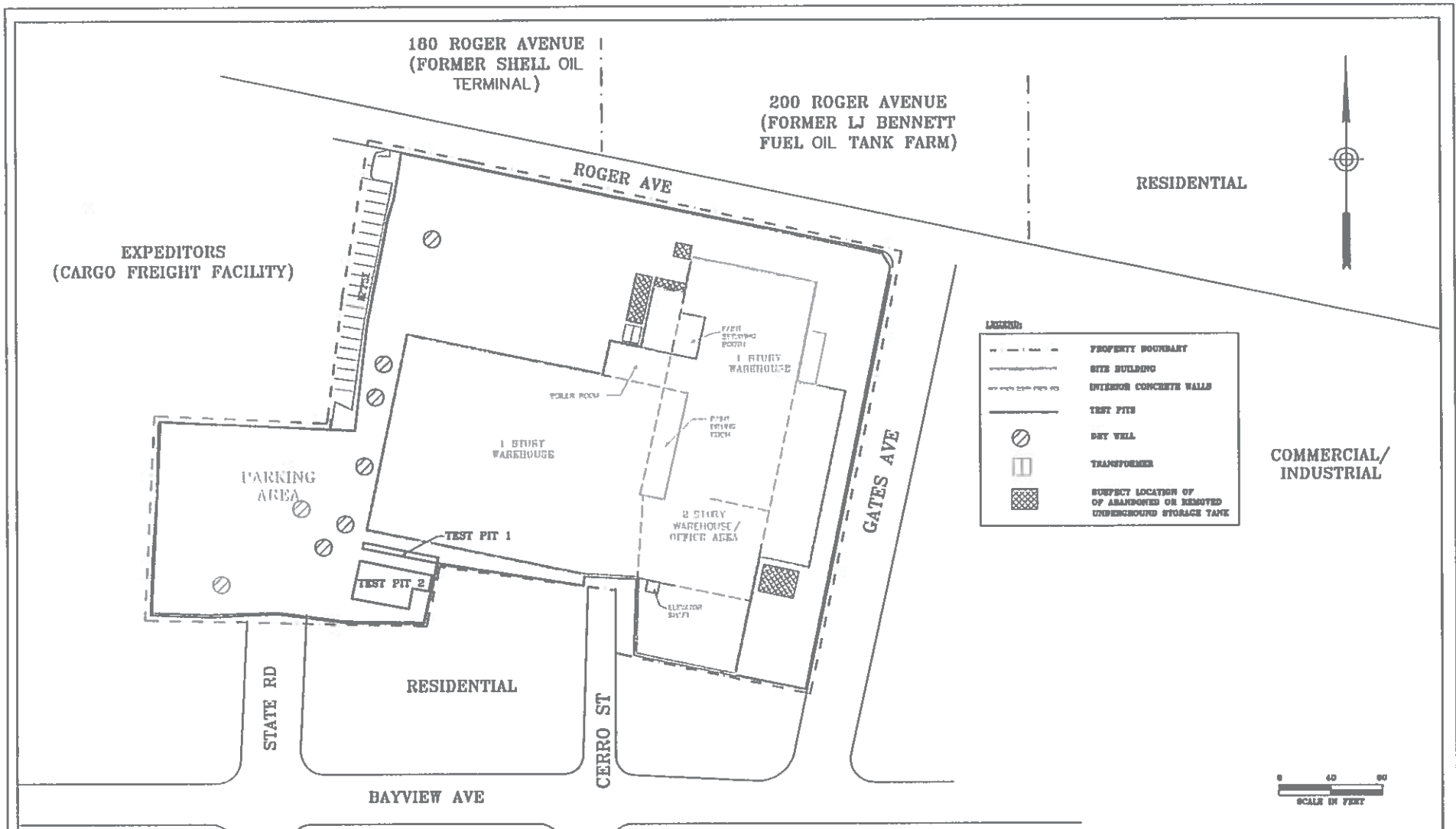
DRAWN BY: J. Marzilli
 CHECKED BY: J. Myers
 DESIGNED BY: J. Marzilli
 PREPARED BY: J. Myers

DRAWING TITLE:
SITE PLAN

SCALE:
 AS SHOWN

ATC PROJECT: # 15.75316.(1)15

DATE: JULY, 2018
 FIGURE 2



CLIENT:
 175 ROGER AVENUE, LLC
 17 STATE STREET, 19TH FLOOR
 NEW YORK, NY 10004

SITE ADDRESS:
 175 ROGER AVENUE
 INWOOD, NY 11096

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DRAWN BY: J. Marshall
 CHECKED BY: J. Myers
 DESIGNED BY: J. Marshall
 CARRIED BY: J. Myers

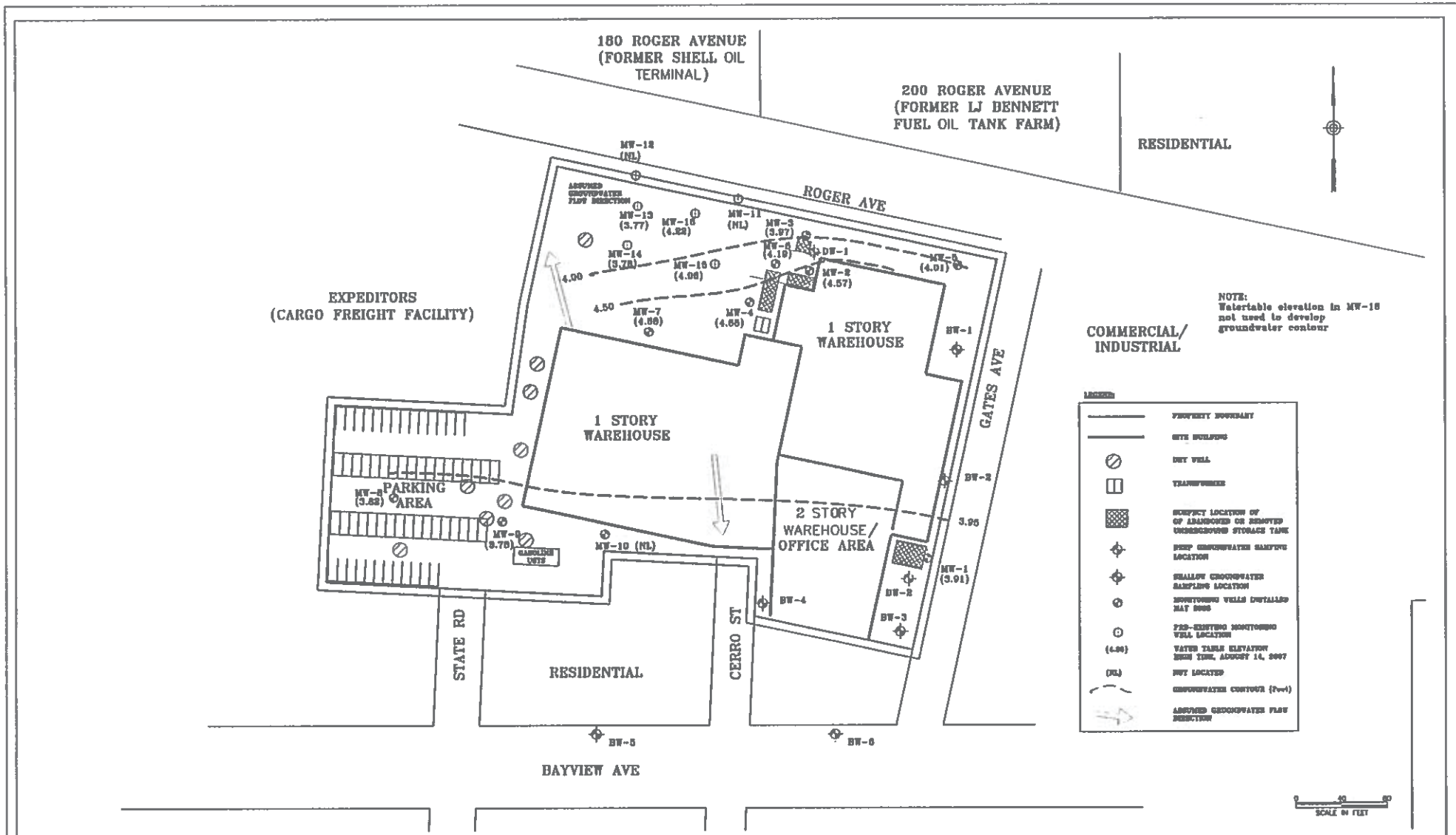
DRAWING TITLE:
**GASOLINE UST
 TEST PIT LOCATION
 MAP**

SCALE:
 AS SHOWN ATC PROJECT: # 15.75316.0015

DRAWING NO:
FIGURE 3

DATE:
 R.T.Y. 2018

REVISION NO.:



CLIENT:
175 ROGER AVENUE, LLC
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NEW YORK, NY 10004

SITE ADDRESS:
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DRAWN BY: EM
INSTRUCED BY: SS
DESIGNED BY: SS
CHECKED BY: SS

DRAWING TITLE:
GROUNDWATER ELEVATIONS
AND CONTOURS
AUGUST 14, 2007

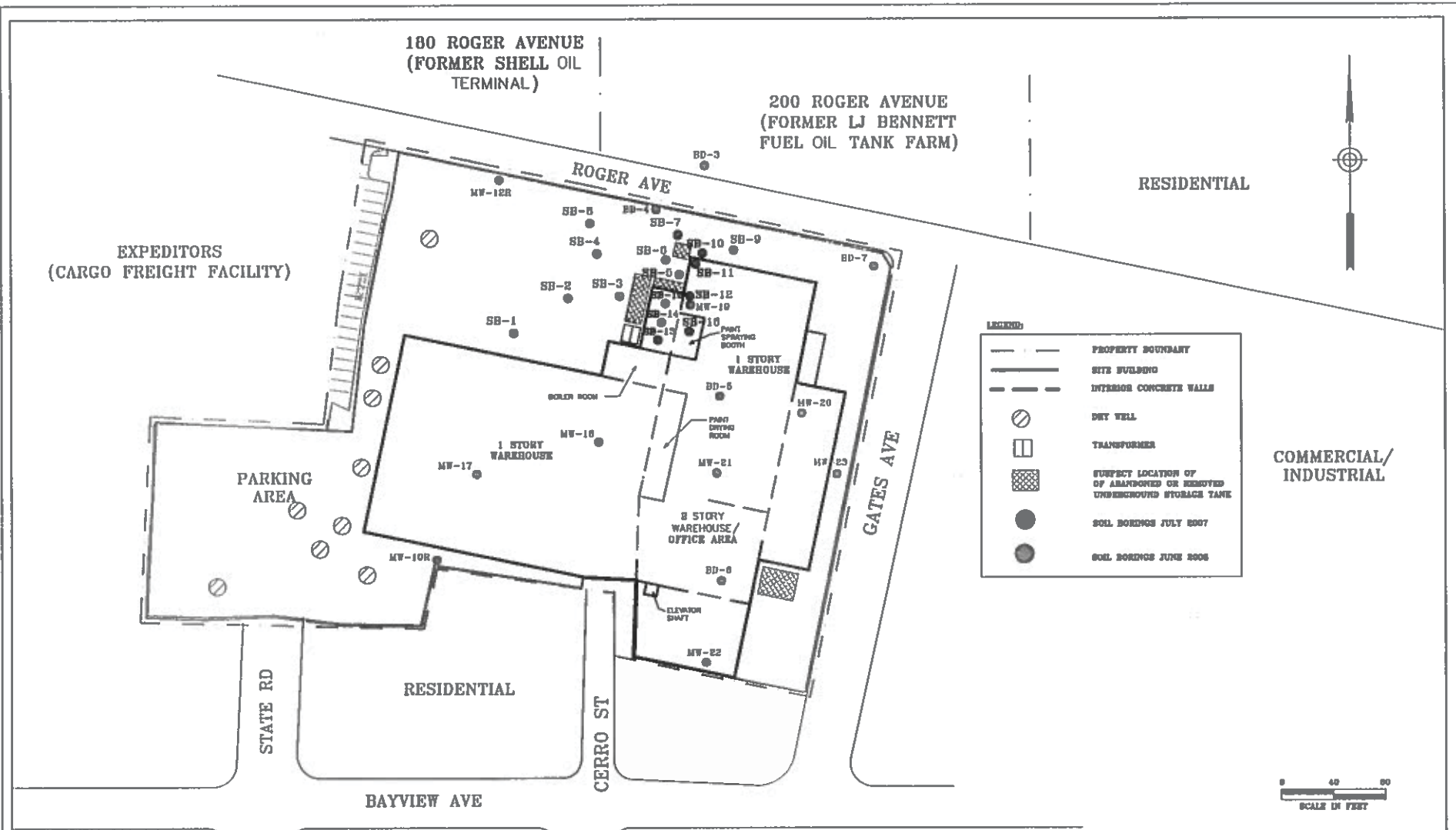
SCALE:
AS SHOWN

ATC PROJECT #: 15.75316.0005

DATE: SEPTEMBER, 2007

FIGURE 4

FILE: M3CAD2007200725316.0005



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 NEW YORK, NY 10004

SITE ADDRESS:
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 INWOOD, NY 11096

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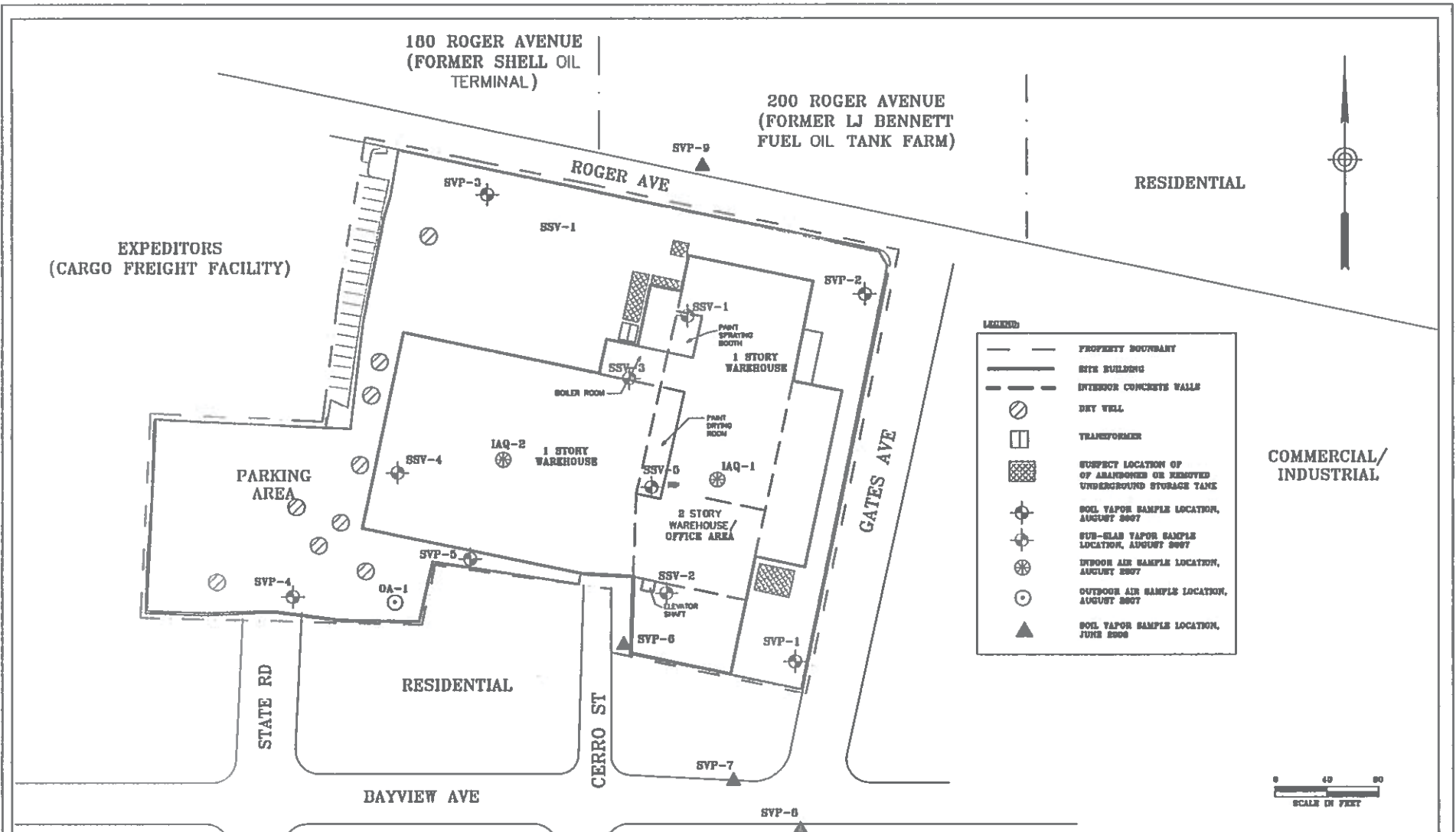
DRAWN BY: J. Marshall
 CHECKED BY: J. Myers
 DESIGNED BY: J. Marshall
 CONCEPT BY: J. Marshall

DRAWING TITLE:
**SOIL SAMPLING
 LOCATION MAP**

SCALE:
 AS SHOWN ATC PROJECT: # 15-75316.00015

DATE: JULY, 2018
 SHEET NO.: FIGURE 5

KACargo Vermeire 175 Roger Avenue 2018 NYSDEC Brownfield



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175 ROGER AVENUE, LLC
17 STATE STREET, 19TH FLOOR
NEW YORK, NY 10004

SITE ADDRESS:
175 ROGER AVENUE
INWOOD, NY 11096

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DRAWN BY: J. MacCall
CHECKED BY: J. Myers
DESIGNED BY: J. MacCall
FORWARDED BY: J. Myers

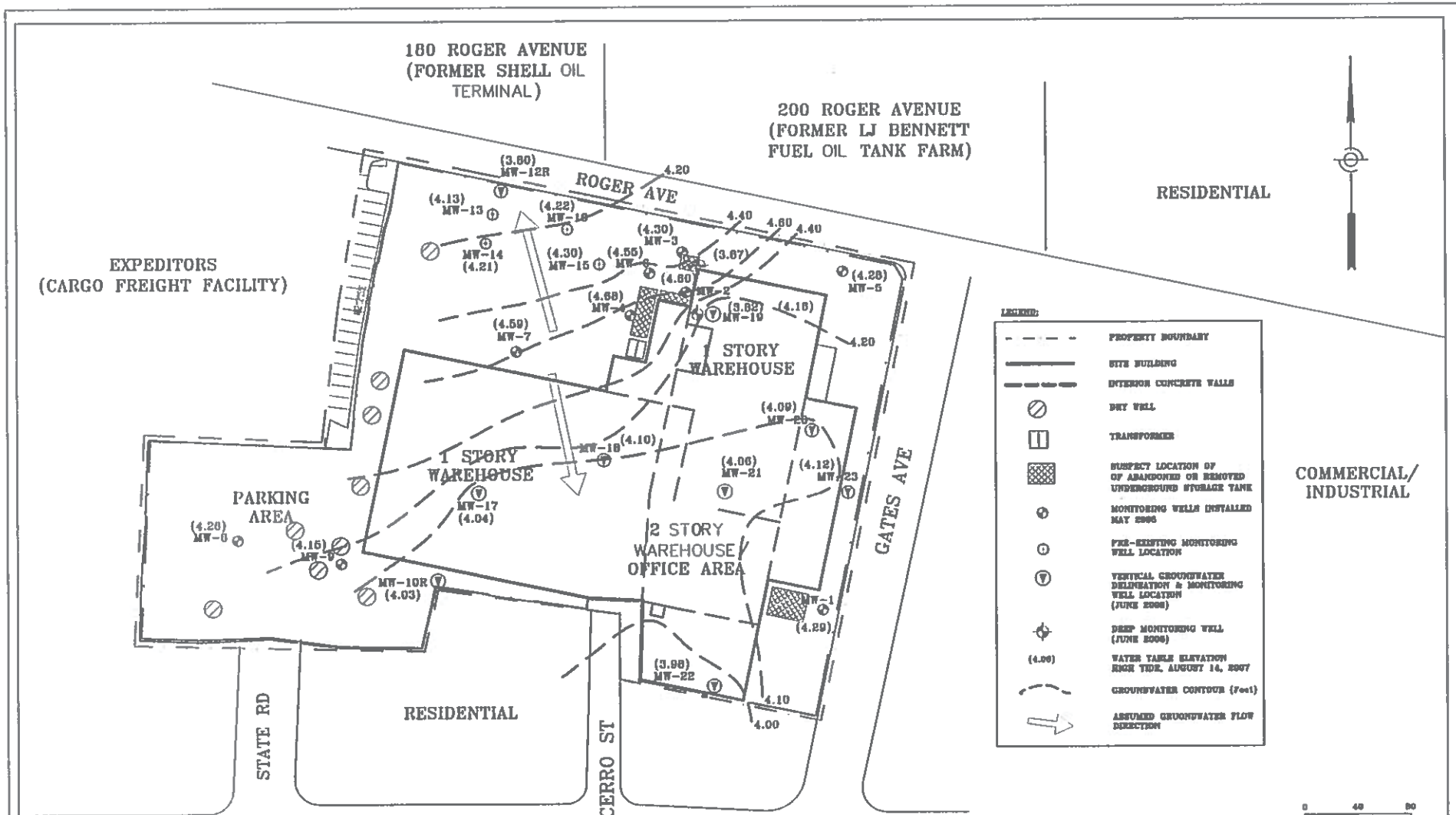
DRAWING TITLE:
Soil, Sub-Slab, Indoor &
Outdoor Sampling
Locations

SCALE:
AS SHOWN

ATC PROJECT: # 15.75316.0785

PLAN SHEET:
FIGURE 6

DATE:
JULY, 2008



LEGEND:

- PROPERTY BOUNDARY
- SITE BUILDING
- INTERIOR CONCRETE WALLS
- DRY WELL
- TRANSFORMER
- SUSPECT LOCATION OF ABANDONED OR REMOVED UNDERGROUND STORAGE TANK
- MONITORING WELLS INSTALLED MAY 2006
- PRE-EXISTING MONITORING WELL LOCATION
- VERTICAL GROUNDWATER DELINEATION & MONITORING WELL LOCATION (JUNE 2008)
- DEEP MONITORING WELL (JUNE 2008)
- WATER TABLE ELEVATION HIGH TIDE, AUGUST 14, 2007
- GROUNDWATER CONTOUR (Foot)
- ASSUMED GROUNDWATER FLOW DIRECTION



CLIENT:
 175 ROGER AVENUE, LLC
 17 STATE STREET, 19TH FLOOR
 NEW YORK, NY 10004

SITE ADDRESS:
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 INWOOD, NY 11096

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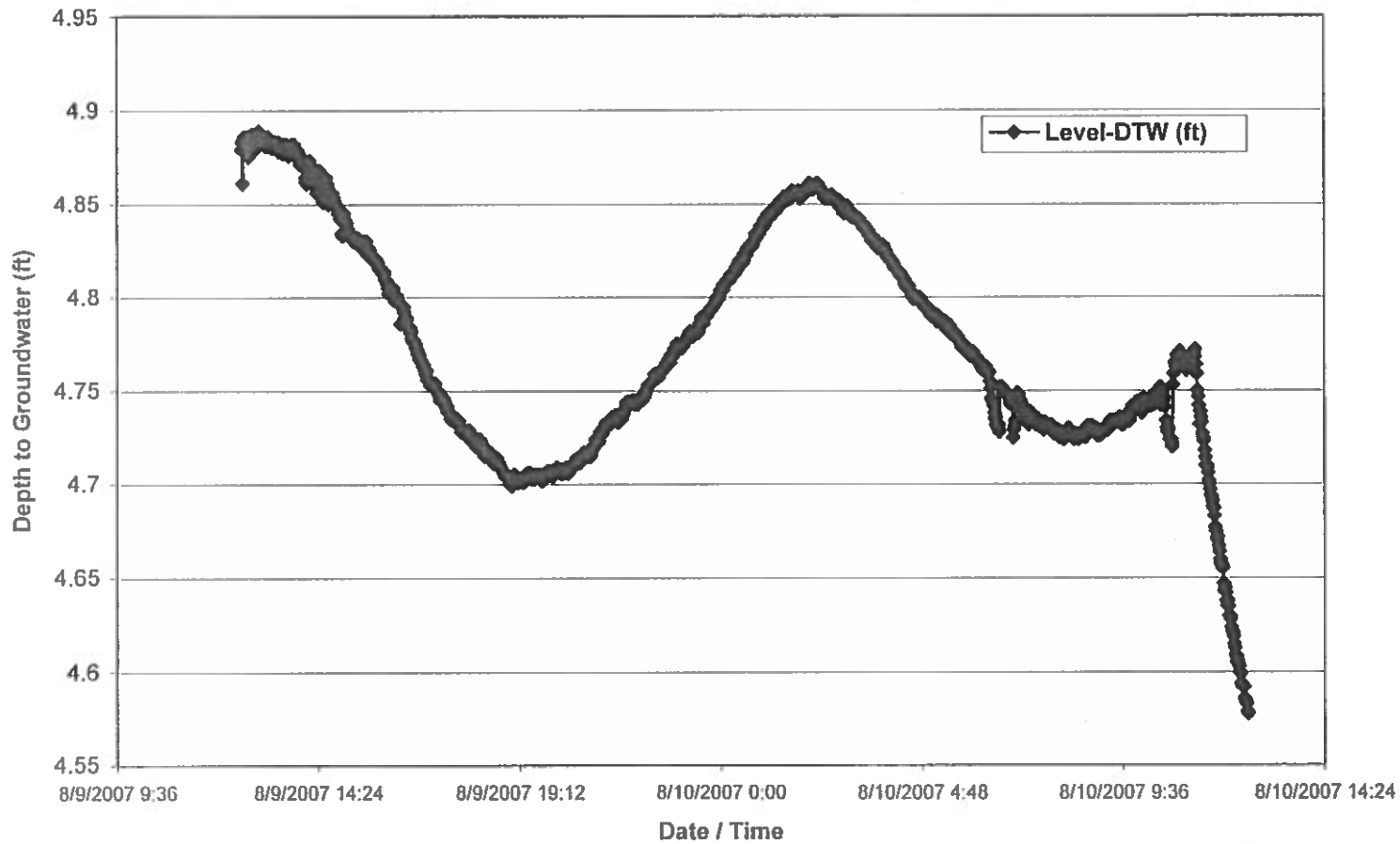
DRAWN BY: E. Meechell
 DESIGNED BY: J. Myers
 CHECKED BY: E. Meechell
 DATE: 7/18/08

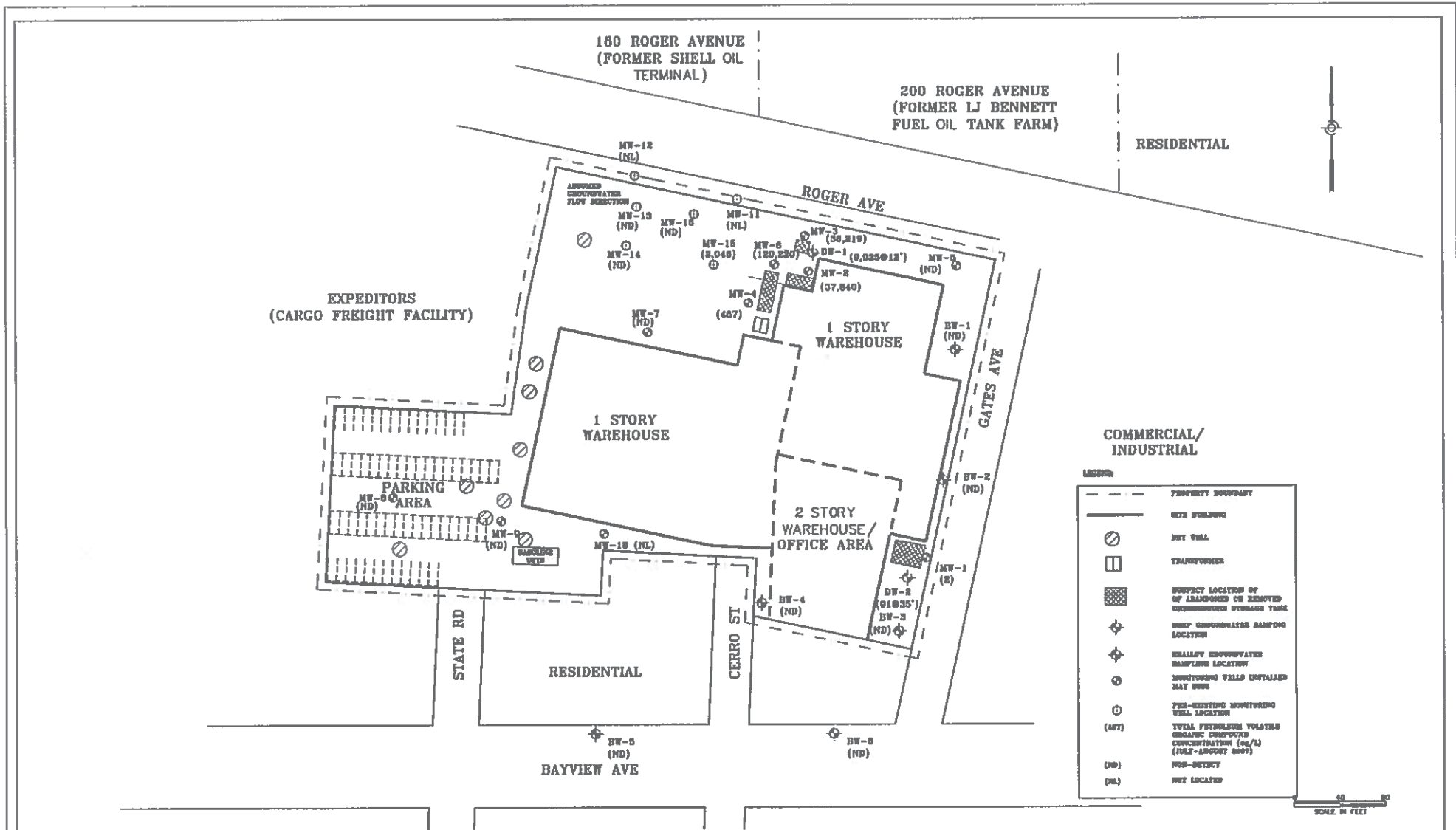
DRAWING TITLE:
 GROUNDWATER ELEVATIONS
 AND CONTOUR MAP
 JULY 18, 2008

DRAWING NO:
FIGURE 7
 TITLE: 175R, 200R
 DATE: 7/18/08

K:\Cargo Ventures\175 Roger Avenue\2008 NYS\DFC Base of Field

Figure 8
Groundwater Elevation Fluctuations with Tide Measured in Monitoring Well MW-15
Over a 24 Hour Period on August 9 and 10, 2007
175 Roger Avenue, Inwood, NY





CLIENT:
 175 ROGER AVENUE, LLC
 17 STATE STREET, 19TH FLOOR
 NEW YORK, NY 10004

SITE ADDRESS:
 175 ROGER AVENUE
 INWOOD, NY 11096

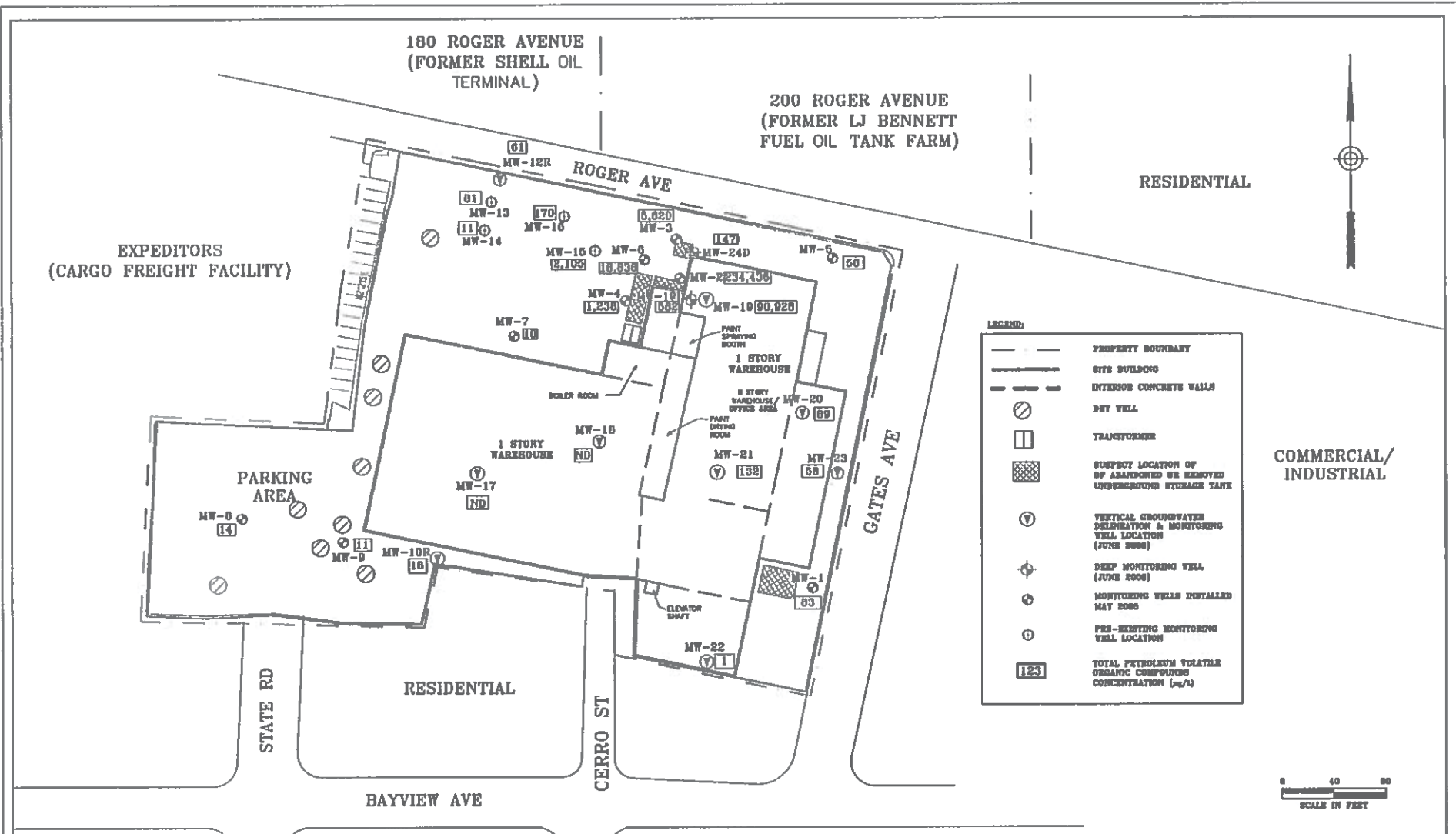
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 (212) 353-8280 • FAX: (212) 353-8306

DRAWING BY: EM
 DESIGNED BY: SS
 CHECKED BY: SS

DRAWING TITLE:
**TOTAL PETROLEUM VOC
 GROUNDWATER CONC.,
 AUGUST 2007**

SCALE:
 AS SHOWN ATC PROJECT: # 15.75316.0005

DATE: SEPTEMBER, 2007
 SHEET NO. 9
 OF 9



CLIENT:
175 ROGER AVENUE, LLC
17 STATE STREET, 19TH FLOOR
NEW YORK, NY 10004

SITE ADDRESS:
175 ROGER AVENUE
INWOOD, NY 11096

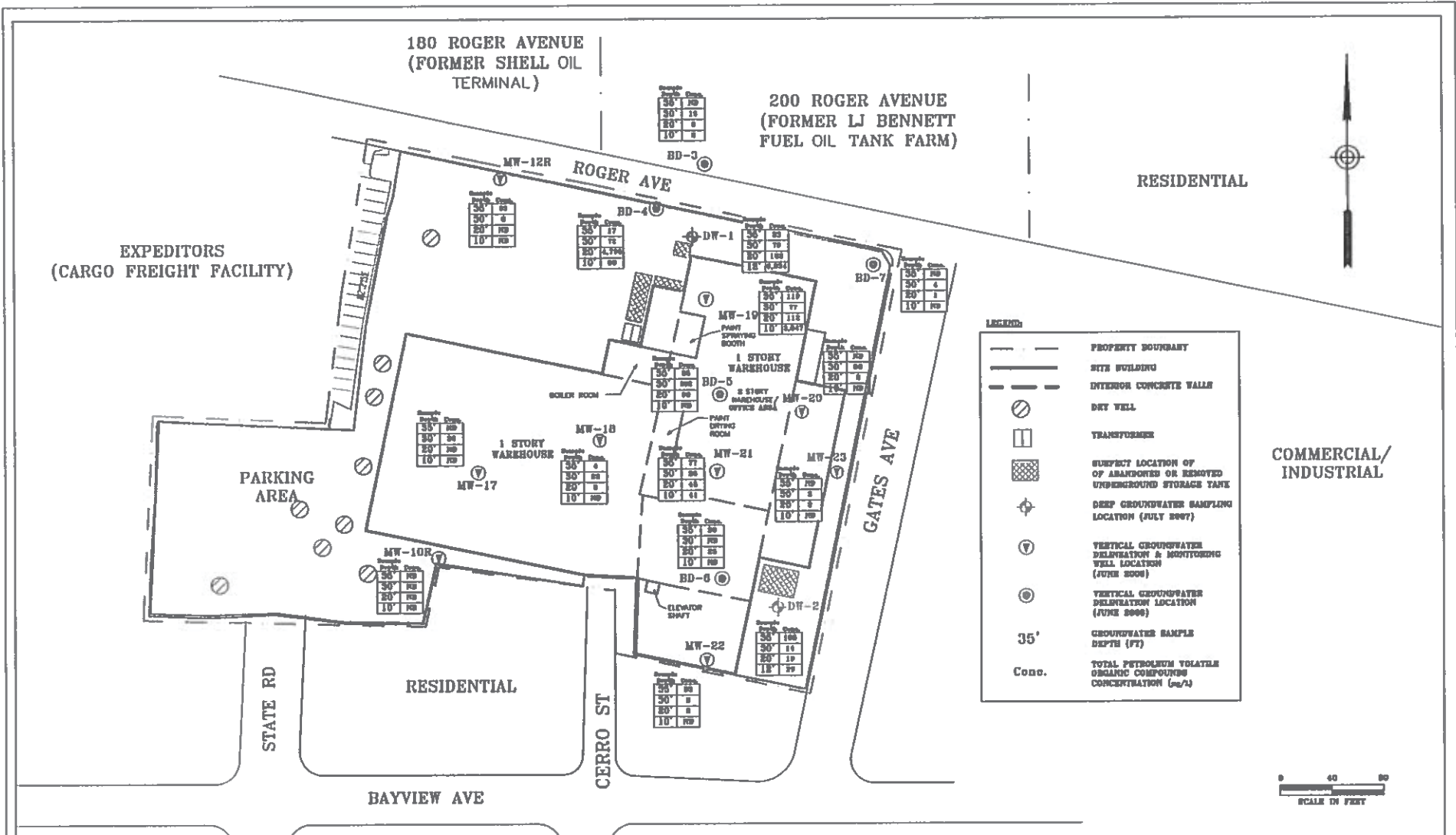
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DRAWN BY: J. Marshall
INSPECTED BY: J. Myers
DESIGNED BY: J. Marshall
CHECKED BY: J. Myers

DRAWING TITLE: TOTAL
PETROLEUM VOC's
MONITORING WELLS
JUNE 2008

DRAWING NO: FIGURE 10
DATE: JULY, 2008
REVISED BY:

SCALE: AS SHOWN
ATC PROJECT: # 15.75316.0005
NYSDDEC BROWNFIELD



CLIENT:
 175 ROGER AVENUE, LLC
 17 STATE STREET, 19TH FLOOR
 NEW YORK, NY 10004

SITE ADDRESS:
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DRAWN BY: J. Maschell
 CHECKED BY: J. Myers
 DESIGNED BY: J. Maschell
 CONCEPT BY: J. Myers

DRAWING TITLE:
**Total Petroleum
 VOC Conc. with Depth,
 June 2008**

SCALE:
 AS SHOWN

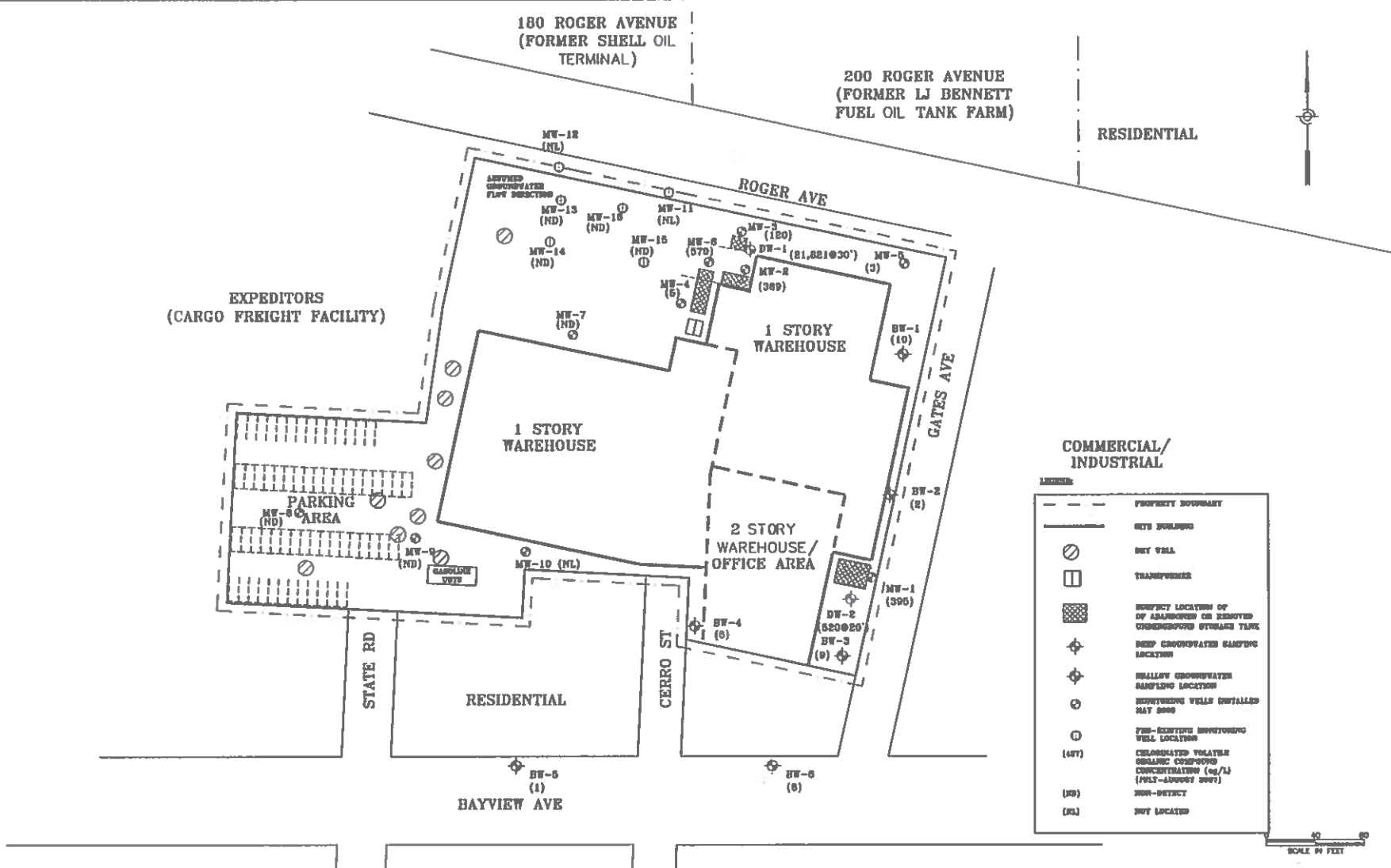
ATC PROJECT: # 15.75316.0005

DRAWING NO:
FIGURE 11

DATE:
 JULY, 2008

REVISIONS:

KACargo Verweest\175 Roger Avenue\2008 NYSDEC Brownfield



COMMERCIAL/ INDUSTRIAL

LEGEND	
---	PROPERTY BOUNDARY
- - -	CITY BOUNDARY
○	WELL
□	TRANSFORMER
▨	PROPERTY LOCATION OF ABANDONED OR REMOVED UNDERGROUND STORAGE TANK
⊕	DEEP GROUNDWATER SAMPLING LOCATION
⊕	SHALLOW GROUNDWATER SAMPLING LOCATION
⊕	MONITORING WELLS INSTALLED MAY 2000
⊕	PRE-EXISTING ENVIRONMENTAL WELL LOCATION
(ND)	CHLORINATED VOLATILE ORGANIC COMPOUND CONCENTRATION (ug/L) (MAY-2000) (ND)
(ND)	NON-DETECT
(NL)	NOT LOCATED

SCALE IN FEET
0 40 80

CLIENT:
175 ROGER AVENUE, LLC
17 STATE STREET, 19TH FLOOR
NEW YORK, NY 10004

SITE ADDRESS:
175 ROGER AVENUE
INWOOD, NY 11096

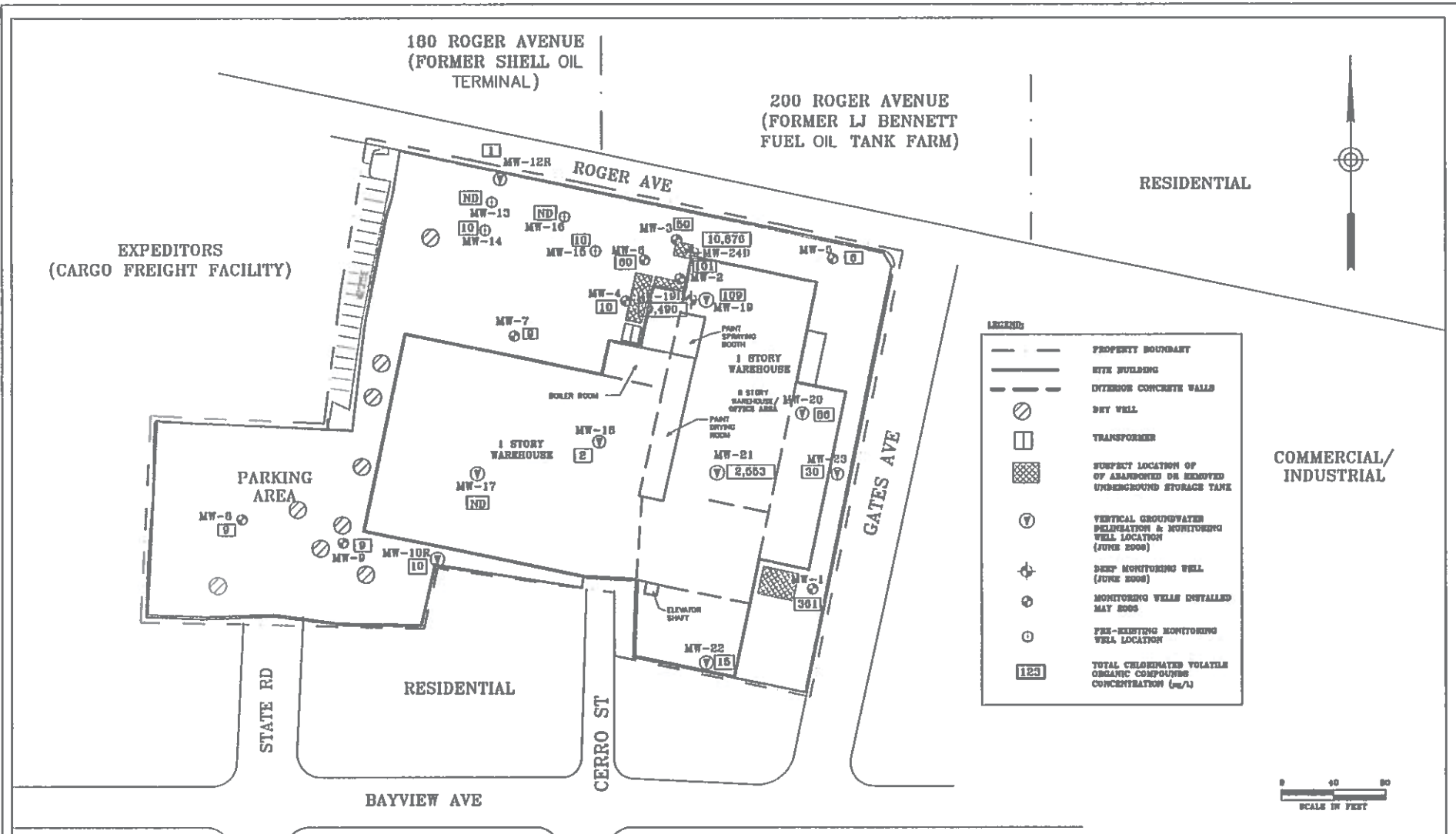
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(212) 353-8280 • FAX: (212) 353-8306

DRAWING BY: ESJ
CHECKED BY: SS
DESIGNED BY: SS
CONVERTED BY: SS

DRAWING TITLE:
CHLORINATED VOC
GROUNDWATER CONC.
AUGUST 2007

SCALE AS SHOWN
ATC PROJECT: # 15-75316.0005

DATE: SEPTEMBER, 2007
REVISION: 0



CLIENT:
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 17 STATE STREET, 19TH FLOOR
 NEW YORK, NY 10004

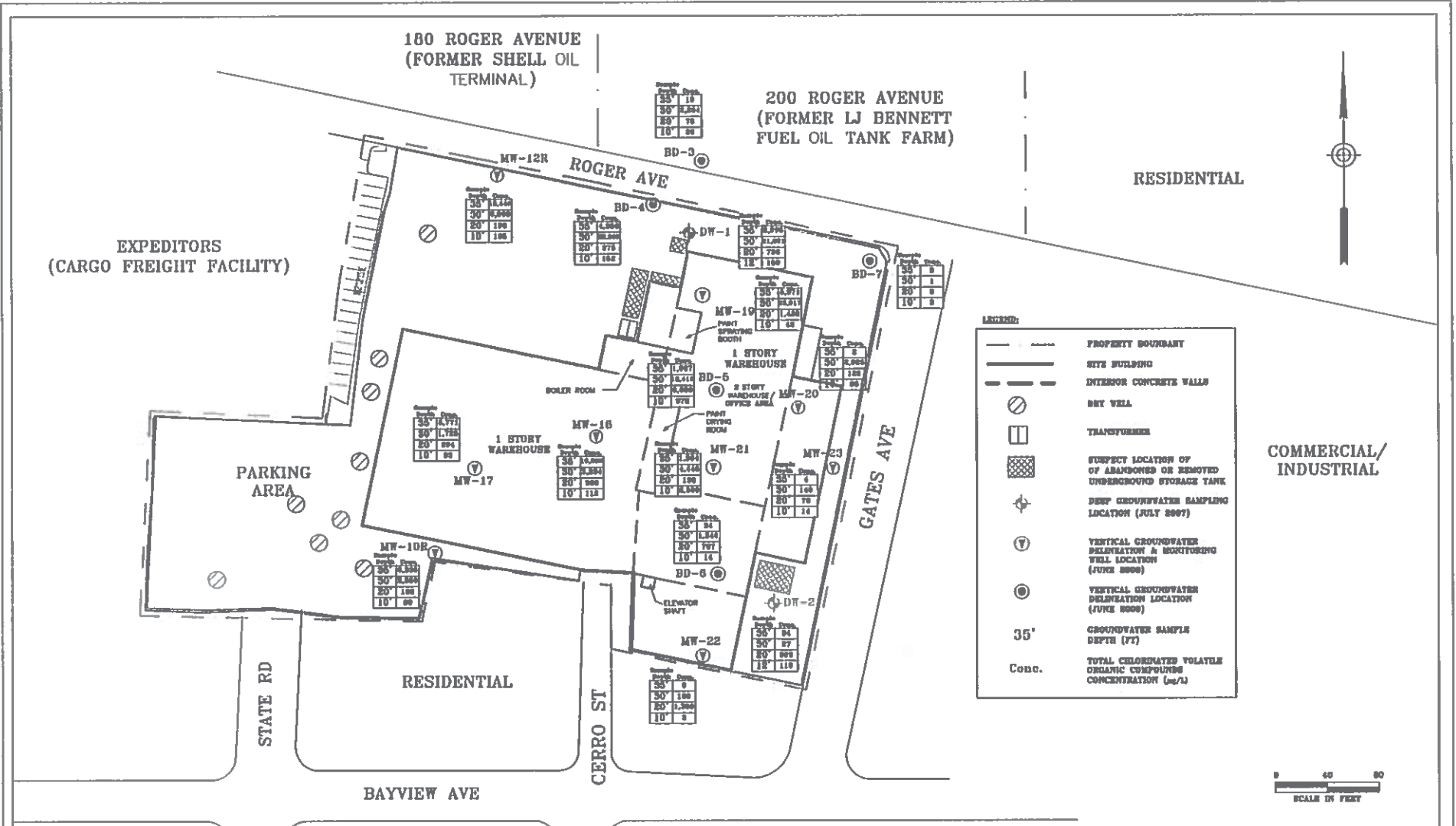
SITE ADDRESS:
 175 ROGER AVENUE
 INWOOD, NY 11096

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 104 E. 25th Street, 10th Floor - New York, NY 10010-2917
 (212) 353-8280 • FAX: (212) 353-8306

DRAWN BY: J. March
 CHECKED BY: J. March
 DESIGNED BY: J. March
 APPROVED BY: J. Myers

DRAWING TITLE:
**TOTAL CHLORINATED VOC'S
 MONITORING WELLS
 JUNE 2008**

DATE: JULY, 2008
 DRAWING NO: FIGURE 13
 REVISIONS TO:



CLIENT:
 175 ROGER AVENUE, LLC
 17 STATE STREET, 19TH FLOOR
 NEW YORK, NY 10004

SITE ADDRESS:
 175 ROGER AVENUE
 INWOOD, NY 11096

VATC ASSOCIATES INC.
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 104 E. 25th Street, 10th Floor • New York, NY 10010-2917
 (212) 353-0280 • FAX: (212) 353-0306

DRAWN BY: J. March
 APPROVED BY: J. March
 DESIGNED BY: J. March
 CHECKED BY: J. March

DRAWING TITLE: **TOTAL CHLORINATED VOC's W/ DEPTH, JUNE 2008**

DATE: 06/11/08
 DRAWN BY: J.T.Y. JEM
 SCALE: AS SHOWN
 ATC PROJECT: # 15-25316-0005

KACargo Venture/175 Roger Avenue/URN N VSDEC Birmwfield

FIGURE 15

TOTAL ORGANIC VOLATILES (VOCs) MEASURED IN SHALLOW MONITORING WELLS (MW) AND PROBE LOCATIONS (BW) AND MEASURED CONCENTRATION OF ELECTRON ACCEPTORS AND METABOLIC BY-PRODUCTS

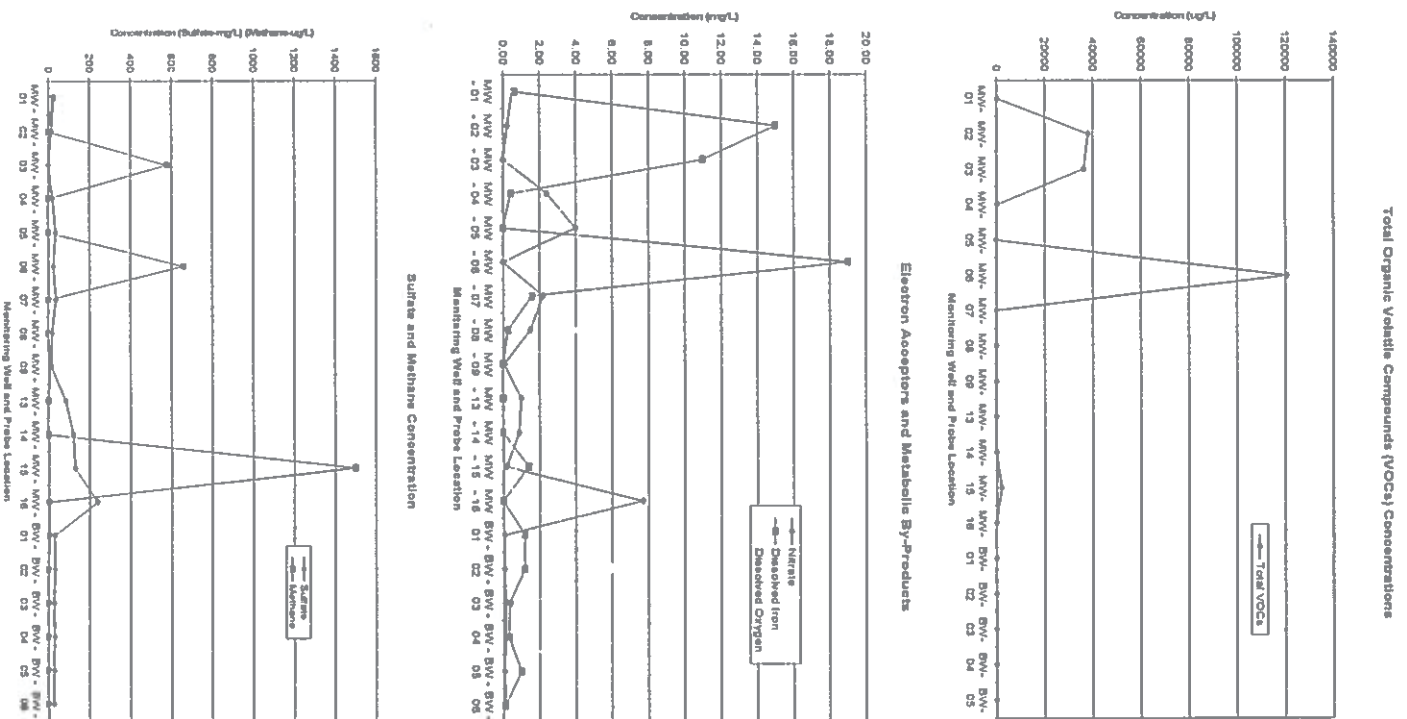
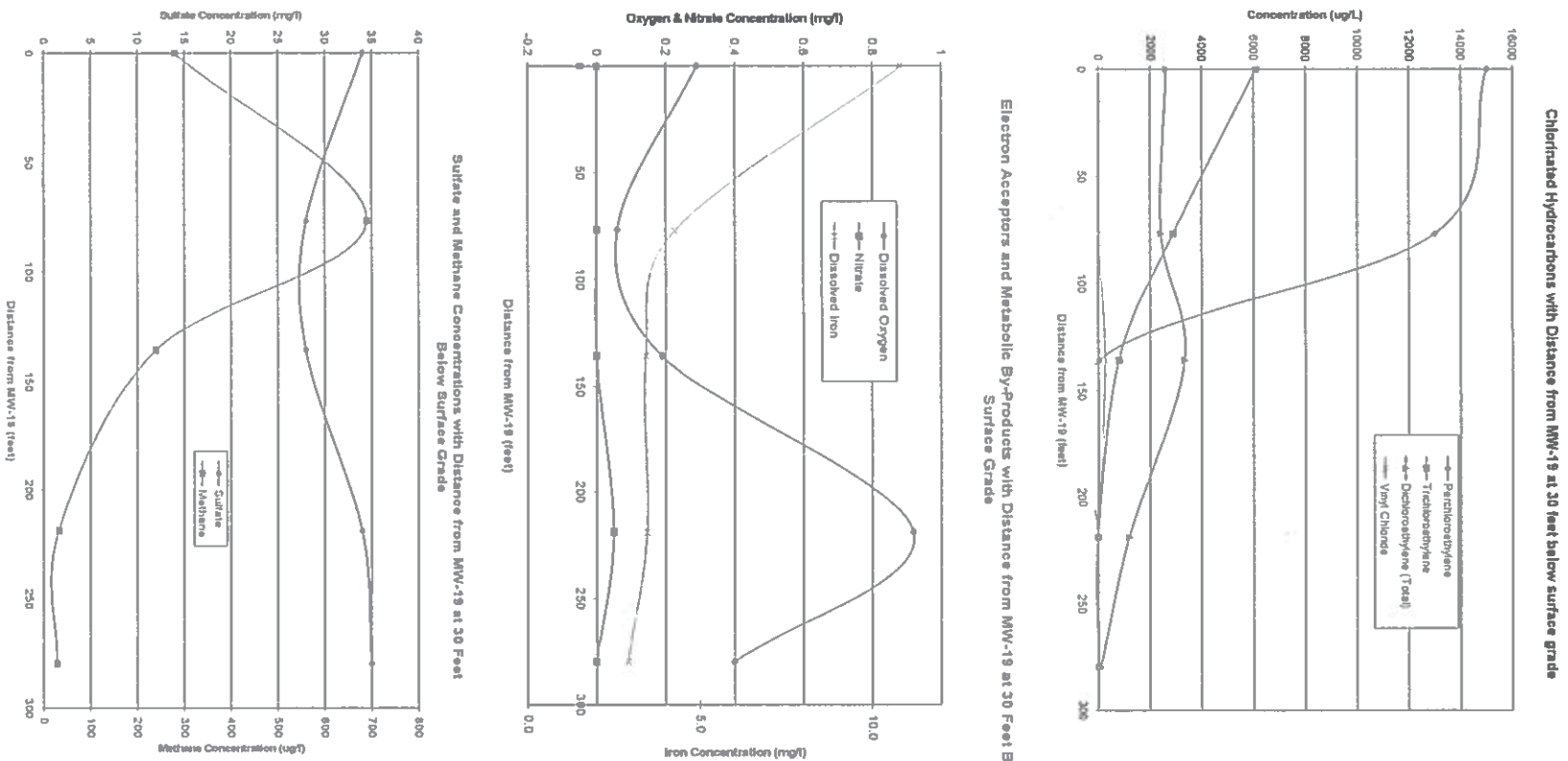


FIGURE 16. CHLORINATED HYDROCARBON COMPOUND CONCENTRATIONS AND ELECTON ACCEPTORS AND METABOLIC BY-PRODUCTS WITH DISTANCE FROM MONITORING WELL LOCATION MW-19



*Remedial Investigation Report
175 Roger Avenue
Inwood, New York*

TABLES

TABLE I
WELL CONSTRUCTION INFORMATION

175 Roger Avenue
Inwood, New York

Well Number	Date(s) of Installation	Well Diameter (inches)	Screen Slot (inches)	Total Depth (feet)	Screened Interval (feet)	Location		Elevation (feet)
						Northerly	Easterly	
MW - 1	5/23/2005	2	0.020	20	3' to 20'	1693.305	485.610	7.99
MW - 2	5/23/2005	2	0.020	20	3' to 20'	1912.880	637.458	9.67
MW - 3	5/23/2005	2	0.020	20	3' to 20'	1942.875	646.371	9.15
MW - 4	5/23/2005	2	0.020	20	3' to 20'	1886.888	675.375	9.60
MW - 5	5/24/2005	2	0.020	20	3' to 20'	1952.725	523.126	8.60
MW - 6	5/24/2005	2	0.020	20	3' to 20'	1921.818	667.644	9.49
MW - 7	5/24/2005	2	0.020	20	3' to 20'	1841.857	755.544	9.88
MW - 8	5/24/2005	2	0.020	20	3' to 20'	1655.888	935.213	9.02
MW - 9	5/25/2005	2	0.020	20	3' to 20'	1655.317	854.136	8.88
MW - 10	Not Located							
MW-10R	6/6/2008	2	0.020	18	3' to 18'	1656.076	778.751	9.41
MW - 11	Not Located							
MW - 12	Not Located							
MW-12R	6/6/2008	2	0.020	18	3' to 18'	1961.477	791.761	7.95
MW - 13*	-	2	-	8	-	1942.433	794.337	8.67
MW - 14*	-	2	-	15	-	1919.289	795.068	9.03
MW - 15*	-	2	-	14	-	1920.927	706.770	9.30
MW - 16*	-	2	-	13	-	1942.403	736.051	8.97
MW-17	6/13/2008	2	0.020	18	3' to 18'	1728.867	761.747	9.54
MW-18	6/16/2008	2	0.020	18	3' to 18'	1773.282	673.125	9.45
MW-19	6/16/2008	2	0.020	18	3' to 18'	1899.518	618.883	9.55
MW-19D	6/16/2008	2	0.010	36	31' to 36'	1898.910	620.504	9.71
MW-20	6/6/2008	2	0.020	18	3' to 18'	1827.920	521.581	9.69
MW-21	6/13/2008	2	0.020	18	3' to 18'	1768.057	577.550	9.42
MW-22	6/13/2008	2	0.020	18	3' to 18'	1618.856	555.190	9.49
MW-23	6/6/2008	2	0.020	18	3' to 18'	1786.405	484.872	9.15
MW - 24D	6/16/2008	2	0.010	35	30' to 35'	1935.306	631.446	9.12

Notes:

* Construction details estimated based on field observations on July 10, 2007

TABLE 2 - DRYWELL SURVEY

**175 Roger Avenue
Inwood, New York
July 10, 2007**

Dry Well No.	Construction Details	Depth to Bottom (feet)	Depth to Water (feet)	Sediment in Bottom (feet)	Diameter (feet)	Nature of Bottom
DW-1	Concrete	5.5	5	0.5	9	Blue stone and gravel
DW-2	Concrete	7	5.5	1	9	white sand
DW-3	Concrete	5.5	none	1	9	gravel and black sand
DW-4	Concrete	6	none	1	9	white sand
DW-5	Concrete	6.5	none	1.5	9	white sand
DW-6	Concrete	6.5	5	1.5	9	black sand
DW-7	Concrete	5.5	none	1	9	white sand
DW-8	Concrete	4	none	0.5	9	white sand
DW-9	Concrete	5	4.5	0.5	9	black sand

TABLE 3.1 - DEPTH TO WATER TABLE AND GROUNDWATER ELEVATIONS MEASURE ON AUGUST 14, 2007 AT LOW AND HIGH TIDE

**Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York**

Well Location	Casing Elevation (ft)	High Tide - JFK Airport 5.77 ft @ 10:02 AM		Low Tide - JFK Airport 0.26 ft @ 4:28 PM	
		Depth to Water Table (ft)	Groundwater Elevation (ft)	Depth to Water Table (ft)	Groundwater Elevation (ft)
MW - 1	7.99	4.08	3.91	4.20	3.79
MW - 2	9.67	5.10	4.57	5.22	4.45
MW - 3	9.15	5.18	3.97	5.28	3.87
MW - 4	9.60	4.92	4.68	5.06	4.54
MW - 5	8.60	4.59	4.01	4.78	3.82
MW - 6	9.49	5.30	4.19	5.30	4.19
MW - 7	9.88	5.20	4.68	5.31	4.57
MW - 8	9.02	5.20	3.82	5.20	3.82
MW - 9	8.88	5.10	3.78	5.10	3.78
MW - 13	8.67	4.90	3.77	4.96	3.71
MW - 14	9.03	5.25	3.78	5.35	3.68
MW - 15	9.20	5.14	4.06	5.26	3.94
MW - 16	8.97	4.75	4.22	4.90	4.07

**TABLE 3.2 - DEPTH TO WATER TABLE AND GROUNDWATER ELEVATIONS MEASURED ON
JUNE 18, 2008.**

**Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York**

Well Location	Casing Elevation (ft)	Depth to Water Table (ft)	Groundwater Elevation (ft)
MW - 1	7.99	3.70	4.29
MW - 2	9.67	5.07	4.60
MW - 3	9.15	4.85	4.30
MW - 4	9.60	4.92	4.68
MW - 5	8.60	4.32	4.28
MW - 6	9.49	4.94	4.55
MW - 7	9.88	5.29	4.59
MW - 8	9.02	4.76	4.26
MW - 9	8.88	4.73	4.15
MW-10R	9.41	5.38	4.03
MW-12R	7.95	4.15	3.80
MW-13	8.67	4.54	4.13
MW-14	9.03	4.82	4.21
MW-15	9.30	5.00	4.30
MW-16	8.97	4.75	4.22
MW-17	9.54	5.50	4.04
MW-18	9.45	5.35	4.10
MW-19	9.55	5.39	4.16
MW-19D	9.71	5.89	3.82
MW-20	9.69	5.60	4.09
MW-21	9.42	5.36	4.06
MW-22	9.49	5.51	3.98
MW-23	9.15	5.03	4.12
MW-24D	9.12	5.25	3.87

TABLE 4.1 SUBSURFACE SOIL - VOLATILE ORGANIC COMPOUNDS (VOCs), JULY 2007

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	SB-01 001 7.5 7/16/2007 µg/kg	SB-01 Dup 018 7.5 7/16/2007 µg/kg	SB-02 002 7.0 7/16/2007 µg/kg	SB-03 003 9.0 7/16/2007 µg/kg	SB-04 004 7.0 7/16/2007 µg/kg	SB-05 005 7.0 7/16/2007 µg/kg	SB-06 006 7.0 7/16/2007 µg/kg	SB-07 007 7.0 7/16/2007 µg/kg	Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) µg/kg
Dichlorodifluoromethane	<10 (a)	<9.0 (a)	<8.0	<8.0	<10	<3,000	<570	<10	100,000 (c)
Vinyl Chloride	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	20
Chloromethane	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
Bromomethane	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
Chloroethane	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
Trichlorofluoromethane	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
Acrolein	<95	<89	<81	<82	<95	<30,000	<5,700	<98	100,000
Acetone	58 B	29 J,B	18 J,B	34 J,B	55 B	9,500 J,B	2,300 J,B	39 J,B	50
1,1-Dichloroethylene	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	330
Iodomethane	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
Carbon Disulfide	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
Methylene Chloride	27 J,B	3.0 J,B	21 J,B	20 J,B	28 J,B	<12,000	<2,300	7.0 J,B	50
Acrylonitrile	<47	<45	<41	<41	<47	<15,000	<2,900	<49	100,000
Methyl-Tert-Butyl-Ether	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	930
trans-1,2-Dichloroethylene	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	190
1,1-Dichloroethane	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	270
2-Butanone-(MEK)	<47	<45	<41	<41	<47	<15,000	<2,900	<49	120
Vinyl Acetate	<47	<45	<41	<41	<47	<15,000	<2,900	<49	100,000
2,2-Dichloropropane	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
cis-1,2-Dichloroethylene	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	250
Chloroform	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	370
Bromochloromethane	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
1,1,1-Trichloroethane	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	680
1,1-Dichloropropene	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
Carbon Tetrachloride	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	760
Benzene	<10	<9.0	<8.0	<8.0	<10	4,100	260 J	<10	60
1,2-Dichloroethane	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	20
Trichloroethylene	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	470
1,2-Dichloropropane	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
4-Methyl-2-Pentanone (MIBK)	<47	<45	<41	<41	<47	<15,000	<2,900	<49	100,000
2-Chloroethyl vinyl ether	<47	<45	<41	<41	<47	<15,000	<2,900	<49	100,000
cis-1,3-Dichloropropene	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
Toluene	<10	<9.0	<8.0	<8.0	<10	11,000	<570	<10	700
trans-1,3-Dichloropropene	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
Bromodichloromethane	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
Dibromomethane	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
1,1,2-Trichloroethane	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000

TABLE 4.1 SUBSURFACE SOIL - VOLATILE ORGANIC COMPOUNDS (VOCs), JULY 2007

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	SB-01 001 7.5 7/16/2007 µg/kg	SB-01 Dup 018 7.5 7/16/2007 µg/kg	SB-02 002 7.0 7/16/2007 µg/kg	SB-03 003 9.0 7/16/2007 µg/kg	SB-04 004 7.0 7/16/2007 µg/kg	SB-05 005 7.0 7/16/2007 µg/kg	SB-06 006 7.0 7/16/2007 µg/kg	SB-07 007 7.0 7/16/2007 µg/kg	Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) µg/kg
1,2-Dibromoethane	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
2-Hexanone	<47	<45	<41	<41	<47	<15,000	<2,900	<49	100,000
1,3-Dichloropropane	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
Tetrachloroethylene	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	1,300
Dibromochloromethane	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
Chlorobenzene	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	1,100
1,1,1,2-Tetrachloroethane	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
Ethylbenzene	<10	<9.0	<8.0	<8.0	<10	63,000	1,500	<10	1,000
M & P XYLENE	4.0 J	4.0 J	5.0 J	4.0 J	4.0 J	470,000	6,000	<20	260
O-XYLENE	<10	3.0 J	2.0 J	<8.0	<10	270,000	1,500	<10	260
Styrene	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
Bromoform	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
Isopropylbenzene	<10	<9.0	<8.0	<8.0	<10	83,000	2,000	<10	100,000
1,1,2,2-Tetrachloroethane	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
1,2,3-Trichloropropane	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
n-Propylbenzene	<10	<9.0	<8.0	<8.0	<10	170,000	5,400	<10	3,900
trans-1,4-Dichloro-2-butene	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
Bromobenzene	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
2-Chlorotoluene	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
1,3,5-Trimethylbenzene	<10	<9.0	<8.0	<8.0	<10	390,000	7,000	<10	8,400
4-Chlorotoluene	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
tert-Butylbenzene	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	5,900
1,2,4-Trimethylbenzene	2.0 J	<9.0	2.0 J	2.0 J	<10	870,000	28,000	<10	3,600
sec-Butylbenzene	<10	<9.0	<8.0	<8.0	<10	8,400	390 J	<10	11,000
4-Isopropyltoluene	<10	<9.0	<8.0	<8.0	<10	4,700	210 J	<10	100,000
1,3-Dichlorobenzene	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	2,400
1,4-Dichlorobenzene	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	1,800
n-Butylbenzene	<10	<9.0	<8.0	<8.0	<10	5,000	510 J	<10	12,000
1,2-Dichlorobenzene	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	1,100
1,2-Dibromo-3-Chloropropane	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
1,2,4-Trichlorobenzene	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
Hexachlorobutadiene	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000
Naphthalene	<10	<9.0	<8.0	<8.0	<10	8,800	660	<10	100,000
1,2,3-Trichlorobenzene	<10	<9.0	<8.0	<8.0	<10	<3,000	<570	<10	100,000

*-Sample depth is in feet below ground surface

(a) <10: Compound not detected above the Practical Quantitation Limit of 10 ug/Kg

(c) Soil Cleanup Objective for unrestricted use capped at 100,000 ug/Kg per NYS Brownfield Cleanup Program Technical Support Document, Section 9.3, September 2006

B: Analyte was detected in the associated Method Blank

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

Analyte above Unrestricted Use Soil Cleanup Objective (6 NYCRR Subpart 375-6, Table 375-6.8(b))

TABLE 4.1 SUBSURFACE SOIL - VOLATILE ORGANIC COMPOUNDS (VOCs), JULY 2007

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	SB-08 008 8.0 7/16/2007 µg/kg	SB-09 009 7.0 7/16/2007 µg/kg	SB-10 010 7.0 7/16/2007 µg/kg	SB-11 011 6.5 7/17/2007 µg/kg	SB-12 012 6.5 7/17/2007 µg/kg	SB-13 013 7.0 7/17/2007 µg/kg	SB-14 014 6.8 7/17/2007 µg/kg	SB-15 015 6.5 7/17/2007 µg/kg	Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) µg/kg
Dichlorodifluoromethane	<10	<9.0 (a)	<9.0	<10	<560	<15	<580	<560	100,000 (c)
Vinyl Chloride	<10	<9.0	<9.0	<10	<560	<15	<580	<560	20
Chloromethane	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
Bromomethane	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
Chloroethane	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
Trichlorofluoromethane	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
Acrolein	<95	<91	<94	<95	<5,600	<150	<5,800	<5,600	100,000
Acetone	95 B	43 J,B	37 J,B	21 J,B	1,900 J,B	110 B	1,500 J,B	1,600 J,B	50
1,1-Dichloroethylene	<10	<9.0	<9.0	<10	<560	<15	<580	<560	330
Iodomethane	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
Carbon Disulfide	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
Methylene Chloride	20 J,B	17 J,B	20 J,B	8.0 J,B	310 J	9.0 J,B	<2,300	<2,200	50
Acrylonitrile	<48	<45	<47	<48	<2,800	<77	<2,900	<2,800	100,000
Methyl-Tert-Butyl-Ether	<10	<9.0	<9.0	<10	<560	<15	<580	<560	930
trans-1,2-Dichloroethylene	<10	<9.0	<9.0	<10	<560	<15	<580	<560	190
1,1-Dichloroethane	<10	<9.0	<9.0	<10	<560	<15	<580	<560	270
2-Butanone-(MEK)	<48	<45	<47	<48	<2,800	<77	<2,900	<2,800	120
Vinyl Acetate	<48	<45	<47	<48	<2,800	<77	<2,900	<2,800	100,000
2,2-Dichloropropane	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
cis-1,2-Dichloroethylene	<10	<9.0	<9.0	<10	<560	<15	<580	<560	250
Chloroform	<10	<9.0	<9.0	<10	<560	<15	<580	<560	370
Bromochloromethane	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
1,1,1-Trichloroethane	<10	<9.0	<9.0	<10	<560	<15	<580	<560	680
1,1-Dichloropropene	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
Carbon Tetrachloride	<10	<9.0	<9.0	<10	<560	<15	<580	<560	760
Benzene	<10	<9.0	<9.0	<10	150 J	<15	130 J	<560	60
1,2-Dichloroethane	<10	<9.0	<9.0	<10	<560	<15	<580	<560	20
Trichloroethylene	<10	<9.0	<9.0	<10	<560	<15	<580	<560	470
1,2-Dichloropropane	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
4-Methyl-2-Pentanone (MIBK)	<48	<45	<47	<48	<2,800	<77	<2,900	<2,800	100,000
2-Chloroethyl vinyl ether	<48	<45	<47	<48	<2,800	<77	<2,900	<2,800	100,000
cis-1,3-Dichloropropene	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
Toluene	<10	<9.0	<9.0	<10	<560	<15	2,100	610	700
trans-1,3-Dichloropropene	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
Bromodichloromethane	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
Dibromomethane	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
1,1,2-Trichloroethane	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000

TABLE 4.1 SUBSURFACE SOIL - VOLATILE ORGANIC COMPOUNDS (VOCs), JULY 2007

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID, Lab Sample Number Sample Depth (ft)* Date Collected Units	SB-08 008 8.0 7/16/2007 µg/kg	SB-09 009 7.0 7/16/2007 µg/kg	SB-10 010 7.0 7/16/2007 µg/kg	SB-11 011 6.5 7/17/2007 µg/kg	SB-12 012 6.5 7/17/2007 µg/kg	SB-13 013 7.0 7/17/2007 µg/kg	SB-14 014 6.8 7/17/2007 µg/kg	SB-15 015 6.5 7/17/2007 µg/kg	Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) µg/kg
1,2-Dibromoethane	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
2-Hexanone	<48	<45	<47	<48	<2,800	<77	<2,900	<2,800	100,000
1,3-Dichloropropane	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
Tetrachloroethylene	<10	<9.0	<9.0	<10	<560	<15	190 J	<560	1,300
Dibromochloromethane	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
Chlorobenzene	<10	<9.0	<9.0	<10	<560	<15	<580	<560	1,100
1,1,1,2-Tetrachloroethane	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
Ethylbenzene	3.0 J	<9.0	2.0 J	<10	<560	<15	47,000	14,000	1,000
M & P XYLENE	15 J	6.0 J	11 J	<19	710 J	13 J	230,000	82,000	260
O-XYLENE	2.0 J	3.0 J	15	<10	650	6.0 J	96,000	35,000	260
Styrene	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
Bromoform	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
Isopropylbenzene	<10	<9.0	<9.0	<10	710	<15	49,000	20,000	100,000
1,1,2,2-Tetrachloroethane	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
1,2,3-Trichloropropane	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
n-Propylbenzene	<10	<9.0	3.0 J	<10	3,400	<15	120,000	60,000	3,900
trans-1,4-Dichloro-2-butene	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
Bromobenzene	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
2-Chlorotoluene	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
1,3,5-Trimethylbenzene	<10	2.0 J	10	<10	11,000	19	160,000	68,000	8,400
4-Chlorotoluene	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
tert-Butylbenzene	<10	<9.0	<9.0	<10	<560	<15	<580	<560	5,900
1,2,4-Trimethylbenzene	4.0 J	4.0 J	23	<10	44,000	61	430,000	190,000	3,600
sec-Butylbenzene	<10	<9.0	<9.0	<10	530 J	<15	4,300	1,500	11,000
4-Isopropyltoluene	<10	<9.0	<9.0	<10	340 J	<15	1,900	590	100,000
1,3-Dichlorobenzene	<10	<9.0	<9.0	<10	<560	<15	<580	<560	2,400
1,4-Dichlorobenzene	<10	<9.0	<9.0	<10	<560	<15	<580	<560	1,800
n-Butylbenzene	<10	<9.0	<9.0	<10	600	<15	2,200	490 J	12,000
1,2-Dichlorobenzene	<10	<9.0	<9.0	<10	<560	<15	<580	<560	1,100
1,2-Dibromo-3-Chloropropane	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
1,2,4-Trichlorobenzene	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
Hexachlorobutadiene	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000
Naphthalene	<10	<9.0	<9.0	<10	1,200	30	2,200	860	100,000
1,2,3-Trichlorobenzene	<10	<9.0	<9.0	<10	<560	<15	<580	<560	100,000

*-Sample depth is in feet below ground surface

(a) <10. Compound not detected above the Practical Quantitation Limit of 10 ug/Kg

(c) Soil Cleanup Objective for unrestricted use capped at 100,000 ug/Kg per NYS Brownfield Cleanup Program Technical Support Document, Section 9.3, September 2006

B: Analyte was detected in the associated Method Blank

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

Analyte above Unrestricted Use Soil Cleanup Objective (6 NYCRR Subpart 375-6, Table 375-6.8(b))

TABLE 4.1 SUBSURFACE SOIL - VOLATILE ORGANIC COMPOUNDS (VOCs), JULY 2007

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	SB-16 016 7.5 7/17/2007 µg/kg	DW-3 017 0.5 7/10/2007 µg/kg	Equip. Blank 019 NA 7/16/2007 µg/kg	Trip Blk -01 020 NA 7/11/2007 µg/kg	Trip Blk -02 021 NA 7/6/2007 µg/kg				Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) µg/kg
Dichlorodifluoromethane	<9.0	<590	<5.0	<5.0	<5.0				100,000 (c)
Vinyl Chloride	<9.0	<590	<5.0	<5.0	<5.0				20
Chloromethane	<9.0	<590	<5.0	<5.0	<5.0				100,000
Bromomethane	<9.0	<590	<5.0	<5.0	<5.0				100,000
Chloroethane	<9.0	<590	<5.0	<5.0	<5.0				100,000
Trichlorofluoromethane	<9.0	<590	<5.0	<5.0	<5.0				100,000
Aerolein	<90	<5,900	<25	<25	<25				100,000
Acetone	110 B	1,900 J,B	51	32	20				50
1,1-Dichloroethylene	<9.0	<590	<5.0	<5.0	<5.0				330
Iodomethane	<9.0	<590	<5.0	<5.0	<5.0				100,000
Carbon Disulfide	<9.0	<590	<5.0	<5.0	<5.0				100,000
Methylene Chloride	7.0 J,B	<2,400	<5.0	<5.0	<5.0				50
Acrylonitrile	<45	<3,000	<25	<25	<25				100,000
Methyl-Tert-Butyl-Ether	<9.0	<590	<5.0	<5.0	<5.0				930
trans-1,2-Dichloroethylene	<9.0	<590	<5.0	<5.0	<5.0				190
1,1-Dichloroethane	<9.0	<590	<5.0	<5.0	<5.0				270
2-Butanone-(MEK)	12 J	<3,000	<25	<25	<25				120
Vinyl Acetate	<45	<3,000	<25	<25	<25				100,000
2,2-Dichloropropane	<9.0	<590	<5.0	<5.0	<5.0				100,000
cis-1,2-Dichloroethylene	<9.0	<590	<5.0	<5.0	<5.0				250
Chloroform	<9.0	<590	<5.0	<5.0	<5.0				370
Bromochloromethane	<9.0	<590	<5.0	<5.0	<5.0				100,000
1,1,1-Trichloroethane	<9.0	<590	<5.0	<5.0	<5.0				680
1,1-Dichloropropene	<9.0	<590	<5.0	<5.0	<5.0				100,000
Carbon Tetrachloride	<9.0	<590	<5.0	<5.0	<5.0				760
Benzene	<9.0	240 J	<5.0	<5.0	<5.0				60
1,2-Dichloroethane	<9.0	<590	<5.0	<5.0	<5.0				20
Trichloroethylene	<9.0	<590	<5.0	<5.0	<5.0				470
1,2-Dichloropropane	<9.0	<590	<5.0	<5.0	<5.0				100,000
4-Methyl-2-Pentanone (MIBK)	<45	<3,000	<25	<25	<25				100,000
2-Chloroethyl vinyl ether	<45	<3,000	<25	<25	<25				100,000
cis-1,3-Dichloropropene	<9.0	<590	<5.0	<5.0	<5.0				100,000
Toluene	3.0 J	<590	<5.0	<5.0	<5.0				700
trans-1,3-Dichloropropene	<9.0	<590	<5.0	<5.0	<5.0				100,000
Bromodichloromethane	<9.0	<590	<5.0	<5.0	<5.0				100,000
Dibromomethane	<9.0	<590	<5.0	<5.0	<5.0				100,000
1,1,2-Trichloroethane	<9.0	<590	<5.0	<5.0	<5.0				100,000

TABLE 4.1 SUBSURFACE SOIL - VOLATILE ORGANIC COMPOUNDS (VOCs), JULY 2007

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	SB-16 016 7.5 7/17/2007 µg/kg	DW-3 017 0.5 7/10/2007 µg/kg	Equip. Blank 019 NA 7/16/2007 µg/kg	Trip Blank #01 020 NA 7/11/2007 µg/kg	Trip Blank #02 021 NA 7/6/2007 µg/kg				Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) µg/kg
1,2-Dibromoethane	<9.0	<590	<5.0	<5.0	<5.0				100,000
2-Hexanone	<45	<3,000	<25	<25	<25				100,000
1,3-Dichloropropane	<9.0	<590	<5.0	<5.0	<5.0				100,000
Tetrachloroethylene	<9.0	<590	<5.0	<5.0	<5.0				1,300
Dibromochloromethane	<9.0	<590	<5.0	<5.0	<5.0				100,000
Chlorobenzene	<9.0	<590	<5.0	<5.0	<5.0				1,100
1,1,1,2-Tetrachloroethane	<9.0	<590	<5.0	<5.0	<5.0				100,000
Ethylbenzene	5.0 J	170 J	<5.0	<5.0	<5.0				1,000
M & P XYLENE	53	760 J	<10	<10	<10				260
O-XYLENE	21	170 J	<5.0	<5.0	<5.0				260
Styrene	<9.0	<590	<5.0	<5.0	<5.0				100,000
Bromoform	<9.0	<590	<5.0	<5.0	<5.0				100,000
Isopropylbenzene	<9.0	1,300	<5.0	<5.0	<5.0				100,000
1,1,2,2-Tetrachloroethane	<9.0	<590	<5.0	<5.0	<5.0				100,000
1,2,3-Trichloropropane	<9.0	<590	<5.0	<5.0	<5.0				100,000
n-Propylbenzene	3.0 J	3,100	<5.0	<5.0	<5.0				3,900
trans-1,4-Dichloro-2-butene	<9.0	<590	<5.0	<5.0	<5.0				100,000
Bromobenzene	<9.0	<590	<5.0	<5.0	<5.0				100,000
2-Chlorotoluene	<9.0	<590	<5.0	<5.0	<5.0				100,000
1,3,5-Trimethylbenzene	17	200 J	<5.0	<5.0	<5.0				8,400
4-Chlorotoluene	<9.0	<590	<5.0	<5.0	<5.0				100,000
tert-Butylbenzene	<9.0	<590	<5.0	<5.0	<5.0				5,900
1,2,4-Trimethylbenzene	100	13,000	<5.0	<5.0	<5.0				3,600
sec-Butylbenzene	<9.0	400 J	<5.0	<5.0	<5.0				11,000
4-Isopropyltoluene	<9.0	640	<5.0	<5.0	<5.0				100,000
1,3-Dichlorobenzene	<9.0	<590	<5.0	<5.0	<5.0				2,400
1,4-Dichlorobenzene	<9.0	<590	<5.0	<5.0	<5.0				1,800
n-Butylbenzene	<9.0	500 J	<5.0	<5.0	<5.0				12,000
1,2-Dichlorobenzene	<9.0	<590	<5.0	<5.0	<5.0				1,100
1,2-Dibromo-3-Chloropropane	<9.0	<590	<5.0	<5.0	<5.0				100,000
1,2,4-Trichlorobenzene	<9.0	<590	<5.0	<5.0	<5.0				100,000
Hexachlorobutadiene	<9.0	<590	<5.0	<5.0	<5.0				100,000
Naphthalene	350	<590	<5.0	<5.0	<5.0				100,000
1,2,3-Trichlorobenzene	<9.0	<590	<5.0	<5.0	<5.0				100,000

*-Sample depth is in feet below ground surface

(a) <10: Compound not detected above the Practical Quantitation Limit of 10 ug/Kg

(c) Soil Cleanup Objective for unrestricted use capped at 100,000 ug/Kg per NYS Brownfield Cleanup Program Technical Support Document, Section 9.3, September 2006

B: Analyte was detected in the associated Method Blank

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

Analyte above Unrestricted Use Soil Cleanup Objective (6 NYCRR Subpart 375-6, Table 375-6.8(b))

TABLE 4.2 VERTICAL DELINEATION BORING DW-01 - VOLATILE ORGANIC COMPOUNDS (VOCs) MEASURED IN SUBSURFACE SOIL WITH DEPTH

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	DW - 01 001 8 - 8.5 7/30/2007 ug/Kg	DW - 01 002 15 - 15.5 7/30/2007 ug/Kg	DW - 01 003 22 - 22.5 7/30/2007 ug/Kg	DW - 01 004 27.5 - 28 7/30/2007 ug/Kg	DW - 01 005 34 - 34.5 7/30/2007 ug/Kg	DW - 01 DUP 011 34 - 34.5 7/30/2007 ug/Kg	Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) ug/Kg
Dichlorodifluoromethane	<10	<9.0	<9.0	<10	<10	<9.0	100,000 (c)
Vinyl Chloride	<10	<9.0	<9.0	<10	<10	<9.0	20
Chloromethane	<10	<9.0	<9.0	<10	<10	<9.0	100,000
Bromomethane	<10	<9.0	<9.0	<10	<10	<9.0	100,000
Chloroethane	<10	<9.0	<9.0	<10	<10	<9.0	100,000
Trichlorofluoromethane	<10	<9.0	<9.0	<10	<10	<9.0	100,000
Acrolein	<100	<91	<91	<96	<97	<92	100,000
Acetone	90 B	67 B	50 B	69 B	420 B	400 B	50
1,1-Dichloroethylene	<10	<9.0	<9.0	<10	<10	<9.0	330
Iodomethane	<10	<9.0	<9.0	<10	<10	<9.0	100,000
Carbon Disulfide	<10	<9.0	<9.0	<10	<10	<9.0	100,000
Methylene Chloride	6 J,H	<37	<36	<38	<39	10 B,J	50
Acrylonitrile	<50	<46	<45	<48	<49	<46	100,000
Methyl-Tert-Butyl-Ether	<10	<9.0	<9.0	<10	<10	<9.0	930
trans-1,2-Dichloroethylene	<10	<9.0	<9.0	<10	<10	<9.0	190
1,1-Dichloroethane	<10	<9.0	<9.0	<10	<10	<9.0	270
2-Butanone-(MEK)	<50	<46	<45	<48	60	48	120
Vinyl Acetate	<50	<46	<45	<48	<49	<46	100,000
2,2-Dichloropropane	<10	<9.0	<9.0	<10	<10	<9.0	100,000
cis-1,2-Dichloroethylene	<10	<9.0	<9.0	<10	<10	<9.0	250
Chloroform	<10	<9.0	<9.0	<10	<10	<9.0	370
Bromochloromethane	<10	<9.0	<9.0	<10	<10	<9.0	100,000
1,1,1-Trichloroethane	<10	<9.0	<9.0	<10	<10	<9.0	680
1,1-Dichloropropene	<10	<9.0	<9.0	<10	<10	<9.0	100,000
Carbon Tetrachloride	<10	<9.0	<9.0	<10	<10	<9.0	760
Benzene	<10	<9.0	<9.0	<10	<10	<9.0	60
1,2-Dichloroethane	<10	<9.0	<9.0	<10	<10	<9.0	20
Trichloroethylene	<10	<9.0	<9.0	<10	19	16	470
1,2-Dichloropropane	<10	<9.0	<9.0	<10	<10	<9.0	100,000
4-Methyl-2-Pentanone (MIBK)	<50	<46	<45	<48	<49	<46	100,000
2-Chloroethyl vinyl ether	<50	<46	<45	<48	<49	<46	100,000
cis-1,3-Dichloropropene	<10	<9.0	<9.0	<10	<10	<9.0	100,000
Toluene	<10	<9.0	<9.0	<10	<10	<9.0	700
trans-1,3-Dichloropropene	<10	<9.0	<9.0	<10	<10	<9.0	100,000
Bromodichloromethane	<10	<9.0	<9.0	<10	<10	<9.0	100,000
Dibromomethane	<10	<9.0	<9.0	<10	<10	<9.0	100,000
1,1,2-Trichloroethane	<10	<9.0	<9.0	<10	<10	<9.0	100,000

TABLE 4.2 VERTICAL DELINEATION BORING DW-01 - VOLATILE ORGANIC COMPOUNDS (VOCs) MEASURED IN SUBSURFACE SOIL WITH DEPTH

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	DW - 01 001 8 - 8.5 7/30/2007 ug/Kg	DW - 01 002 15 - 15.5 7/30/2007 ug/Kg	DW - 01 003 22 - 22.5 7/30/2007 ug/Kg	DW - 01 004 27.5 - 28 7/30/2007 ug/Kg	DW - 01 005 34 - 34.5 7/30/2007 ug/Kg	DW - 01 DUP 011 34 - 34.5 7/30/2007 ug/Kg	Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) ug/Kg
1,2-Dibromoethane	<10	<9.0	<9.0	<10	<10	<9.0	100,000
2-Hexanone	<50	<46	<45	<48	<49	<46	100,000
1,3-Dichloropropane	<10	<9.0	<9.0	<10	<10	<9.0	100,000
Tetrachloroethylene	3 J	<9.0	<9.0	25	41	39	1,300
Dibromochloromethane	<10	<9.0	<9.0	<10	<10	<9.0	100,000
Chlorobenzene	<10	<9.0	<9.0	<10	<10	<9.0	1,100
1,1,1,2-Tetrachloroethane	<10	<9.0	<9.0	<10	<10	<9.0	100,000
Ethylbenzene	<10	<9.0	<9.0	<10	<10	<9.0	1,000
M & P XYLENE	<20	<18	<18	<19	<19	<18	260
O-XYLENE	<10	<9.0	<9.0	<10	<10	<9.0	260
Styrene	<10	<9.0	<9.0	<10	<10	<9.0	100,000
Bromoform	<10	<9.0	<9.0	<10	<10	<9.0	100,000
Isopropylbenzene	<10	<9.0	<9.0	<10	<10	<9.0	100,000
1,1,2,2-Tetrachloroethane	<10	<9.0	<9.0	<10	<10	<9.0	100,000
1,2,3-Trichloropropane	<10	<9.0	<9.0	<10	<10	<9.0	100,000
n-Propylbenzene	<10	<9.0	<9.0	<10	<10	<9.0	3,900
trans-1,4-Dichloro-2-butene	<10	<9.0	<9.0	<10	<10	<9.0	100,000
Bromobenzene	<10	<9.0	<9.0	<10	<10	<9.0	100,000
2-Chlorotoluene	<10	<9.0	<9.0	<10	<10	<9.0	100,000
1,3,5-Trimethylbenzene	<10	<9.0	<9.0	<10	<10	<9.0	8,400
4-Chlorotoluene	<10	<9.0	<9.0	<10	<10	<9.0	100,000
tert-Butylbenzene	<10	<9.0	<9.0	<10	<10	<9.0	5,900
1,2,4-Trimethylbenzene	<10	<9.0	<9.0	<10	<10	<9.0	3,600
sec-Butylbenzene	<10	<9.0	<9.0	<10	<10	<9.0	11,000
4-Isopropyltoluene	<10	<9.0	<9.0	<10	<10	<9.0	100,000
1,3-Dichlorobenzene	<10	<9.0	<9.0	<10	<10	<9.0	2,400
1,4-Dichlorobenzene	<10	<9.0	<9.0	<10	<10	<9.0	1,800
n-Butylbenzene	<10	<9.0	<9.0	<10	<10	<9.0	12,000
1,2-Dichlorobenzene	<10	<9.0	<9.0	<10	<10	<9.0	1,100
1,2-Dibromo-3-Chloropropane	<10	<9.0	<9.0	<10	<10	<9.0	100,000
1,2,4-Trichlorobenzene	<10	<9.0	<9.0	<10	<10	<9.0	100,000
Hexachlorobutadiene	<10	<9.0	<9.0	<10	<10	<9.0	100,000
Naphthalene	<10	<9.0	<9.0	<10	<10	<9.0	100,000
1,2,3-Trichlorobenzene	<10	<9.0	<9.0	<10	<10	<9.0	100,000

*-Sample depth is in feet below ground surface

(a) <10: Compound not detected above the Practical Quantitation Limit of 10 ug/Kg

(c) Soil Cleanup Objective for unrestricted use capped at 100,000 ug/Kg per NYS Brownfield Cleanup Program Technical Support Document, Section 9.3, September 2006

B: Analyte was detected in the associated Method Blank

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

Analyte above Unrestricted Use Soil Cleanup Objective (6 NYCRR Subpart 375-6, Table 375-6.8(b))

TABLE 4.2 VERTICAL DELINEATION BORING DW-02 - VOLATILE ORGANIC COMPOUNDS (VOCs) MEASURED IN SUBSURFACE SOIL WITH DEPTH

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID, Lab Sample Number Sample Depth (ft) [±] Date Collected Units	DW - 02 006 7.5 - 8 7/30/2007 ug/Kg	DW - 02 007 12.5 - 13 7/30/2007 ug/Kg	DW - 02 008 17 - 17.5 7/30/2007 ug/Kg	DW - 02 009 22.5 - 23 7/30/2007 ug/Kg	DW - 02 010 34 - 34.5 7/30/2007 ug/Kg	Trip Blank 012 NA 7/30/2007 ug/Kg	Equipment Blank 013 NA 7/30/2007 ug/Kg	Unrestricted Use Soil Cleanup Objectives 6 NYGRR Subpart 375-6 Table 375-6.8(b) ug/Kg
Dichlorodifluoromethane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000 (c)
Vinyl Chloride	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	20
Chloromethane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
Bromomethane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
Chloroethane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
Trichlorofluoromethane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
Acrolein	<83	<100	<80	<86	<100	<25	<25	100,000
Acetone	53 B	68 B	43 B	43 B,J	280 B	<25	44	50
1,1-Dichloroethylene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	330
Iodomethane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
Carbon Disulfide	<8.0	<10	<8.0	<9.0	9 J	<5.0	<5.0	100,000
Methylene Chloride	<33	29 J,B	20 J,B	23 J,B	12 J,B	3 J	<5.0	50
Acrylonitrile	<42	<51	<8.0	<43	<52	<25	<25	100,000
Methyl-Tert-Butyl-Ether	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	930
trans-1,2-Dichloroethylene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	190
1,1-Dichloroethane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	270
2-Butanone-(MEK)	<42	<51	<40	<43	37 J	<25	<25	120
Vinyl Acetate	<42	<51	<40	<43	<52	<25	<25	100,000
2,2-Dichloropropane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
cis-1,2-Dichloroethylene	<8.0	<10	<8.0	3 J B	<10	<5.0	<5.0	250
Chloroform	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	370
Bromochloromethane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
1,1,1-Trichloroethane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	680
1,1-Dichloropropene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
Carbon Tetrachloride	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	760
Benzene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	60
1,2-Dichloroethane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	20
Trichloroethylene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	470
1,2-Dichloropropane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
4-Methyl-2-Pentanone (MIBK)	<42	<51	<40	<43	<52	<25	<25	100,000
2-Chloroethyl vinyl ether	<42	<51	<40	<43	<52	<25	<25	100,000
cis-1,3-Dichloropropene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
Toluene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	700
trans-1,3-Dichloropropene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
Bromodichloromethane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
Dibromomethane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
1,1,2-Trichloroethane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000

TABLE 4.2 VERTICAL DELINEATION BORING DW-02 - VOLATILE ORGANIC COMPOUNDS (VOCs) MEASURED IN SUBSURFACE SOIL, WITH DEPTH

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID, Lab Sample Number Sample Depth (ft)* Date Collected Units	DW - 02 006 7.5 - 8 7/30/2007 ug/Kg	DW - 02 007 12.5 - 13 7/30/2007 ug/Kg	DW - 02 008 17 - 17.5 7/30/2007 ug/Kg	DW - 02 009 22.5 - 23 7/30/2007 ug/Kg	DW - 02 010 34 - 34.5 7/30/2007 ug/Kg	Trip Blank 012 NA 7/30/2007 ug/Kg	Equipment Blank 013 NA 7/30/2007 ug/Kg	Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) ug/Kg
1,2-Dibromoethane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
2-Hexanone	<42	<51	<40	<43	<52	<25	<25	100,000
1,3-Dichloropropane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
Tetrachloroethylene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	1,300
Dibromochloromethane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
Chlorobenzene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	1,100
1,1,1,2-Tetrachloroethane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
Ethylbenzene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	1,000
M & P XYLENE	<17	<21	<16	<17	<21	<10	<10	260
O-XYLENE	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	260
Styrene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
Bromoforn	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
Isopropylbenzene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
1,1,2,2-Tetrachloroethane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
1,2,3-Trichloropropane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
n-Propylbenzene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	3,900
trans-1,4-Dichloro-2-butene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
Bromobenzene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
2-Chlorotoluene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
1,3,5-Trimethylbenzene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	8,400
4-Chlorotoluene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
tert-Butylbenzene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	5,900
1,2,4-Trimethylbenzene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	3,600
sec-Butylbenzene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	11,000
4-Isopropyltoluene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
1,3-Dichlorobenzene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	2,400
1,4-Dichlorobenzene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	1,800
n-Butylbenzene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	12,000
1,2-Dichlorobenzene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	1,100
1,2-Dibromo-3-Chloropropane	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
1,2,4-Trichlorobenzene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
Hexachlorobutadiene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
Naphthalene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000
1,2,3-Trichlorobenzene	<8.0	<10	<8.0	<9.0	<10	<5.0	<5.0	100,000

*-Sample depth is in feet below ground surface

(a) <10: Compound not detected above the Practical Quantitation Limit of 10 ug/Kg

(c) Soil Cleanup Objective for unrestricted use capped at 100,000 ug/Kg per NYS Brownfield Cleanup Program Technical Support Document, Section 9.3, September 2006

B: Analyte was detected in the associated Method Blank

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

Analyte above Unrestricted Use Soil Cleanup Objective (6 NYCRR Subpart 375-6, Table 375-6.8(b))

TABLE 4.3 SUBSURFACE SOIL - VOLATILE ORGANIC COMPOUNDS (VOCs), MAY-JUNE 2008

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	BD-3 006 30.0 6/3/2008 µg/kg	BD-4 003 18.0 5/30/2008 µg/kg	BD-5 006 7.0 5/27/2008 µg/kg	BD-6 002 40.0 5/22/2008 µg/kg	BD-7 004 7.0 6/2/2008 µg/kg	BD-7 Dup 008 7.0 6/2/2008 µg/kg	MW-10R 005 7.0 6/3/2008 µg/kg	MW-12R 007 6.0 6/4/2008 µg/kg	Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) µg/kg
Dichlorodifluoromethane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000 (c)
Vinyl Chloride	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	20
Chloromethane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
Bromomethane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
Chloroethane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
Trichlorofluoromethane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
Acrolein	<95	<86	<96	<140	<94	<77	<87	<93	100,000
Acetone	<48	<43	<48	<69	<47	<38	<43	<46	50
1,1-Dichloroethylene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	330
Iodomethane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
Carbon Disulfide	<19	<17	<19	<28	<19	<15	<17	<19	100,000
Methylene Chloride	<38	<34	<38	<55	<38	<31	<35	<37	50
Acrylonitrile	<48	<43	<48	<69	<47	<38	<43	<46	100,000
Methyl-Tert-Butyl-Ether	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	930
trans-1,2-Dichloroethylene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	190
1,1-Dichloroethane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	270
2-Butanone-(MEK)	<48	<43	<48	<69	<47	<38	<43	<46	120
Vinyl Acetate	<48	<43	<48	<69	<47	<38	<43	<46	100,000
2,2-Dichloropropane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
cis-1,2-Dichloroethylene	27.9	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	250
Chloroform	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	370
Bromochloromethane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
1,1,1-Trichloroethane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	680
1,1-Dichloropropene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
Carbon Tetrachloride	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	760
Benzene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	60
1,2-Dichloroethane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	20
Trichloroethylene	39.8	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	470
1,2-Dichloropropane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
4-Methyl-2-Pentanone (MIBK)	<48	<43	<48	<69	<47	<38	<43	<46	100,000
2-Chloroethyl vinyl ether	<48	<43	<48	<69	<47	<38	<43	<46	100,000
cis-1,3-Dichloropropene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
Toluene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	700
trans-1,3-Dichloropropene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
Bromodichloromethane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
Dibromomethane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
1,1,2-Trichloroethane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000

TABLE 4.3 SUBSURFACE SOIL - VOLATILE ORGANIC COMPOUNDS (VOCs), MAY-JUNE 2008

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	BD-3 006 30.0 6/3/2008 µg/kg	BD-4 003 18.0 5/30/2008 µg/kg	BD-5 006 7.0 5/27/2008 µg/kg	BD-6 002 40.0 5/22/2008 µg/kg	BD-7 004 7.0 6/2/2008 µg/kg	BD-7 Dup 008 7.0 6/2/2008 µg/kg	MW-10R 005 7.0 6/3/2008 µg/kg	MW-12R 007 6.0 6/4/2008 µg/kg	Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) µg/kg
1,2-Dibromoethane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
2-Hexanone	<48	<43	<48	<69	<47	<38	<43	<46	100,000
1,3-Dichloropropane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
Tetrachloroethylene	97.4	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	1,300
Dibromochloromethane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
Chlorobenzene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	1,100
1,1,1,2-Tetrachloroethane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
Ethylbenzene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	1,000
m & p-Xylene	<19	<17	<19	<28	<19	<15	<17	<19	260
o-Xylene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	260
Styrene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
Bromoform	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
Isopropylbenzene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
1,1,2,2-Tetrachloroethane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
1,2,3-Trichloropropane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
n-Propylbenzene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	3,900
trans-1,4-Dichloro-2-butene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
Bromobenzene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
2-Chlorotoluene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
1,3,5-Trimethylbenzene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	8,400
4-Chlorotoluene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
tert-Butylbenzene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	5,900
1,2,4-Trimethylbenzene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	3,600
sec-Butylbenzene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	11,000
4-Isopropyltoluene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
1,3-Dichlorobenzene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	2,400
1,4-Dichlorobenzene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	1,800
n-Butylbenzene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	12,000
1,2-Dichlorobenzene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	1,100
1,2-Dibromo-3-Chloropropane	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
1,2,4-Trichlorobenzene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
Hexachlorobutadiene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
Naphthalene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000
1,2,3-Trichlorobenzene	<9.5	<8.6	<9.6	<14	<9.4	<7.7	<8.7	<9.3	100,000

*-Sample depth is in feet below ground surface

(a) <10: Compound not detected above the Practical Quantitation Limit of 10 µg/Kg

(c) Soil Cleanup Objective for unrestricted use capped at 100,000 µg/Kg per NYS Brownfield Cleanup Program Technical Support Document, Section 9.3, September 2006

B: Analyte was detected in the associated Method Blank

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

Analyte above Unrestricted Use Soil Cleanup Objective (6 NYCRR Subpart 375-6, Table 375-6.8(b))

TABLE 4.3 SUBSURFACE SOIL - VOLATILE ORGANIC COMPOUNDS (VOCs), MAY-JUNE 2008

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	MW-17 002 7.0 5/29/2008 µg/kg	MW-18 001 6.5 5/29/2008 µg/kg	MW-19 005 7.0 5/23/2008 µg/kg	MW-20 003 12.0 5/22/2008 µg/kg	MW-21 007 7.0 5/28/2008 µg/kg	MW-22 001 7.5 5/20/2008 µg/kg	MW-23 004 7.0 5/23/2008 µg/kg	Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) µg/kg
Dichlorodifluoromethane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000 (c)
Vinyl Chloride	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	20
Chloromethane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
Bromomethane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
Chloroethane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
Trichlorofluoromethane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
Acrolein	<86	<95	<100	<70	<110	<94	<92	100,000
Acetone	<43	<47	<50	<35	<53	<47	<46	50
1,1-Dichloroethylene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	330
Iodomethane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
Carbon Disulfide	<17	<19	<20	<14	<21	<19	<18	100,000
Methylene Chloride	<35	<38	<40	<28	<42	<38	<37	50
Acrylonitrile	<43	<47	<50	<35	<53	<47	<46	100,000
Methyl-Tert-Butyl-Ether	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	930
trans-1,2-Dichloroethylene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	190
1,1-Dichloroethane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	270
2-Butanone-(MEK)	<43	<47	<50	<35	<53	<47	<46	120
Vinyl Acetate	<43	<47	<50	<35	<53	<47	<46	100,000
2,2-Dichloropropane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
cis-1,2-Dichloroethylene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	250
Chloroform	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	370
Bromochloromethane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
1,1,1-Trichloroethane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	680
1,1-Dichloropropene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
Carbon Tetrachloride	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	760
Benzene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	60
1,2-Dichloroethane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	20
Trichloroethylene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	470
1,2-Dichloropropane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
4-Methyl-2-Pentanone (MIBK)	<43	<47	<50	<35	<53	<47	<46	100,000
2-Chloroethyl vinyl ether	<43	<47	<50	<35	<53	<47	<46	100,000
cis-1,3-Dichloropropene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
Toluene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	700
trans-1,3-Dichloropropene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
Bromodichloromethane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
Dibromomethane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
1,1,2-Trichloroethane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000

TABLE 4.3 SUBSURFACE SOIL - VOLATILE ORGANIC COMPOUNDS (VOCs), MAY-JUNE 2008

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	MW-17 002 7.0 5/29/2008 µg/kg	MW-18 001 6.5 5/29/2008 µg/kg	MW-19 005 7.0 5/23/2008 µg/kg	MW-20 003 12.0 5/22/2008 µg/kg	MW-21 007 7.0 5/28/2008 µg/kg	MW-22 001 7.5 5/20/2008 µg/kg	MW-23 004 7.0 5/23/2008 µg/kg	Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) µg/kg
1,2-Dibromoethane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
2-Hexanone	<43	<47	<50	<35	<53	<47	<46	100,000
1,3-Dichloropropane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
Tetrachloroethylene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	1,300
Dibromochloromethane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
Chlorobenzene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	1,100
1,1,1,2-Tetrachloroethane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
Ethylbenzene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	1,000
m & p-Xylene	<17	<19	<20	<14	<21	<19	<18	260
o-Xylene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	260
Styrene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
Bromoform	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
Isopropylbenzene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
1,1,2,2-Tetrachloroethane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
1,2,3-Trichloropropane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
n-Propylbenzene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	3,900
trans-1,4-Dichloro-2-butene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
Bromobenzene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
2-Chlorotoluene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
1,3,5-Trimethylbenzene	<8.6	<9.5	47.4	<7.0	<11	<9.4	<9.2	8,400
4-Chlorotoluene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
tert-Butylbenzene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	5,900
1,2,4-Trimethylbenzene	<8.6	<9.5	230	<7.0	<11	<9.4	<9.2	3,600
sec-Butylbenzene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	11,000
4-Isopropyltoluene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
1,3-Dichlorobenzene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	2,400
1,4-Dichlorobenzene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	1,800
n-Butylbenzene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	12,000
1,2-Dichlorobenzene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	1,100
1,2-Dibromo-3-Chloropropane	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
1,2,4-Trichlorobenzene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
Hexachlorobutadiene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000
Naphthalene	<8.6	<9.5	212	<7.0	<11	<9.4	<9.2	100,000
1,2,3-Trichlorobenzene	<8.6	<9.5	<10	<7.0	<11	<9.4	<9.2	100,000

*-Sample depth is in feet below ground surface

(a) <10 Compound not detected above the Practical Quantitation Limit of 10 µg/Kg

(c) Soil Cleanup Objective for unrestricted use capped at 100,000 µg/Kg per NYS Brownfield Cleanup Program Technical Support Document, Section 9.3, September 2006

B: Analyte was detected in the associated Method Blank

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

Analyte above Unrestricted Use Soil Cleanup Objective (6 NYCRR Subpart 375-6, Table 375-6.8(b))

TABLE 4.3 SUBSURFACE SOIL - VOLATILE ORGANIC COMPOUNDS (VOCs), MAY-JUNE 2008

Brownfield Remedial Investigation
 175 Roger Avenue
 Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	Equip. Blank 009 NA 5/29/2008 µg/kg	Trip-Blk-03 008 NA 5/28/2008 µg/kg	Trip-Blk-04 010 NA 6/4/2008 µg/kg					Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) µg/kg
Dichlorodifluoromethane	<5.0	<5.0	<5.0					100,000 (c)
Vinyl Chloride	<5.0	<5.0	<5.0					20
Chloromethane	<5.0	<5.0	<5.0					100,000
Bromomethane	<5.0	<5.0	<5.0					100,000
Chloroethane	<5.0	<5.0	<5.0					100,000
Trichlorofluoromethane	<5.0	<5.0	<5.0					100,000
Aerolcin	<25	<25	<25					100,000
Acetone	<25	<25	64.2					50
1,1-Dichloroethylene	<5.0	<5.0	<5.0					330
Iodomethane	<5.0	<5.0	<5.0					100,000
Carbon Disulfide	<5.0	<5.0	<5.0					100,000
Methylene Chloride	<5.0	<5.0	<5.0					50
Acrylonitrile	<25	<25	<25					100,000
Methyl-Tert-Butyl-Ether	<5.0	<5.0	<5.0					930
trans-1,2-Dichloroethylene	<5.0	<5.0	<5.0					190
1,1-Dichloroethane	<5.0	<5.0	<5.0					270
2-Butanone-(MEK)	<25	<25	<25					120
Vinyl Acetate	<25	<25	<25					100,000
2,2-Dichloropropane	<5.0	<5.0	<5.0					100,000
cis-1,2-Dichloroethylene	<5.0	<5.0	<5.0					250
Chloroform	<5.0	<5.0	<5.0					370
Bromo-chloromethane	<5.0	<5.0	<5.0					100,000
1,1,1-Trichloroethane	<5.0	<5.0	<5.0					680
1,1-Dichloropropene	<5.0	<5.0	<5.0					100,000
Carbon Tetrachloride	<5.0	<5.0	<5.0					760
Benzene	<5.0	<5.0	<5.0					60
1,2-Dichloroethane	<5.0	<5.0	<5.0					20
Trichloroethylene	<5.0	<5.0	<5.0					470
1,2-Dichloropropane	<5.0	<5.0	<5.0					100,000
4-Methyl-2-Pentanone (MIBK)	<25	<25	<25					100,000
2-Chloroethyl vinyl ether	<25	<25	<25					100,000
cis-1,3-Dichloropropene	<5.0	<5.0	<5.0					100,000
Toluene	<5.0	<5.0	<5.0					700
trans-1,3-Dichloropropene	<5.0	<5.0	<5.0					100,000
Bromodichloromethane	<5.0	<5.0	<5.0					100,000
Dibromomethane	<5.0	<5.0	<5.0					100,000
1,1,2-Trichloroethane	<5.0	<5.0	<5.0					100,000

TABLE 4.3 SUBSURFACE SOIL - VOLATILE ORGANIC COMPOUNDS (VOCs), MAY-JUNE 2008

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	Equip. Blank 009 NA 5/29/2008 µg/kg	Trip-Blank-03 008 NA 5/28/2008 µg/kg	Trip-Blank-04 010 NA 6/4/2008 µg/kg					Unrestricted Use Soil Cleanup Objectives 6 NYGRR Subpart 375-6 Table 375-6.8(b) µg/kg
1,2-Dibromoethane	<5.0	<5.0	<5.0					100,000
2-Hexanone	<25	<25	<25					100,000
1,3-Dichloropropane	<5.0	<5.0	<5.0					100,000
Tetrachloroethylene	<5.0	<5.0	<5.0					1,300
Dibromochloromethane	<5.0	<5.0	<5.0					100,000
Chlorobenzene	<5.0	5.71	<5.0					1,100
1,1,1,2-Tetrachloroethane	<5.0	<5.0	<5.0					100,000
Ethylbenzene	<5.0	<5.0	<5.0					1,000
m & p-Xylene	<10	<10	<10					260
o-Xylene	<5.0	<5.0	<5.0					260
Styrene	<5.0	<5.0	<5.0					100,000
Bromoform	<5.0	<5.0	<5.0					100,000
Isopropylbenzene	<5.0	<5.0	<5.0					100,000
1,1,2,2-Tetrachloroethane	<5.0	<5.0	<5.0					100,000
1,2,3-Trichloropropane	<5.0	<5.0	<5.0					100,000
n-Propylbenzene	<5.0	<5.0	<5.0					3,900
trans-1,4-Dichloro-2-butene	<5.0	<5.0	<5.0					100,000
Bromobenzene	<5.0	<5.0	<5.0					100,000
2-Chlorotoluene	<5.0	<5.0	<5.0					100,000
1,3,5-Trimethylbenzene	<5.0	<5.0	<5.0					8,400
4-Chlorotoluene	<5.0	<5.0	<5.0					100,000
tert-Butylbenzene	<5.0	<5.0	<5.0					5,900
1,2,4-Trimethylbenzene	<5.0	<5.0	<5.0					3,600
sec-Butylbenzene	<5.0	<5.0	<5.0					11,000
4-Isopropyltoluene	<5.0	<5.0	<5.0					100,000
1,3-Dichlorobenzene	<5.0	<5.0	<5.0					2,400
1,4-Dichlorobenzene	<5.0	<5.0	<5.0					1,800
n-Butylbenzene	<5.0	<5.0	<5.0					12,000
1,2-Dichlorobenzene	<5.0	<5.0	<5.0					1,100
1,2-Dibromo-3-Chloropropane	<5.0	<5.0	<5.0					100,000
1,2,4-Trichlorobenzene	<5.0	<5.0	<5.0					100,000
Hexachlorobutadiene	<5.0	<5.0	<5.0					100,000
Naphthalene	<5.0	<5.0	<5.0					100,000
1,2,3-Trichlorobenzene	<5.0	<5.0	<5.0					100,000

*-Sample depth is in feet below ground surface

(a) <10: Compound not detected above the Practical Quantitation Limit of 10 ug/Kg

(c) Soil Cleanup Objective for unrestricted use capped at 100,000 ug/Kg per NYS Brownfield Cleanup Program Technical Support Document, Section 9.3, September 2006

B: Analyte was detected in the associated Method Blank

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

Analyte above Unrestricted Use Soil Cleanup Objective (6 NYCRR Subpart 375-6, Table 375-6.8(b))

TABLE 5. SUBSURFACE SOIL - SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs), JULY 2007

Brownfield Remedial Investigation
 175 Roger Avenue
 Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	SB-01 001 7.5 7/16/2007 ug/Kg	SB-01 DUP 018 7.5 7/16/2007 ug/Kg	SB-02 002 7.0 7/16/2007 ug/Kg	SB-03 003 9.0 7/16/2007 ug/Kg	SB-04 004 7.0 7/16/2007 ug/Kg	SB-05 005 7.0 7/16/2007 ug/Kg	SB-06 006 7.0 7/16/2007 ug/Kg	SB-07 007 7.0 7/16/2007 ug/Kg	Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) ug/Kg
bis(2-Chloroethyl)ether	<190 (a)	<190	<190	<200	<190	<2,000	<200	<200	100,000 (c)
N-Nitrosodimethylamine	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
Phenol	<190	<190	<190	<200	<190	<2,000	<200	<200	330
2-Chlorophenol	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
1,3-Dichlorobenzene	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
1,4-Dichlorobenzene	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
1,2-Dichlorobenzene	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
2,2'-oxybis(1-Chloropropane	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
2-Methyl Phenol	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
Hexachloroethane	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
N-Nitroso-di-n-propylamine	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
3&4-Methyl Phenol	<390	<380	<380	<390	<390	<4,000	<400	<390	100,000
Nitrobenzene	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
Isophorone	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
2-Nitrophenol	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
2,4-Dimethylphenol	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
bis(2-Chloroethoxy)methane	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
2,4-Dichlorophenol	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
1,2,4-Trichlorobenzene	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
Naphthalene	<190	<190	<190	<200	<190	9,200	6,200	<200	12,000
4-Chloroaniline	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
Hexachlorobutadiene	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
4-Chloro-3-methylphenol	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
2-Methyl Naphthalene	<190	<190	<190	<200	<190	1,300 J	500	<200	100,000
Hexachlorocyclopentadiene	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
2,4,6-Trichlorophenol	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
2,4,5-Trichlorophenol	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
2-Chloronaphthalene	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
2-Nitroaniline	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
Acenaphthylene	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
Dimethyl Phthalate	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
2,6-Dinitrotoluene	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
Acenaphthene	<190	<190	<190	<200	<190	<2,000	<200	<200	20,000
3-Nitroaniline	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000

TABLE 5. SUBSURFACE SOIL - SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs), JULY 2007

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	SB-01 001 7.5 7/16/2007 ug/Kg	SB-01 DUP 018 7.5 7/16/2007 ug/Kg	SB-02 002 7.0 7/16/2007 ug/Kg	SB-03 003 9.0 7/16/2007 ug/Kg	SB-04 004 7.0 7/16/2007 ug/Kg	SB-05 005 7.0 7/16/2007 ug/Kg	SB-06 006 7.0 7/16/2007 ug/Kg	SB-07 007 7.0 7/16/2007 ug/Kg	Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) ug/Kg
2,4-Dinitrophenol	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
2,4-Dinitrotoluene	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
Dibenzofuran	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
4-Nitrophenol	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
Fluorene	<190	<190	<190	<200	<190	<2,000	<200	<200	30,000
4-Chlorophenyl Phenyl Ether	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
Diethyl Phthalate	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
4-Nitroaniline	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
2-Methyl-4,6-dinitrophenol	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
N-Nitrosodiphenylamine	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
4-Bromophenyl Phenyl Ether	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
Hexachlorobenzene	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
Pentachlorophenol	<190	<190	<190	<200	<190	<2,000	<200	<200	800
Phenanthrene	<190	<190	<190	<200	<190	<2,000	86 J	<200	100,000
Anthracene	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
Carbazole	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000
Di-n-butylphthalate	<190	<190	<190	<200	<190	1,600 J	480	<200	100,000
Fluoranthene	<190	<190	<190	<200	<190	<2,000	44 J	<200	100,000
Benzidine	<190	<190	<190	<200	<190	<2,000 I	<200	<200	100,000
Pyrene	<190	<190	<190	<200	<190	<2,000 I	100 J	<200	100,000
Butyl Benzyl Phthalate	<190	<190	<190	<200	<190	<2,000 I	<200	<200	100,000
3,3'-Dichlorobenzidine	<190	<190	<190	<200	<190	<2,000 I	<200	<200	100,000
Benzo(a)anthracene	<190	<190	<190	<200	<190	<2,000 I	<200	<200	1,000
Chrysene	<190	<190	<190	<200	<190	<2,000 I	<200	<200	1,000
bis(2-Ethylhexyl)phthalate	<190	<190	<190	46 J	<190	970 J, I	660	<200	100,000
Di-n-octyl phthalate	<190	<190	<190	<200	<190	<2,000 I	<200	<200	100,000
Indeno (1,2,3-cd)Pyrene	<190	<190	<190	<200	<190	<2,000 I	<200	<200	500
Benzo(b)fluoranthene	<190	<190	<190	<200	<190	<2,000 I	<200	<200	1,000
Benzo(k)fluoranthene	<190	<190	<190	<200	<190	<2,000 I	<200	<200	800
Benzo(a)pyrene	<190	<190	<190	<200	<190	<2,000 I	<200	<200	1,000
Dibenzo(a,h)Anthracene	<190	<190	<190	<200	<190	<2,000 I	<200	<200	330
Benzo (g,h,i) perylene	<190	<190	<190	<200	<190	<2,000	<200	<200	100,000

*-Sample depth is in feet below ground surface

(a) <190: Compound not detected above the Practical Quantitation Limit of 190 ug/Kg

(c) - Soil Cleanup Objective for unrestricted use capped at 100,000 ug/Kg per NYS Brownfield Cleanup Program Technical Support Document, Section 9.3, September 2006

B: Analyte was detected in the associated Method Blank

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

I: Internal Standard recovery was outside of method limits. Matrix interference was confirmed by reanalysis

Analyte above Unrestricted Use Soil Cleanup Objective (6 NYCRR Subpart 375-6, Table 375-6.8(b))

TABLE 5. SUBSURFACE SOIL - SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs), JULY 2007

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	SB-08 008 8.0 7/16/2007 ug/Kg	SB-09 9 7.0 7/16/2007 ug/Kg	SB-10 10 7.0 7/16/2007 ug/Kg	SB-11 11 6.5 7/17/2007 ug/Kg	SB-12 12 6.5 7/17/2007 ug/Kg	SB-13 13 7.0 7/17/2007 ug/Kg	SB-14 14 6.8 7/17/2007 ug/Kg	SB-15 15 6.5 7/17/2007 ug/Kg	Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) ug/Kg
bis(2-Chloroethyl)ether	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000 (c)
N-Nitrosodimethylamine	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
Phenol	<200	<190	<200	<200	<190	<190	<2,000	<190	330
2-Chlorophenol	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
1,3-Dichlorobenzene	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
1,4-Dichlorobenzene	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
1,2-Dichlorobenzene	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
2,2'-oxybis(1-Chloropropane	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
2-Methyl Phenol	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
Hexachloroethane	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
N-Nitroso-di-n-propylamine	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
3&4-Methyl Phenol	<400	<380	<400	<390	<370	<380	<4,100	<380	100,000
Nitrobenzene	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
Isophorone	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
2-Nitrophenol	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
2,4-Dimethylphenol	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
bis(2-Chloroethoxy)methane	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
2,4-Dichlorophenol	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
1,2,4-Trichlorobenzene	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
Naphthalene	<200	<190	<200	<200	96 J	620	7,100	1,400	12,000
4-Chloroaniline	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
Hexachlorobutadiene	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
4-Chloro-3-methylphenol	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
2-Methyl Naphthalene	<200	<190	<200	<200	<190	130 J	820 J	310	100,000
Hexachlorocyclopentadiene	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
2,4,6-Trichlorophenol	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
2,4,5-Trichlorophenol	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
2-Chloronaphthalene	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
2-Nitroaniline	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
Acenaphthylene	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
Dimethyl Phthalate	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
2,6-Dinitrotoluene	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
Acenaphthene	<200	<190	<200	<200	<190	<190	<2,000	<190	20,000
3-Nitroaniline	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000

TABLE 5. SUBSURFACE SOIL - SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs), JULY 2007

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	SB-08 008 8.0 7/16/2007 ug/Kg	SB-09 9 7.0 7/16/2007 ug/Kg	SB-10 10 7.0 7/16/2007 ug/Kg	SB-11 11 6.5 7/17/2007 ug/Kg	SB-12 12 6.5 7/17/2007 ug/Kg	SB-13 13 7.0 7/17/2007 ug/Kg	SB-14 14 6,8 7/17/2007 ug/Kg	SB-15 15 6,5 7/17/2007 ug/Kg	Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) ug/Kg
2,4-Dinitrophenol	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
2,4-Dinitrotoluene	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
Dibenzofuran	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
4-Nitrophenol	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
Fluorene	<200	<190	<200	<200	<190	<190	<2,000	<190	30,000
4-Chlorophenyl Phenyl Ether	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
Diethyl Phthalate	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
4-Nitroaniline	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
2-Methyl-4,6-dinitrophenol	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
N-Nitrosodiphenylamine	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
4-Bromophenyl Phenyl Ether	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
Hexachlorobenzene	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
Pentachlorophenol	<200	<190	<200	<200	<190	<190	<2,000	<190	800
Phenanthrene	<200	<190	<200	<200	<190	<190	<2,000	59 J	100,000
Anthracene	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
Carbazole	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000
Di-n-butylphthalate	<200	<190	<200	<200	45 J	120 J	<2,000	80 J	100,000
Fluoranthene	<200	<190	<200	<200	44 J	<190	<2,000	<190	100,000
Benzidine	<200	<190	<200	<200	<190 I	<190	<2,000	<190	100,000
Pyrene	<200	<190	<200	<200	65 J, I	<190	<2,000	<190	100,000
Butyl Benzyl Phthalate	<200	<190	<200	<200	<190 I	<190	<2,000	<190	100,000
3,3'-Dichlorobenzidine	<200	<190	<200	<200	<190 I	<190	<2,000	<190	100,000
Benzo(a)anthracene	<200	<190	<200	<200	<190 I	<190	<2,000	<190	1,000
Chrysene	<200	<190	<200	<200	<190 I	<190	<2,000	<190	1,000
bis(2-Ethylhexyl)phthalate	<200	<190	<200	40 J	430 I	100 J	<2,000	190 J	100,000
Di-n-octyl phthalate	<200	<190	<200	<200	<190 I	<190	<2,000	<190	100,000
Indeno (1,2,3-cd)Pyrene	<200	<190	<200	<200	<190 I	<190	<2,000	<190	500
Benzo(b)fluoranthene	<200	<190	<200	<200	<190	<190	<2,000	<190	1,000
Benzo(k)fluoranthene	<200	<190	<200	<200	<190	<190	<2,000	<190	800
Benzo(a)pyrene	<200	<190	<200	<200	<190	<190	<2,000	<190	1,000
Dibenzo(a,h)Anthracene	<200	<190	<200	<200	<190	<190	<2,000	<190	330
Benzo (g,h,i) perylene	<200	<190	<200	<200	<190	<190	<2,000	<190	100,000

*-Sample depth is in feet below ground surface

(a) <190: Compound not detected above the Practical Quantitation Limit of 190 ug/Kg

(c) - Soil Cleanup Objective for unrestricted use capped at 100,000 ug/Kg per NYS Brownfield Cleanup Program Technical Support Document, Section 9.3, September 2006

B: Analyte was detected in the associated Method Blank

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

I: Internal Standard recovery was outside of method limits. Matrix interference was confirmed by reanalysis.

Analyte above Unrestricted Use Soil Cleanup Objective (6 NYCRR Subpart 375-6, Table 375-6.8(b))

TABLE 5. SUBSURFACE SOIL - SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs), JULY 2007

Brownfield Remedial Investigation
 175 Roger Avenue
 Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	SB-16 16 7.5 7/17/2007 ug/Kg	DW-3 17 0.5 7/17/2007 ug/Kg	Equip. Blank 19 NA 7/16/2007 ug/Kg					Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) ug/Kg
bis(2-Chloroethyl)ether	<190	<1,000	<6.0					100,000 (c)
N-Nitrosodimethylamine	<190	<1,000	<6.0					100,000
Phenol	<190	<1,000	<6.0					330
2-Chlorophenol	<190	<1,000	<6.0					100,000
1,3-Dichlorobenzene	<190	<1,000	<6.0					100,000
1,4-Dichlorobenzene	<190	<1,000	<6.0					100,000
1,2-Dichlorobenzene	<190	<1,000	<6.0					100,000
2,2'-oxybis(1-Chloropropane	<190	<1,000	<6.0					100,000
2-Methyl Phenol	<190	<1,000	<6.0					100,000
Hexachloroethane	<190	<1,000	<6.0					100,000
N-Nitroso-di-n-propylamine	<190	<1,000	<6.0					100,000
3&4-Methyl Phenol	<390	<2,000	<11					100,000
Nitrobenzene	<190	<1,000	<6.0					100,000
Isophorone	<190	<1,000	<6.0					100,000
2-Nitrophenol	<190	<1,000	<6.0					100,000
2,4-Dimethylphenol	<190	<1,000	<6.0					100,000
bis(2-Chloroethoxy)methane	<190	<1,000	<6.0					100,000
2,4-Dichlorophenol	<190	<1,000	<6.0					100,000
1,2,4-Trichlorobenzene	<190	<1,000	<6.0					100,000
Naphthalene	<190	<1,000	<6.0					12,000
4-Chloroaniline	<190	<1,000	<6.0					100,000
Hexachlorobutadiene	<190	<1,000	<6.0					100,000
4-Chloro-3-methylphenol	<190	<1,000	<6.0					100,000
2-Methyl Naphthalene	<190	4,900	<6.0					100,000
Hexachlorocyclopentadiene	<190	<1,000	<6.0					100,000
2,4,6-Trichlorophenol	<190	<1,000	<6.0					100,000
2,4,5-Trichlorophenol	<190	<1,000	<6.0					100,000
2-Chloronaphthalene	<190	<1,000	<6.0					100,000
2-Nitroaniline	<190	<1,000	<6.0					100,000
Acenaphthylene	<190	<1,000	<6.0					100,000
Dimethyl Phthalate	<190	<1,000	<6.0					100,000
2,6-Dinitrotoluene	<190	<1,000	<6.0					100,000
Acenaphthene	<190	750 J	<6.0					20,000
3-Nitroaniline	<190	<1,000	<6.0					100,000

TABLE 5. SUBSURFACE SOIL - SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs), JULY 2007

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	SB-16 16 7.5 7/17/2007 ug/Kg	DW-3 17 0.5 7/17/2007 ug/Kg	Equip. Blank 19 NA 7/16/2007 ug/Kg					Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) ug/Kg
2,4-Dinitrophenol	<190	<1,000	<6.0					100,000
2,4-Dinitrotoluene	<190	<1,000	<6.0					100,000
Dibenzofuran	<190	<1,000	<6.0					100,000
4-Nitrophenol	<190	<1,000	<6.0					100,000
Fluorene	<190	<1,000	<6.0					30,000
4-Chlorophenyl Phenyl Ether	<190	<1,000	<6.0					100,000
Diethyl Phthalate	<190	<1,000	<6.0					100,000
4-Nitroaniline	<190	<1,000	<6.0					100,000
2-Methyl-4,6-dinitrophenol	<190	<1,000	<6.0					100,000
N-Nitrosodiphenylamine	<190	<1,000	<6.0					100,000
4-Bromophenyl Phenyl Ether	<190	<1,000	<6.0					100,000
Hexachlorobenzene	<190	<1,000	<6.0					100,000
Pentachlorophenol	<190	<1,000	<6.0					800
Phenanthrene	<190	3,800	<6.0					100,000
Anthracene	<190	<1,000	<6.0					100,000
Carbazole	<190	<1,000	<6.0					100,000
Di-n-butylphthalate	<190	<1,000	<6.0					100,000
Fluoranthene	<190	<1,000	<6.0					100,000
Benzidine	<190	<1,000	<6.0					100,000
Pyrene	<190	2,200	<6.0					100,000
Butyl Benzyl Phthalate	<190	14,000	<6.0					100,000
3,3'-Dichlorobenzidine	<190	<1,000	<6.0					100,000
Benzo(a)anthracene	<190	<1,000	<6.0					1,000
Chrysene	<190	<1,000	<6.0					1,000
bis(2-Ethylhexyl)phthalate	48 J	14,000	<6.0					100,000
Di-n-octyl phthalate	<190	<1,000	<6.0					100,000
Indeno (1,2,3-cd)Pyrene	<190	<1,000	<6.0					500
Benzo(b)fluoranthene	<190	<1,000	<6.0					1,000
Benzo(k)fluoranthene	<190	<1,000	<6.0					800
Benzo(a)pyrene	<190	<1,000	<6.0					1,000
Dibenzo(a,h)Anthracene	<190	<1,000	<6.0					330
Benzo (g,h,i) perylene	<190	<1,000	<6.0					100,000

*-Sample depth is in feet below ground surface

(a) <190: Compound not detected above the Practical Quantitation Limit of 190 ug/Kg

(c) - Soil Cleanup Objective for unrestricted use capped at 100,000 ug/Kg per NYS Brownfield Cleanup Program Technical Support Document, Section 9.3, September 2006

B: Analyte was detected in the associated Method Blank

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

I: Internal Standard recovery was outside of method limits. Matrix interference was confirmed by reanalysis.

Analyte above Unrestricted Use Soil Cleanup Objective (6 NYCRR Subpart 375-6, Table 375-6.8(b))

TABLE 6. SUBSURFACE SOIL - PRIORITY POLLUTANT METALS, JULY 2007

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	SB-01 001 7.5 7/16/2007 mg/Kg	SB-01 Dup 018 7.5 7/16/2007 mg/Kg	SB-02 002 7.0 7/16/2007 mg/Kg	SB-03 003 9.0 7/16/2007 mg/Kg	SB-04 004 7.0 7/16/2007 mg/Kg	SB-05 005 7.0 7/16/2007 mg/Kg	SB-06 006 7.0 7/16/2007 mg/Kg	SB-07 007 7.0 7/16/2007 mg/Kg	SB-08 008 8.0 7/16/2007 mg/Kg	Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) mg/Kg
Arsenic	4.5	2.8	<2.1	<2.2	<2.2	<2.4	<2.3	<2.2	<2.3	13
Antimony	<5.8 (a)	<5.9	<3.7	<5.7	<5.6	<6.1	<6.0	<5.8	<6.0	10,000 (c)
Beryllium	<0.34	<0.34	<0.32	<0.33	<0.32	<0.35	<0.34	<0.33	<0.35	7.2
Cadmium	<0.34	<0.34	<0.32	<0.33	<0.32	<0.35	<0.34	<0.33	<0.35	2.5
Chromium	2.5	4.1	4.3	4.1	3.3	8.2	10	5.7	4.4	30
Copper	<5.6	<5.7	10	<5.4	<5.4	<5.9	<5.7	<5.5	<5.8	50
Lead	<3.4	<3.4	7.3	<3.3	<3.2	7.9	7.8	3.6	<3.5	63
Mercury	<0.040	<0.037	<0.038	<0.041	<0.036	<0.038	<0.035	<0.038	<0.035	0.18
Nickel	<4.5	<4.6	<4.2	<4.4	<4.3	<4.7	5.0	<4.4	<4.6	30
Selenium	<3.9	<4.0	<5.5	<3.8	<3.8	<4.1	<2.3	<3.9	<4.0	3.9
Silver	<0.56	<0.57	<0.53	<0.54	<0.54	<0.59	<0.57	<0.55	<0.58	2
Zinc	<5.6	6.1	80	<5.4	<5.4	11	11	6.0	<5.8	109
Thallium	<2.2	<2.3	<2.1	<2.2	<2.2	<2.4	<2.3	<2.2	<2.3	10,000

*-Sample depth is in feet below ground surface

(a) <5.8: Compound not detected above the Practical Quantitation Limit of 5.8 mg/Kg

(c) - Soil Cleanup Objective for unrestricted use capped at 10,000 mg/Kg per NYS Brownfield Cleanup Program Technical Support Document, Section 9.3, September 2006

Analyte above Unrestricted Use Soil Cleanup Objective (6 NYCRR Subpart 375-6, Table 375-6.8(b))

TABLE 6. SUBSURFACE SOIL - PRIORITY POLLUTANT METALS, JULY 2007

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	SB-09 009 7.0 7/16/2007 mg/Kg	SB-10 010 7.0 7/17/2007 mg/Kg	SB-11 011 6.5 7/17/2007 mg/Kg	SB-12 012 6.5 7/17/2007 mg/Kg	SB-13 013 7.0 7/17/2007 mg/Kg	SB-14 014 6.8 7/17/2007 mg/Kg	SB-15 015 6.5 7/17/2007 mg/Kg	SB-16 016 7.5 7/17/2007 mg/Kg	Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) mg/Kg
Arsenic	<2.1	<2.2	<2.1	<2.1	4.3	3.2	<2.3	<2.3 (a)	13
Antimony	<5.5	<5.8	<5.6	<5.3	<6.1	<6.0	<5.8	<5.9	10,000 (c)
Beryllium	<0.31	<0.34	<0.32	<0.31	<0.35	<0.34	<0.34	<0.34	7.2
Cadmium	<0.31	<0.34	<0.32	<0.31	<0.35	<0.34	<0.34	<0.34	2.5
Chromium	10	3.8	4.5	7.5	7.6	7.6	2.9	6.2	30
Copper	<5.2	<5.6	<5.4	10	<5.9	<5.7	<5.6	6.3	50
Lead	17	<3.4	3.2	20	5.2	4.1	<3.4	3.4	63
Mercury	<0.036	<0.039	<0.040	<0.039	<0.038	<0.040	<0.037	<0.039	0.18
Nickel	5.9	<4.5	<4.3	4.2	<4.7	<4.6	<4.5	<4.5	30
Selenium	<3.7	<3.9	<3.7	<3.6	<4.1	<4.0	<3.9	<4.0	3.9
Silver	<0.52	<0.56	<0.53	<0.51	<0.59	<0.57	<0.56	<0.57	2
Zinc	17	32	12	31	34	23	8.9	6.9	109
Thallium	<2.1	<2.2	<2.1	<2.1	<2.4	<2.3	<2.3	<2.3	10,000

*-Sample depth is in feet below ground surface

(a) <5.8. Compound not detected above the Practical Quantitation Limit of 5.8 mg/Kg

(c) - Soil Cleanup Objective for unrestricted use capped at 10,000 mg/Kg per NYS Brownfield Cleanup Program Technical Support Document, Section 9.3, September 2006

Analyte above Unrestricted Use Soil Cleanup Objective (6 NYCRR Subpart 375-6, Table 375-6.8(b))

TABLE 6. SUBSURFACE SOIL - PRIORITY POLLUTANT METALS, JULY 2007

**Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York**

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	DW-3 017 0.5 7/17/2007 mg/Kg	Equip. Blank 019 NA 7/16/2007 mg/Kg						Unrestricted Use Soil Cleanup Objectives 6 NYCRR Subpart 375-6 Table 375-6.8(b) mg/Kg
Arsenic	<7.4	<0.020						13
Antimony	<7.4	<0.010						10,000 (c)
Beryllium	<1.1	<0.0025						7.2
Cadmium	15	<0.0011						2.5
Chromium	61	<0.0060						30
Copper	370	<0.0050						50
Lead	840	<0.010						63
Mercury	4.1	<0.0002						0.18
Nickel	37	<0.040						30
Selenium	<7.4	<0.0050						3.9
Silver	3.0	<0.020						2
Zinc	520	<0.020						109
Thallium	<7.4	<0.050						10,000

*-Sample depth is in feet below ground surface

(a) <5.8. Compound not detected above the Practical Quantitation Limit of 5.8 mg/Kg

(c) - Soil Cleanup Objective for unrestricted use capped at 10,000 mg/Kg per NYS Brownfield Cleanup Program Technical Support Document, Section 9.3, September 2006

Analyte above Unrestricted Use Soil Cleanup Objective (6 NYCRR Subpart 375-6, Table 375-6.8(b))

TABLE 7. HORIZONTAL GROUNDWATER DELINEATION ASSESSMENT, JULY 2007 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Brownfield Remedial Investigation
 175 Roger Avenue
 Inwood, New York

Sample ID, Lab Sample Number Sample Depth (ft)* Date Collected Units	BW - 01 001 20 - 20.5 7/26/2007 ug/L	BW - 01 DUP 008 20 - 20.5 7/26/2007 ug/L	BW - 02 002 20 - 20.5 7/26/2007 ug/L	BW - 03 003 20 - 20.5 7/26/2007 ug/L	BW - 04 004 20 - 20.5 7/26/2007 ug/L	BW - 05 005 20 - 20.5 7/26/2007 ug/L	NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES ug/L
Dichlorodifluoromethane	<5.0 (a)	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Chloride	<5.0	2 J	2 J	<5.0	<5.0	2 J	2 STD
Chloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Bromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Chloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Trichlorofluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrolein	<25	<25	<25	<25	<25	<25	5 STD
Acetone	<25	<25	<25	<25	<25	<25	50 GV
1,1-Dichloroethylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Iodomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Carbon Disulfide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Methylene Chloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrylonitrile	<25	<25	<25	<25	<25	<25	5 STD
Methyl-Tert-Butyl-Ether	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	10 GV
trans-1,2-Dichloroethylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Acetate	<25	<25	<25	<25	<25	<25	--
2-Butanone (MEK)	<25	<25	<25	<25	<25	<25	50 GV
2,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
cis-1,2-Dichloroethylene	<5.0	2 J	2 J	9	8	1 J	5 STD
Chloroform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	7 STD
Bromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Carbon Tetrachloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Benzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD
1,2-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.6 STD
Trichloroethylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Methyl-2-Pentanone (MIBK)	<25	<25	<25	<25	<25	<25	--
2-Chloroethyl vinyl ether	<25	<25	<25	<25	<25	<25	--
cis-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Toluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 ST
trans-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Bromodichloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Dibromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD

TABLE 7. HORIZONTAL GROUNDWATER DELINEATION ASSESSMENT, JULY 2007 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID: Lab Sample Number Sample Depth (ft)* Date Collected Units	BW - 01 001 20 - 20.5 7/26/2007 ug/L	BW - 01 DUP 008 20 - 20.5 7/26/2007 ug/L	BW - 02 002 20 - 20.5 7/26/2007 ug/L	BW - 03 003 20 - 20.5 7/26/2007 ug/L	BW - 04 004 20 - 20.5 7/26/2007 ug/L	BW - 05 005 20 - 20.5 7/26/2007 ug/L	NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES ug/L
1,2-Dibromoethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
2-Hexanone	<25	<25	<25	<25	<25	<25	50 STD
1,3-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Tetrachloroethylene	10	<5.0	<5.0	1 J	<5.0	<5.0	5 STD
Dibromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Chlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Ethylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
M&P-Xylene	<10	<10	<10	<10	<10	<10	5 STD
O-Xylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Styrene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromoform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Isopropylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,3-Trichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
n-Propylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
trans-1,4-Dichloro-2-butene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
2-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3,5-Trimethylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
tert-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,4-Trimethylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
sec-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Isopropyltoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,4-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
n-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	3 STD
1,2-Dibromo-3-Chloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
1,2,4-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Hexachlorobutadiene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.5 STD
Naphthalene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	10 GV
1,2,3-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD

*-Sample depth is in feet below ground surface

(a) <5.0: Compound not detected above the Practical Quantitation Limit of 5.0 ug/Kg

STD: New York State Ambient Groundwater Quality Standard; NYCRR Title 6, Chapter X, Part 700-705

GV: New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 1.1.1

B: Analyte was detected in the associated Method Blank

t: Applies to sum of cis- and trans-1,3 dichloropropene

J: Estimated value: Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

Analyte above NYS Groundwater Standard or Guidance Value

TABLE 7. HORIZONTAL GROUNDWATER DELINEATION ASSESSMENT, JULY 2007 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Brownfield Remedial Investigation
 175 Roger Avenue
 Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	BW - 06 006 20 - 20.5 7/26/2007 ug/L	Equipment Blank 007 7/26/2007 ug/L	Trip Blank 008 7/26/2007 ug/L				NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES ug/L
Dichlorodifluoromethane	<5.0	<5.0	<5.0				5 STD
Vinyl Chloride	<5.0	<5.0	<5.0				2 STD
Chloromethane	<5.0	<5.0	<5.0				--
Bromomethane	<5.0	<5.0	<5.0				5 STD
Chloroethane	<5.0	<5.0	<5.0				5 STD
Trichlorofluoromethane	<5.0	<5.0	<5.0				5 STD
Acrolein	<25	<25	<25				5 STD
Acetone	<25	54	<25				50 GV
1,1-Dichloroethylene	<5.0	<5.0	<5.0				5 STD
Iodomethane	<5.0	<5.0	<5.0				--
Carbon Disulfide	<5.0	<5.0	<5.0				--
Methylene Chloride	<5.0	<5.0	2				5 STD
Acrylonitrile	<25	<25	<25				5 STD
Methyl-Tert-Butyl-Ether	<5.0	<5.0	<5.0				10 GV
trans-1,2-Dichloroethylene	<5.0	<5.0	<5.0				5 STD
1,1-Dichloroethane	<5.0	<5.0	<5.0				5 STD
Vinyl Acetate	<25	<25	<25				--
2-Butanone-(MEK)	<25	<25	<25				50 GV
2,2-Dichloropropane	<5.0	<5.0	<5.0				5 STD
cis-1,2-Dichloroethylene	8	<5.0	<5.0				5 STD
Chloroform	<5.0	<5.0	<5.0				7 STD
Bromochloromethane	<5.0	<5.0	<5.0				5 STD
1,1,1-Trichloroethane	<5.0	<5.0	<5.0				5 STD
1,1-Dichloropropene	<5.0	<5.0	<5.0				5 STD
Carbon Tetrachloride	<5.0	<5.0	<5.0				5 STD
Benzene	<5.0	<5.0	<5.0				1 STD
1,2-Dichloroethane	<5.0	<5.0	<5.0				0.6 STD
Trichloroethylene	<5.0	<5.0	<5.0				5 STD
1,2-Dichloropropane	<5.0	<5.0	<5.0				5 STD
4-Methyl-2-Pentanone (MIBK)	<25	<25	<25				--
2-Chloroethyl vinyl ether	<25	<25	<25				--
cis-1,3-Dichloropropene	<5.0	<5.0	<5.0				0.4 STD'
Toluene	<5.0	<5.0	<5.0				5 STD
trans-1,3-Dichloropropene	<5.0	<5.0	<5.0				0.4 STD'
Bromodichloromethane	<5.0	<5.0	<5.0				50 GV
Dibromomethane	<5.0	<5.0	<5.0				5 STD
1,1,2-Trichloroethane	<5.0	<5.0	<5.0				1 STD

TABLE 7. HORIZONTAL GROUNDWATER DELINEATION ASSESSMENT, JULY 2007 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected Units	BW - 06 006 20 - 20.5 7/26/2007 ug/L	Equipment Blank 007 7/26/2007 ug/L	Trip Blank 008 7/26/2007 ug/L				NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES ug/L
1,2-Dibromoethane	<5.0	<5.0	<5.0				--
2-Hexanone	<25	<25	<25				50 STD
1,3-Dichloropropane	<5.0	<5.0	<5.0				5 STD
Tetrachloroethylene	<5.0	<5.0	<5.0				5 STD
Dibromochloromethane	<5.0	<5.0	<5.0				50 GV
Chlorobenzene	<5.0	<5.0	<5.0				5 STD
1,1,1,2-Tetrachloroethane	<5.0	<5.0	<5.0				5 STD
Ethylbenzene	<5.0	<5.0	<5.0				5 STD
M&P-Xylene	<10	<10	<10				5 STD
O-Xylene	<5.0	<5.0	<5.0				5 STD
Styrene	<5.0	<5.0	<5.0				5 STD
Bromoform	<5.0	<5.0	<5.0				50 GV
Isopropylbenzene	<5.0	<5.0	<5.0				5 STD
1,1,2,2-Tetrachloroethane	<5.0	<5.0	<5.0				5 STD
1,2,3-Trichloropropane	<5.0	<5.0	<5.0				0.04 STD
n-Propylbenzene	<5.0	<5.0	<5.0				5 STD
trans-1,4-Dichloro-2-butene	<5.0	<5.0	<5.0				5 STD
Bromobenzene	<5.0	<5.0	<5.0				5 STD
2-Chlorotoluene	<5.0	<5.0	<5.0				5 STD
1,3,5-Trimethylbenzene	<5.0	<5.0	<5.0				5 STD
4-Chlorotoluene	<5.0	<5.0	<5.0				5 STD
tert-Butylbenzene	<5.0	<5.0	<5.0				5 STD
1,2,4-Trimethylbenzene	<5.0	<5.0	<5.0				5 STD
sec-Butylbenzene	<5.0	<5.0	<5.0				5 STD
4-Isopropyltoluene	<5.0	<5.0	<5.0				5 STD
1,3-Dichlorobenzene	<5.0	<5.0	<5.0				5 STD
1,4-Dichlorobenzene	<5.0	<5.0	<5.0				5 STD
n-Butylbenzene	<5.0	<5.0	<5.0				5 STD
1,2-Dichlorobenzene	<5.0	<5.0	<5.0				3 STD
1,2-Dibromo-3-Chloropropane	<5.0	<5.0	<5.0				0.04 STD
1,2,4-Trichlorobenzene	<5.0	<5.0	<5.0				5 STD
Hexachlorobutadiene	<5.0	<5.0	<5.0				0.5 STD
Naphthalene	<5.0	<5.0	<5.0				10 GV
1,2,3-Trichlorobenzene	<5.0	<5.0	<5.0				5 STD

*-Sample depth is in feet below ground surface

(a) <5.0: Compound not detected above the Practical Quantitation Limit of 5.0 ug/Kg

STD: New York State Ambient Groundwater Quality Standard; NYCRR Title 6, Chapter X, Part 700-705

GV: New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 1.1.1

B: Analyte was detected in the associated Method Blank

t: Applies to sum of cis- and trans-1,3 dichloropropene

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

Analyte above NYS Groundwater Standard or Guidance Value

TABLE 8.1 MONITORING WELLS - VOLATILE ORGANIC COMPOUNDS (VOCs) MEASURED IN GROUNDWATER, AUGUST 2007

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Date Collected Total Dissolved Solids (mg/L) Units	MW - 01 001 8/7/2007 290 ug/L	MW - 02 001 8/14/2007 310 ug/L	MW - 03 001 8/6/2007 350 ug/L	MW - 04 002 8/14/2007 130 ug/L	MW - 05 004 8/7/2007 510 ug/L	MW - 5'DUP 005 8/7/2007 500 ug/L	NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES ug/L
Dichlorodifluoromethane	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
Vinyl Chloride	3J	<100	<250	<5.0	<5.0	<5.0	2 STD
Chloromethane	<5.0	<100	<250	<5.0	<5.0	<5.0	--
Bromomethane	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
Chloroethane	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
Trichlorofluoromethane	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
Acrolein	<25	<500	<1,200	<25	<25	<25	5 STD
Acetone	<25	<500	<1,200	<25	<25	<25	50 GV
1,1-Dichloroethylene	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
Iodomethane	<5.0	<100	<250	<5.0	<5.0	<5.0	--
Carbon Disulfide	<5.0	<100	<250	<5.0	<5.0	<5.0	--
Methylene Chloride	<5.0	89 J	<250	4 J	<5.0	<5.0	5 STD
Acrylonitrile	<25	<500	<1,200	<25	<25	<25	5 STD
Methyl-Tert-Butyl-Ether	2 J	<100	<250	<5.0	<5.0	<5.0	10 GV
trans-1,2-Dichloroethylene	2 J	<100	<250	<5.0	<5.0	<5.0	5 STD
1,1-Dichloroethane	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
Vinyl Acetate	<25	<500	<1,200	<25	<25	<25	--
2-Butanone-(MEK)	<25	<500	<1,200	<25	<25	<25	50 GV
2,2-Dichloropropane	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
cis-1,2-Dichloroethylene	310	280	120 J	<5.0	<5.0	<5.0	5 STD
Chloroform	<5.0	<100	<250	<5.0	<5.0	<5.0	7 STD
Bromochloromethane	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
1,1,1-Trichloroethane	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
1,1-Dichloropropene	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
Carbon Tetrachloride	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
Benzene	<5.0	<100	<250	<5.0	<5.0	<5.0	1 STD
1,2-Dichloroethane	<5.0	<100	<250	<5.0	<5.0	<5.0	0.6 STD
Trichloroethylene	22	<100	<250	<5.0	<5.0	<5.0	5 STD
1,2-Dichloropropane	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
4-Methyl-2-Pentanone (MIBK)	<25	<500	<1,200	<25	<25	<25	--
2-Chloroethyl vinyl ether	<25	<500	<1,200	<25	<25	<25	--
cis-1,3-Dichloropropene	<5.0	<100	<250	<5.0	<5.0	<5.0	0.4 STD'
Toluene	<5.0	2,500	6,900	13	<5.0	<5.0	5 STD
trans-1,3-Dichloropropene	<5.0	<100	<250	<5.0	<5.0	<5.0	0.4 STD'
Bromodichloromethane	<5.0	<100	<250	<5.0	<5.0	<5.0	50 GV
Dibromomethane	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
1,1,2-Trichloroethane	<5.0	<100	<250	<5.0	<5.0	<5.0	1 STD

TABLE 8.1 MONITORING WELLS - VOLATILE ORGANIC COMPOUNDS (VOCs) MEASURED IN GROUNDWATER, AUGUST 2007

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Date Collected Total Dissolved Solids (mg/L) Units:	MW - 01 001 8/7/2007 290 ug/L	MW - 02 001 8/14/2007 310 ug/L	MW - 03 001 8/6/2007 350 ug/L	MW - 04 002 8/14/2007 130 ug/L	MW - 05 004 8/7/2007 510 ug/L	MW - 5'DUP 005 8/7/2007 500 ug/L	NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES ug/L
1,2-Dibromoethane	<5.0	<100	<250	<5.0	<5.0	<5.0	-
2-Hexanone	<25	<500	<1,200	<25	<25	<25	50 STD
1,3-Dichloropropane	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
Tetrachloroethylene	27	<100	<250	1 J	3 J	3 J	5 STD
Dibromochloromethane	<5.0	<100	<250	<5.0	<5.0	<5.0	50 GV
Chlorobenzene	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
1,1,1,2-Tetrachloroethane	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
Ethylbenzene	<5.0	1,300	5,500	59	<5.0	<5.0	5 STD
M&P-Xylene	<10	11,000	13,000	170	<10	<10	5 STD
O-Xylene	<5.0	9,800	5,300	78	<5.0	<5.0	5 STD
Styrene	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
Bromoform	<5.0	<100	<250	<5.0	<5.0	<5.0	50 GV
Isopropylbenzene	<5.0	690	510	15	<5.0	<5.0	5 STD
1,1,2,2-Tetrachloroethane	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
1,2,3-Trichloropropane	<5.0	<100	<250	<5.0	<5.0	<5.0	0.04 STD
n-Propylbenzene	<5.0	790	760	24	<5.0	<5.0	5 STD
trans-1,4-Dichloro-2-butene	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
Bromobenzene	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
2-Chlorotoluene	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
1,3,5-Trimethylbenzene	<5.0	3,600	590	22	<5.0	<5.0	5 STD
4-Chlorotoluene	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
tert-Butylbenzene	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
1,2,4-Trimethylbenzene	<5.0	8,100	3,600	75	<5.0	<5.0	5 STD
sec-Butylbenzene	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
4-Isopropyltoluene	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
1,3-Dichlorobenzene	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
1,4-Dichlorobenzene	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
n-Butylbenzene	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
1,2-Dichlorobenzene	<5.0	<100	<250	<5.0	<5.0	<5.0	3 STD
1,2-Dibromo-3-Chloropropane	<5.0	<100	<250	<5.0	<5.0	<5.0	0.04 STD
1,2,4-Trichlorobenzene	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD
Hexachlorobutadiene	<5.0	<100	<250	<5.0	<5.0	<5.0	0.5 STD
Naphtalene	<5.0	60	59 J	1 J	<5.0	<5.0	10 GV
1,2,3-Trichlorobenzene	<5.0	<100	<250	<5.0	<5.0	<5.0	5 STD

*-Sample depth is in feet below ground surface

(a) <5.0: Compound not detected above the Practical Quantitation Limit of 5.0 ug/Kg

STD: New York State Ambient Groundwater Quality Standard; NYCRR Title 6, Chapter X, Part 700-705

GV: New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 1.1.1

B: Analyte was detected in the associated Method Blank

t: Applies to sum of cis- and trans-1,3 dichloropropene

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

Analyte above NYS Groundwater Standard or Guidance Value

TABLE 8.1 MONITORING WELLS - VOLATILE ORGANIC COMPOUNDS (VOCs) MEASURED IN GROUNDWATER, AUGUST 2007

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Date Collected Total Dissolved Solids (mg/L) Units	MW - 06 002 8/6/2007 470 ug/L	MW - 07 003 8/14/2007 190 ug/L	MW - 08 001 8/7/2007 160 ug/L	MW - 09 002- 8/7/2007 140 ug/L	MW - 13 004 8/6/2007 220 ug/L	MW - 14 005 8/6/2007 240 ug/L	NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES ug/L
Dichlorodifluoromethane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Chloride	<250	<5.0	<5.0	<5.0	<5.0	<5.0	2 STD
Chloromethane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	--
Bromomethane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Chloroethane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Trichlorofluoromethane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrolein	<1,200	<25	<25	<25	<25	<25	5 STD
Acetone	<1,200	<25	<25	<25	<25	<25	50 GV
1,1-Dichloroethylene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Iodomethane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	--
Carbon Disulfide	<250	<5.0	<5.0	<5.0	<5.0	<5.0	--
Methylene Chloride	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrylonitrile	<1,200	<25	<25	<25	<25	<25	5 STD
Methyl-Tert-Butyl-Ether	<250	<5.0	<5.0	<5.0	<5.0	<5.0	10 GV
trans-1,2-Dichloroethylene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1-Dichloroethane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Acetate	<1,200	<25	<25	<25	<25	<25	--
2-Butanone-(MEK)	<1,200	<25	<25	<25	<25	<25	50 GV
2,2-Dichloropropane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
cis-1,2-Dichloroethylene	570	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Chloroform	<250	<5.0	<5.0	<5.0	<5.0	<5.0	7 STD
Bromochloromethane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1-Trichloroethane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1-Dichloropropene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Carbon Tetrachloride	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Benzene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD
1,2-Dichloroethane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	0.6 STD
Trichloroethylene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2-Dichloropropane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Methyl-2-Pentanone (MIBK)	<1,200	<25	<25	<25	<25	<25	--
2-Chloroethyl vinyl ether	<1,200	<25	<25	<25	<25	<25	--
cis-1,3-Dichloropropene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Toluene	42,000	<5.0	<5.0	<5.0	<5.0	<5.0	5 ST
trans-1,3-Dichloropropene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Bromodichloromethane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Dibromomethane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2-Trichloroethane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD

TABLE 8.1 MONITORING WELLS - VOLATILE ORGANIC COMPOUNDS (VOCs) MEASURED IN GROUNDWATER, AUGUST 2007

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Date Collected Total Dissolved Solids (mg/L) Units	MW - 06 002 8/6/2007 470 ug/L	MW - 07 003 8/14/2007 190 ug/L	MW - 08 001 8/7/2007 160 ug/L	MW - 09 002 8/7/2007 140 ug/L	MW - 13 004 8/6/2007 220 ug/L	MW - 14 005 8/6/2007 240 ug/L	NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES ug/L
1,2-Dibromoethane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	--
2-Hexanone	<1,200	<25	<25	<25	<25	<25	50 STD
1,3-Dichloropropane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Tetrachloroethylene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Dibromochloromethane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Chlorobenzene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1,2-Tetrachloroethane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Ethylbenzene	16,000	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
M&P-Xylene	47,000	<10	<10	<10	<10	<10	5 STD
O-Xylene	11,000	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Styrene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromoform	<250	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Isopropylbenzene	350	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2,2-Tetrachloroethane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,3-Trichloropropane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
n-Propylbenzene	540	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
trans-1,4-Dichloro-2-butene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromobenzene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
2-Chlorotoluene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3,5-Trimethylbenzene	620	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Chlorotoluene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
tert-Butylbenzene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,4-Trimethylbenzene	2,600	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
sec-Butylbenzene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Isopropyltoluene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3-Dichlorobenzene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,4-Dichlorobenzene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
n-Butylbenzene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2-Dichlorobenzene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	3 STD
1,2-Dibromo-3-Chloropropane	<250	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
1,2,4-Trichlorobenzene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Hexachlorobutadiene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	0.5 STD
Naphthalene	110	<5.0	<5.0	<5.0	<5.0	<5.0	10 GV
1,2,3-Trichlorobenzene	<250	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD

*-Sample depth is in feet below ground surface

(a) <5.0: Compound not detected above the Practical Quantitation Limit of 5.0 ug/Kg

STD: New York State Ambient Groundwater Quality Standard; NYCRR Title 6, Chapter X, Part 700-705

GV: New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 1.1.1

B: Analyte was detected in the associated Method Blank

t: Applies to sum of cis- and trans-1,3 dichloropropene

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

Analyte above NYS Groundwater Standard or Guidance Value

TABLE 8.1 MONITORING WELLS - VOLATILE ORGANIC COMPOUNDS (VOCs) MEASURED IN GROUNDWATER, AUGUST 2007

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Date Collected Total Dissolved Solids (mg/L) Units	MW - 15 004 8/14/2007 490 ug/L	MW - 16 003 8/6/2007 570 ug/L	Equipment/Blank 006 8/6/2007 <10 ug/L	Trip Blank 007 8/6/2007 ug/L	Trip Blank 006 8/7/2007 ug/L	Trip Blank 005 8/14/2007 ug/L	NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES ug/L
Dichlorodifluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Chloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	2 STD
Chloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Bromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Chloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Trichlorofluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrolein	<25	<25	<25	<25	<25	<25	5 STD
Acetone	<25	<25	72	<25	<25	<25	50 GV
1,1-Dichloroethylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Iodomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Carbon Disulfide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Methylene Chloride	<5.0	<5.0	2 J	9 J	12	10	5 STD
Acrylonitrile	<25	<25	<25	<25	<25	<25	5 STD
Methyl-Tert-Butyl-Ether	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	10 GV
trans-1,2-Dichloroethylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Acetate	<25	<25	<25	<25	<25	<25	--
2-Butanone-(MEK)	<25	<25	<25	<25	<25	<25	50 GV
2,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
cis-1,2-Dichloroethylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Chloroform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	7 STD
Bromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Carbon Tetrachloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Benzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD
1,2-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.6 STD
Trichloroethylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Methyl-2-Pentanone (MIBK)	<25	<25	<25	<25	<25	<25	--
2-Chloroethyl vinyl ether	<25	<25	<25	<25	<25	<25	--
cis-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Toluene	<5.0	2 J	<5.0	<5.0	<5.0	<5.0	5 STD
trans-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Bromodichloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Dibromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD

TABLE 8.1 MONITORING WELLS - VOLATILE ORGANIC COMPOUNDS (VOCs) MEASURED IN GROUNDWATER, AUGUST 2007

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Date Collected Total Dissolved Solids (mg/L) Units	MW - 15 004 8/14/2007 490 ug/L	MW - 16 003 8/6/2007 570 ug/L	Equipment Blank 006 8/6/2007 <10 ug/L	Trip Blank 007 8/6/2007 ug/L	Trip Blank 006 8/7/2007 ug/L	Trip Blank 005 8/14/2007 ug/L	NY STATE GLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES ug/L
1,2-Dibromoethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-
2-Hexanone	<25.1	<25	<25	<25	<25	<25	50 STD
1,3-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Tetrachloroethylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Dibromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Chlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Ethylbenzene	1.600	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
M&P-Xylene	<10.1	2 J	<10	<10	<10	<10	5 STD
O-Xylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Styrene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromoform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Isopropylbenzene	160	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,3-Trichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
n-Propylbenzene	170	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
trans-1,4-Dichloro-2-butene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
2-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3,5-Trimethylbenzene	1 J	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
tert-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,4-Trimethylbenzene	110	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
sec-Butylbenzene	2 J	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Isopropyltoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,4-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
n-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	3 STD
1,2-Dibromo-3-Chloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
1,2,4-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Hexachlorobutadiene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.5 STD
Naphthalene	3 J	<5.0	<5.0	<5.0	<5.0	<5.0	10 GV
1,2,3-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD

*-Sample depth is in feet below ground surface

(a) <5.0: Compound not detected above the Practical Quantitation Limit of 5.0 ug/Kg

STD: New York State Ambient Groundwater Quality Standard; NYCRR Title 6, Chapter X, Part 700-705

GV: New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 1.1.1

B: Analyte was detected in the associated Method Blank

t: Applies to sum of cis- and trans-1,3 dichloropropene

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

I: Internal Standard recovery was outside of method limits. Matrix interference was confirmed by reanalysis

Analyte above NYS Groundwater Standard or Guidance Value

TABLE 8.2 MONITORING WELLS - VOLATILE ORGANIC COMPOUNDS (VOCs) MEASURED IN GROUNDWATER, JUNE 2008

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID.	MW - 1	MW - 2	MW - 3	MW - 4	MW - 5	MW - 6	MW - 6 DUP (FD - 2)	MW - 7	MW - 8	MW - 9	NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE
Lab Sample Number Date Collected Units	017 6/18/2008 µg/L	011 6/19/2008 µg/L	027 6/19/2008 µg/L	021 6/19/2008 µg/L	019 6/18/2008 µg/L	023 6/19/2008 µg/L	029 6/19/2008 µg/L	009 6/19/2008 µg/L	005 6/19/2008 µg/L	003 6/19/2008 µg/L	µg/L
Dichlorodifluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Chloride	76	<5.0	1 J	<5.0	<5.0	<5.0	1 J	<5.0	<5.0	<5.0	2 STD
Chloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-
Bromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Chloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Trichlorofluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrolein	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	5 STD
Acetone	<25	7 J, B	<25	<25	<25	<25	<25	<25	<25	<25	50 GV
1,1-Dichloroethylene	1 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Iodomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-
Carbon Disulfide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	J J	<5.0	-
Methylene Chloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrylonitrile	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	5 STD
Methyl-Tert-Butyl-Ether	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	10 GV
trans-1,2-Dichloroethylene	3 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Acetate	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	-
2-Butanone-(MEK)	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	50 GV
2,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
cis-1,2-Dichloroethylene	240	89	8	<5.0	<5.0	39	61	<5.0	<5.0	<5.0	5 STD
Chloroform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	7 STD
Bromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Carbon Tetrachloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Benzene	<5.0	4 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD
1,2-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.6 STD
Trichloroethylene	19	<5.0	21	<5.0	<5.0	5 J	6	<5.0	<5.0	<5.0	5 STD
1,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Methyl-2-Pentanone (MIBK)	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	-
2-Chloroethyl vinyl ether	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	-
cis-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Toluene	4 J	8,600	270	8	2 J	5,500	5,600	<5.0	<5.0	1 J	5 STD
trans-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Bromodichloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Dibromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD

TABLE 8.2 MONITORING WELLS - VOLATILE ORGANIC COMPOUNDS (VOCs) MEASURED IN GROUNDWATER, JUNE 2008

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID, Lab Sample Number Date Collected Units	MW-1 017 6/18/2008 µg/L	MW-2 011 6/19/2008 µg/L	MW-3 027 6/19/2008 µg/L	MW-4 021 6/19/2008 µg/L	MW-5 019 6/18/2008 µg/L	MW-6 023 6/19/2008 µg/L	MW-6 DUP (ED-2) 029 6/19/2008 µg/L	MW-7 009 6/19/2008 µg/L	MW-8 005 6/19/2008 µg/L	MW-9 003 6/19/2008 µg/L	NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE µg/L
1,2-Dibromoethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-
2-Hexanone	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	50 STD
1,3-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Tetrachloroethylene	22	12	20	10	6	16	5	9	9	9	5 STD
Dibromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Chlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Ethylbenzene	7	9,000	1,600	150	4 J	3,500	5,300	1 J	1 J	1 J	5 STD
m&p-Xylene	43	57,000	1,800	540	30	6,800	11,000	6 J	8 J	6 J	5 STD
o-Xylene	14	50,000	370	140	8	1,900	2,700	2 J	3 J	2 J	5 STD
Styrene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromoform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Isopropylbenzene	<5.0	4,700	170	40	<5.0	95	140	<5.0	<5.0	<5.0	5 STD
1,1,2,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,3-Trichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
n-Propylbenzene	<5.0	7,300	300	65	<5.0	170	430	<5.0	<5.0	<5.0	5 STD
trans-1,4-Dichloro-2-butene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
2-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3,5-Trimethylbenzene	2 J	3,800	91	80	1 J	100	130	<5.0	<5.0	<5.0	5 STD
4-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
tert-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,4-Trimethylbenzene	13	94,000	1,000	210	11	750	2,000	1 J	2 J	1 J	5 STD
sec-Butylbenzene	<5.0	<5.0	5 J	<5.0	<5.0	5	5 J	<5.0	<5.0	<5.0	5 STD
4-Isopropyltoluene	<5.0	12	1 J	2 J	<5.0	2 J	2 J	<5.0	<5.0	<5.0	5 STD
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,4-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
n-Butylbenzene	<5.0	<5.0	2 J	<5.0	<5.0	<5.0	3 J	<5.0	<5.0	<5.0	5 STD
1,2-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	3 STD
1,2-Dibromo-3-Chloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
1,2,4-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Hexachlorobutadiene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.5 STD
Naphthalene	<5.0	20	11	3 J	<5.0	14	19	<5.0	<5.0	<5.0	10 GV
1,2,3-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD

* Sample depth is in feet below ground surface

(a) <5.0: Compound not detected above the Practical Quantitation Limit of 5.0 µg/Kg

STD: New York State Ambient Groundwater Quality Standard; NYCRR Title 6, Chapter X, Part 700-705

GV: New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 111

J: Applies to sum of cis- and trans-1,3 dichloropropene

F: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

Analyte above NYS Groundwater Standard or Guidance Value

TABLE 8.2 MONITORING WELLS - VOLATILE ORGANIC COMPOUNDS (VOCs) MEASURED IN GROUNDWATER, JUNE 2008

Brownfield Remedial Investigation
 175 Roger Avenue
 Inwood, New York

Sample ID.	MW - 10R	MW - 12R	MW - 13	MW - 14	MW - 15	MW - 16	MW - 17	MW - 18	MW - 19	MW - 19 DUP (FD-1)	NY STATE CLASS GA
Lab Sample Number	001	019	017	007	013	015	003	005	007	021	GROUNDWATER
Date Collected	6/19/2008	6/19/2008	6/19/2008	6/19/2008	6/19/2008	6/19/2008	6/18/2008	6/18/2008	6/18/2008	6/18/2008	STANDARDS/GUIDANCE
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Dichlorodifluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Chloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	2 STD
Chloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Bromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Chloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Trichlorofluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrolein	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	5 STD
Acetone	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	50 GV
1,1-Dichloroethylene	1 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Iodomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Carbon Disulfide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Methylene Chloride	<5.0	<5.0	<5.0	1 J,B	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrylonitrile	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	5 STD
Methyl-Tert-Butyl-Ether	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	10 GV
trans-1,2-Dichloroethylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Acetate	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	--
2-Butanone-(MEK)	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	50 GV
2,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
cis-1,2-Dichloroethylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	20 J	22 J	5 STD
Chloroform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	7 STD
Bromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Carbon Tetrachloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Benzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD
1,2-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.6 STD
Trichloroethylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Methyl-2-Pentanone (MIBK)	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	--
2-Chloroethyl vinyl ether	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	--
cis-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Toluene	2 J	2 J	3 J	<5.0	16	8	<5.0	<5.0	7,200	5,510	5 STD
trans-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Bromodichloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Dibromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD

TABLE 8.2 MONITORING WELLS - VOLATILE ORGANIC COMPOUNDS (VOCs) MEASURED IN GROUNDWATER, JUNE 2008

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID.	MW - 10R	MW - 12R	MW - 13	MW - 14	MW - 15	MW - 16	MW - 17	MW - 18	MW - 19	MW - 19 DUP (RD - 1)	NY STATE CLASS GA
Lab Sample Number	001	019	017	007	013	015	003	005	007	021	GROUNDWATER
Date Collected	6/19/2008	6/19/2008	6/19/2008	6/19/2008	6/19/2008	6/19/2008	6/18/2008	6/18/2008	6/18/2008	6/18/2008	STANDARDS/GUIDANCE
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
1,2-Dibromoethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
2-Hexanone	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	50 STD
1,3-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Tetrachloroethylene	9	1 J	<5.0	9	10	<5.0	<5.0	2 J	89	96	5 STD
Dibromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Chlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Ethylbenzene	2 J	3 J	5 J	1 J	1,400	14	<5.0	<5.0	7,900	6,300	5 STD
M&P-Xylene	9 J	28	32	7 J	170	58	<10	<10	40,000	30,000	5 STD
O-Xylene	3 J	11	17	3 J	130	41	<5.0	<5.0	17,000	12,000	5 STD
Styrene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromoform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Isopropylbenzene	<5.0	<5.0	1 J	<5.0	84	3 J	<5.0	<5.0	390	450	5 STD
1,1,2,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,3-Trichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
n-Propylbenzene	<5.0	<5.0	1 J	<5.0	86	3 J	<5.0	<5.0	590	700	5 STD
trans-1,4-Dichloro-2-butene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
2-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3,5-Trimethylbenzene	<5.0	3 J	5 J	<5.0	54	13	<5.0	<5.0	4,700	1,700 J	5 STD
4-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
tert-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,4-Trimethylbenzene	2 J	14	17	1 J	160	30	<5.0	<5.0	13,000	8,000	5 STD
sec-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	19 J	26 J	5 STD
4-Isopropyltoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	11 J	16 J	5 STD
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,4-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
n-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	18 J	26 J	5 STD
1,2-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	3 STD
1,2-Dibromo-3-Chloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
1,2,4-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Hexachlorobutadiene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.5 STD
Naphthalene	<5.0	<5.0	<5.0	<5.0	5	<5.0	<5.0	<5.0	100	210	10 GV
1,2,3-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD

* Sample depth is in feet below ground surface

(a) <5.0 Compound not detected above the Practical Quantitation Limit of 5.0 ug/Kg

STD - New York State Ambient Groundwater Quality Standard; NYCRR Title 6, Chapter X, Part 700-705

GV - New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 1111

J Applies to sum of cis- and trans-1,3 dichloropropene

J Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

B: Analyte was detected in the associated Method Blank

Analyte above NYS Groundwater Standard or Guidance Value

TABLE 8.2 MONITORING WELLS - VOLATILE ORGANIC COMPOUNDS (VOCs) MEASURED IN GROUNDWATER, JUNE 2008

Brownfield Remedial Investigation
 175 Roger Avenue
 Inwood, New York

Sample ID, Lab Sample Number Date Collected Units	MW - 19D 009 6/18/2008 µg/L	MW - 20 011 6/18/2008 µg/L	MW - 21 013 6/18/2008 µg/L	MW - 22 001 6/18/2008 µg/L	MW - 23 015 6/18/2008 µg/L	MW - 24D 025 6/19/2008 µg/L	TRIP BLANK 023 6/18/2008 µg/L	TRIP BLANK 031 6/19/2008 µg/L	µg/L	NV STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE µg/L
Dichlorodifluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		5 STD
Vinyl Chloride	68	<5.0	15	1 J	<5.0	67	<5.0	<5.0		2 STD
Chloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		--
Bromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		5 STD
Chloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		5 STD
Trichlorofluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		5 STD
Acrolein	<25	<25	<25	<25	<25	<25	<25	<25		5 STD
Acetone	<25	<25	<25	<25	<25	<25	57	26 B		50 GV
1,1-Dichloroethylene	19	<5.0	3 J	<5.0	<5.0	17	<5.0	<5.0		5 STD
Iodomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		--
Carbon Disulfide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		--
Methylene Chloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	6 B		5 STD
Acrylonitrile	<25	<25	<25	<25	<25	<25	<25	<25		5 STD
Methyl-Tert-Butyl-Ether	7	<5.0	<5.0	<5.0	<5.0	9	<5.0	<5.0		10 GV
trans-1,2-Dichloroethylene	3 J	<5.0	5	<5.0	<5.0	2 J	<5.0	<5.0		5 STD
1,1-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		5 STD
Vinyl Acetate	<25	<25	<25	<25	<25	<25	<25	<25		--
2-Butanone-(MEK)	<25	<25	<25	<25	<25	<25	<25	<25		50 GV
2,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		5 STD
cis-1,2-Dichloroethylene	1,400	<5.0	520	8	3 J	990	<5.0	<5.0		5 STD
Chloroform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		7 STD
Bromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		5 STD
1,1,1-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		5 STD
1,1-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		5 STD
Carbon Tetrachloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		5 STD
Benzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		1 STD
1,2-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		0.6 STD
Trichloroethylene	3,800	12	910	<5.0	6	3,600	<5.0	<5.0		5 STD
1,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		5 STD
4-Methyl-2-Pentanone (MIBK)	<25	<25	<25	<25	<25	<25	<25	<25		--
2-Chloroethyl vinyl ether	<25	<25	<25	<25	<25	<25	<25	<25		--
cis-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		0.4 STD ¹
Toluene	25	4 J	7	<5.0	2 J	19	<5.0	<5.0		5 STD
trans-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		0.4 STD ¹
Bromodichloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		50 GV
Dibromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		5 STD
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0		1 STD

TABLE 8.2 MONITORING WELLS - VOLATILE ORGANIC COMPOUNDS (VOCs) MEASURED IN GROUNDWATER, JUNE 2008

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Date Collected Units	MW - 19D 009 6/18/2008 µg/L	MW - 20 011 6/18/2008 µg/L	MW - 21 013 6/18/2008 µg/L	MW - 22 001 6/18/2008 µg/L	MW - 23 015 6/18/2008 µg/L	MW - 24D 025 6/19/2008 µg/L	TRIP BLANK 023 6/18/2008 µg/L	TRIP BLANK 031 6/19/2008 µg/L	µg/L	NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE µg/L
1,2-Dibromoethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
2-Hexanone	<25	<25	<25	<25	<25	<25	<25	<25	<25	50 STD
1,3-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Tetrachloroethylene	4,200	74 a	1,100	6	21	6,200	<5.0	<5.0	<5.0	5 STD
Dibromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Chlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Ethylbenzene	58	8	13	<5.0	4 J	22	<5.0	<5.0	<5.0	5 STD
M&P-Xylene	270	46	64	<10	31	59	<10	<10	<10	5 STD
O-Xylene	130	16	26	<5.0	9	21	<5.0	<5.0	<5.0	5 STD
Styrene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromoform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Isopropylbenzene	5 J	<5.0	1 J	<5.0	<5.0	2 J	<5.0	<5.0	<5.0	5 STD
1,1,2,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,3-Trichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
n-Propylbenzene	9	<5.0	1 J	<5.0	<5.0	2 J	<5.0	<5.0	<5.0	5 STD
trans-1,4-Dichloro-2-butene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
2-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3,5-Trimethylbenzene	24	2 J	4 J	<5.0	<5.0	5 J	<5.0	<5.0	<5.0	5 STD
4-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
tert-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,4-Trimethylbenzene	61	13	16	<5.0	12	17	<5.0	<5.0	<5.0	5 STD
sec-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Isopropyltoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,4-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
n-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	3 STD
1,2-Dibromo-3-Chloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
1,2,4-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Hexachlorobutadiene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.5 STD
Naphthalene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	10 GV
1,2,3-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD

* Sample depth is in feet below ground surface

(a) <5.0: Compound not detected above the Practical Quantitation Limit of 5.0 µg/Kg

STD: New York State Ambient Groundwater Quality Standard, NYCRR Title 6, Chapter X, Part 700-705

GV: New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 111

† Applies to sum of cis- and trans-1,3 dichloropropene

J Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

µg/L Analyte above NYS Groundwater Standard or Guidance Value

TABLE 9. DW-01 VERTICAL GROUNDWATER DELINEATION ASSESSMENT, AUGUST 2007 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Brownfield Remedial Investigation
 175 Roger Avenue
 Inwood, New York

Sample ID. Lab Sample Number Date Collected Sample Depth (ft)* Units	DW - 01 001 8/1/2007 35' µg/L	DW - 01 003 (001 DUP) 8/1/2007 35' µg/L	DW - 01 002 8/1/2007 30' µg/L	DW - 01 004 8/1/2007 20' µg/L	DW - 01 005 8/1/2007 12' µg/L	NY STATE GLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES µg/L
Dichlorodifluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Chloride	70	72	180	13	<5.0	2 STD
Chloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	--
Bromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Chloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Trichlorofluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrolein	<25	<25	<25	<25	<25	5 STD
Acetone	<25	<25	<25	<25	<25	50 GV
1,1-Dichloroethylene	19	19	11	1.1	<5.0	5 STD
Iodomethane	<5.0	<5.0	<5.0	<5.0	<5.0	--
Carbon Disulfide	<5.0	<5.0	<5.0	<5.0	<5.0	--
Methylene Chloride	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrylonitrile	<25	<25	<25	<25	<25	5 STD
Methyl-Tert-Butyl-Ether	11	11	33	5.1	3.1	10 GV
trans-1,2-Dichloroethylene	6	5	30	2.1	<5.0	5 STD
1,1-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Acetate	<25	<25	<25	<25	<25	--
2-Butanone-(MEK)	<25	<25	<25	<25	<25	50 GV
2,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
cis-1,2-Dichloroethylene	1,300	1,400	6,400	300	10	5 STD
Chloroform	<5.0	<5.0	<5.0	<5.0	<5.0	7 STD
Bromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Carbon Tetrachloride	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Benzene	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD
1,2-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	0.6 STD
Trichloroethylene	3,000	3,200	5,400	140	30	5 STD
1,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Methyl-2-Pentanone (MIBK)	<25	<25	<25	<25	<25	--
2-Chloroethyl vinyl ether	<25	<25	<25	<25	<25	--
cis-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD *
Toluene	8	19	4.1	1.1	18	5 STD
trans-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD *
Bromodichloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Dibromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD

TABLE 9. DW-01 VERTICAL GROUNDWATER DELINEATION ASSESSMENT, AUGUST 2007 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID: Lab Sample Number Date Collected Sample Depth (ft)* Units	DW - 01 001 8/1/2007 35' µg/L	DW - 01 003 (001 DUP) 8/1/2007 35' µg/L	DW - 01 002 8/1/2007 30' µg/L	DW - 01 004 8/1/2007 20' µg/L	DW - 01 005 8/1/2007 12' µg/L	NY STATE GLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES µg/L
1,2-Dibromoethane	<5.0	<5.0	<5.0	<5.0	<5.0	-
2-Hexanone	<25	<25	<25	<25	<25	50 STD
1,3-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Tetrachloroethylene	1,600	1,800	9,800	280	110	5 STD
Dibromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Chlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Ethylbenzene	2 J	5	5	19	2,600	5 STD
M&P-Xylene	7 J	17	9 J	7 J	4,300	5 STD
O-Xylene	4 J	8	3 J	1 J	47	5 STD
Styrene	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromoform	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Isopropylbenzene	<5.0	<5.0	14	59	190	5 STD
1,1,2,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,3-Trichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
n-Propylbenzene	<5.0	<5.0	1 J	2 J	310	5 STD
trans-1,4-Dichloro-2-butene	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
2-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3,5-Trimethylbenzene	<5.0	<5.0	<5.0	2 J	350	5 STD
4-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
tert-Butylbenzene	<5.0	<5.0	5 J	1 J	<5.0	5 STD
1,2,4-Trimethylbenzene	1 J	3 J	3 J	4 J	1,200	5 STD
sec-Butylbenzene	<5.0	<5.0	1 J	2 J	3 J	5 STD
4-Isopropyltoluene	<5.0	<5.0	<5.0	<5.0	3 J	5 STD
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,4-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
n-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	3 STD
1,2-Dibromo-3-Chloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
1,2,4-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Hexachlorobutadiene	<5.0	<5.0	<5.0	<5.0	<5.0	0.5 STD
Naphthalene	<5.0	<5.0	<5.0	<5.0	10	10 GV
1,2,3-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD

*-Sample depth is in feet below ground surface

(a) <5.0: Compound not detected above the Practical Quantitation Limit of 5.0 µg/Kg

STD: New York State Ambient Groundwater Quality Standard; NYCRR Title 6, Chapter X, Part 700-705

GV: New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 1.1.1

B: Analyte was detected in the associated Method Blank

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

t: Applies to sum of cis- and trans-1,3 dichloropropene

Analyte above NYS Groundwater Standard or Guidance Value

TABLE 9. DW-01 VERTICAL GROUNDWATER DELINEATION ASSESSMENT, AUGUST 2007 - VOLATILE ORGANIC COMPOUNDS (VOCS)

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Date Collected Sample Depth (ft)* Units	DW -02 006 8/1/2007 35' µg/L	DW -02 007 8/1/2007 30' µg/L	DW -02 008 8/1/2007 20' µg/L	DW -02 009 8/1/2007 12' µg/L	EB -01 010 8/1/2007 µg/L	Trip Blank 011 8/1/2007 µg/L	NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES µg/L
Dichlorodifluoromethane	<5.0	1 J	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Chloride	<5.0	<5.0	34	4 J	<5.0	<5.0	2 STD
Chloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Bromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Chloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Trichlorofluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrolein	<25	<25	<25	<25	<25	<25	5 STD
Acetone	<25	<25	<25	<25	<25	<25	50 GV
1,1-Dichloroethylene	<5.0	<5.0	1 J	<5.0	<5.0	<5.0	5 STD
Iodomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Carbon Disulfide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Methylene Chloride	<5.0	<5.0	<5.0	<5.0	<5.0	2	5 STD
Acrylonitrile	<25	<25	<25	<25	<25	<25	5 STD
Methyl-Tert-Butyl-Ether	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	10 GV
trans-1,2-Dichloroethylene	<5.0	<5.0	3 J	<5.0	<5.0	<5.0	5 STD
1,1-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Acetate	<25	<25	<25	<25	<25	<25	--
2-Butanone-(MEK)	<25	<25	<25	<25	<25	<25	50 GV
2,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
cis-1,2-Dichloroethylene	12	11	470	83	<5.0	<5.0	5 STD
Chloroform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	7 STD
Bromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Carbon Tetrachloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Benzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD
1,2-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.6 STD
Trichloroethylene	35	8	45	15	<5.0	<5.0	5 STD
1,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Methyl-2-Pentanone (MIBK)	<25	<25	<25	<25	<25	<25	--
2-Chloroethyl vinyl ether	<25	<25	<25	<25	<25	<25	--
cis-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Toluene	11	2 J	2 J	3 J	<5.0	<5.0	5 ST
trans-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Bromodichloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Dibromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD

TABLE 9. DW-01 VERTICAL GROUNDWATER DELINEATION ASSESSMENT, AUGUST 2007 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Date Collected Sample Depth (ft)* Units	DW - 02 006 8/1/2007 35' µg/L	DW-02 007 8/1/2007 30' µg/L	DW - 02 008 8/1/2007 20' µg/L	DW - 02 009 8/1/2007 12' µg/L	EB - 01 010 8/1/2007 µg/L	Trip Blank 011 8/1/2007 µg/L	NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES µg/L
1,2-Dibromoethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
2-Hexanone	<25	<25	<25	<25	<25	<25	50 STD
1,3-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Tetrachloroethylene	37	7	43	16	<5.0	<5.0	5 STD
Dibromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Chlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Ethylbenzene	18	3 J	3 J	6	<5.0	<5.0	5 STD
M&P-Xylene	37	6 J	7 J	15	<10	<10	5 STD
O-Xylene	7	1 J	1 J	3 J	<5.0	<5.0	5 STD
Styrene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromoform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Isopropylbenzene	2 J	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,3-Trichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
n-Propylbenzene	4 J	<5.0	1 J	1 J	<5.0	<5.0	5 STD
trans-1,4-Dichloro-2-butene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
2-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3,5-Trimethylbenzene	4 J	<5.0	1 J	2 J	<5.0	<5.0	5 STD
4-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
tert-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,4-Trimethylbenzene	18	2 J	5	8	<5.0	<5.0	5 STD
sec-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Isopropyltoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,4-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
n-Butylbenzene	2 J	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	3 STD
1,2-Dibromo-3-Chloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
1,2,4-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Hexachlorobutadiene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.5 STD
Naphthalene	2 J	<5.0	<5.0	1 J	<5.0	<5.0	10 GV
1,2,3-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD

*-Sample depth is in feet below ground surface

(a) <5.0: Compound not detected above the Practical Quantitation Limit of 5.0 µg/Kg

STD: New York State Ambient Groundwater Quality Standard; NYCRR Title 6, Chapter X, Part 700-705

GV: New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 1.1.1

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

t: Applies to sum of cis- and trans-1,3 dichloropropene

Analyte above NYS Groundwater Standard or Guidance Value

TABLE 9. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID.	BD-3	BD-3	BD-3	BD-3 DUP (FD-3)	BD-3	BD-4	BD-4	BD-4	BD-4	NY STATE CLASS GA
Lab Sample Number	008	007	006	013	005	004	003	002	001	GROUNDWATER
Date Collected	6/12/2008	6/12/2008	6/12/2008	6/12/2008	6/12/2008	6/5/2008	6/5/2008	6/5/2008	6/5/2008	STANDARDS/GUIDANCE
Sample Depth (ft) ^a	10	20	30	30	35	10	20	30	35	VALUES
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Dichlorodifluoromethane	<5.0 (a)	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Chloride	<5.0	1 J	18	20	2 J	<5.0	3 J	<500	120	2 STD
Chloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Bromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Chloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Trichlorofluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrolein	<25	<25	<25	<25	<25	<25	<25	<25	<25	5 STD
Acetone	<25	<25	<25	<25	<25	<25	<25	<25	<25	50 GV
1,1-Dichloroethylene	<5.0	<5.0	3 J	2 J	<5.0	<5.0	<5.0	14	27	5 STD
Iodomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Carbon Disulfide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Methylene Chloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrylonitrile	<25	<25	<25	<25	<25	<25	<25	<25	<25	5 STD
Methyl-Tert-Butyl-Ether	<5.0	5 J	16	15	<5.0	<5.0	<5.0	24	7	10 GV
trans-1,2-Dichloroethylene	<5.0	<5.0	3 J	3 J	<5.0	<5.0	<5.0	31	2 J	5 STD
1,1-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Acetate	<25	<25	<25	<25	<25	<25	<25	<25	<25	--
2-Butanone-(MEK)	<25	<25	<25	<25	<25	<25	<25	<25	<25	50 GV
2,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
cis-1,2-Dichloroethylene	7	26	620	700	4 J	39	58	5,400	1,400	5 STD
Chloroform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	7 STD
Bromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Carbon Tetrachloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Benzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	2 J	3 J	5 J	1 STD
1,2-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.6 STD
Trichloroethylene	8	22	520	570	<5.0	43	84	5,800	2,400	5 STD
1,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Methyl-2-Pentanone (MIBK)	<25	<25	<25	<25	<25	<25	<25	<25	<25	--
2-Chloroethyl vinyl ether	<25	<25	<25	<25	<25	<25	<25	<25	<25	--
cis-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Toluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 J	3 J	5 J	5 STD
trans-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Bromodichloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Dibromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD

TABLE 9. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID.	BD-3	BD-3	BD-3	BD-3 DUP (FD-3)	BD-3	BD-4	BD-4	BD-4	BD-4	NY-STATE CLASS GA
Lab Sample Number	008	007	006	013	005	004	003	002	001	GROUNDWATER
Date Collected	6/12/2008	6/12/2008	6/12/2008	6/12/2008	6/12/2008	6/5/2008	6/5/2008	6/5/2008	6/5/2008	STANDARDS/GUIDANCE
Sample Depth (ft)*	10	20	30	30	35	10	20	30	35	VALUES
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
1,2-Dibromoethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-
2-Hexanone	<25	<25	<25	<25	<25	<25	<25	<25	<25	50 STD
1,3-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Tetrachloroethylene	10	26	1,100	810	13	70	230	11,000	400	5 STD
Dibromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Chlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	7	5 STD
1,1,1,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Ethylbenzene	2 J	1 J	<5.0	<5.0	<5.0	27	2,900	4 J	<5.0	5 STD
M&P-Xylene	<10	<10	<10	<10	<10	<10	25	19	<10	5 STD
O-Xylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	3 J	<5.0	5 STD
Styrene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromoform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Isopropylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	2 J	290	12	<5.0	5 STD
1,1,2,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,3-Trichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
n-Propylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	3 J	360	<5.0	<5.0	5 STD
trans-1,4-Dichloro-2-butene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
2-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3,5-Trimethylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 J	<5.0	<5.0	5 STD
1-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
tert-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	4 J	<5.0	5 STD
1,2,4-Trimethylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	18	1,200	<5.0	<5.0	5 STD
sec-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	4 J	<5.0	<5.0	5 STD
4-Isopropyltoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,4-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
n-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	3 STD
1,2-Dibromo-3-Chloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
1,2,4-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Hexachlorobutadiene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.5 STD
Naphthalene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	8	<5.0	<5.0	10 GV
1,2,3-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD

* Sample depth is in feet below ground surface

(a) <5.0: Compound not detected above the Practical Quantitation Limit of 5.0 µg/Kg

STD: New York State Ambient Groundwater Quality Standard, NYCRR Title 6, Chapter X, Part 700-705

GV: New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 111

J: Applies to sum of cis- and trans-1,3 dichloropropene

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

Analyte above NYS Groundwater Standard or Guidance Value

TABLE 9. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID.	BD - 5	BD - 5	BD - 5	BD - 5	BD - 6	BD - 6	BD - 6	BD - 6 DUP	BD - 6	NY STATE CLASS GA	
Lab Sample Number	008	007	006	005	008	007	006	(RD - 1) 009	005	GROUNDWATER	
Date Collected	6/10/2008	6/10/2008	6/10/2008	6/10/2008	6/9/2008	6/9/2008	6/9/2008	6/9/2008	6/9/2008	STANDARDS/GUIDANCE	
Sample Depth (ft)*	10	20	30	35	10	20	30	30	35	VLAUES	
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
Dichlorodifluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	3 J	5 STD
Vinyl Chloride	52	340	92	30	1 J	190	24	27	1 J	1 J	2 STD
Chloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Bromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Chloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Trichlorofluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrolein	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	5 STD
Acetone	<25	<25	<25	<25	<25	<25	<25	<25	<25	34	50 GV
1,1-Dichloroethylene	2 J	12	6	3 J	<5.0	1 J	1 J	<5.0	<5.0	<5.0	5 STD
Iodomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Carbon Disulfide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Methylene Chloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrylonitrile	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	5 STD
Methyl-Tert-Butyl-Ether	<5.0	7	2 J	2 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	10 GV
trans-1,2-Dichloroethylene	4 J	36	21	11	<5.0	7	4 J	4 J	<5.0	<5.0	5 STD
1,1-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Acetate	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	--
2-Butanone-(MEK)	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	50 GV
2,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
cis-1,2-Dichloroethylene	460	4,100	2,400	1,600	8	460	1,200	1,100	24	24	5 STD
Chloroform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	7 STD
Bromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Carbon Tetrachloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Benzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD
1,2-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.6 STD
Trichloroethylene	270	2,400	2,900	93	<5.0	28	8	8	<5.0	<5.0	5 STD
1,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Methyl-2-Pentanone (MIBK)	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	--
2-Chloroethyl vinyl ether	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	--
cis-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Toluene	<5.0	3 J	3 J	5 J	<5.0	<5.0	<5.0	1 J	4 J	4 J	5 ST
trans-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Bromodichloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Dibromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD

TABLE 9. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID.	BD - 5	BD - 5	BD - 5	BD - 5	BD - 6	BD - 6	BD - 6	BD - 6 DUP (BD - 1)	BD - 6	NY STATE CLASS GA
Lab Sample Number	008	007	006	005	008	007	006	009	005	GROUNDWATER
Date Collected	6/10/2008	6/10/2008	6/10/2008	6/10/2008	6/9/2008	6/9/2008	6/9/2008	6/9/2008	6/9/2008	STANDARDS/GUIDANCE
Sample Depth (ft) ^a	10	20	30	35	10	20	30	30	35	VALUES
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
1,2-Dibromochthane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-
2-Hexanone	<25	<25	<25	<25	<25	<25	<25	<25	<25	50 STD
1,3-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Tetrachloroethylene	190	1,800	13,000	250	5	21	9	6	6	5 STD
Dibromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Chlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Ethylbenzene	<5.0	7	13	9	<5.0	<5.0	<5.0	<5.0	3 J	5 STD
M&P-Xylene	<10	37	64	41	<10	<10	<10	<10	<10	5 STD
O-Xylene	<5.0	15	78	17	<5.0	<5.0	<5.0	<5.0	1 J	5 STD
Styrene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromoform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Isopropylbenzene	<5.0	4 J	15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,3-Trichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
n-Propylbenzene	<5.0	<5.0	5 J	<5.0	<5.0	<5.0	<5.0	<5.0	1 J	5 STD
trans-1,4-Dichloro-2-butene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
2-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3,5-Trimethylbenzene	<5.0	<5.0	6	<5.0	<5.0	6	<5.0	<5.0	4 J	5 STD
1-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
tert-Butylbenzene	<5.0	6	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,4-Trimethylbenzene	<5.0	11	16	11	<5.0	19	<5.0	<5.0	16	5 STD
sec-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Isopropyltoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 J	5 STD
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,4-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
n-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	3 STD
1,2-Dibromo-3-Chloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
1,2,4-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Hexachlorobutadiene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.5 STD
Naphthalene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	10 GV
1,2,3-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD

^aSample depth is in feet below ground surface

(a) <5.0. Compound not detected above the Practical Quantitation Limit of 5.0 ug/Kg

STD: New York State Ambient Groundwater Quality Standard, NYCRR Title 6, Chapter X, Part 700-705

GV: New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 1 | 1

J: Applies to sum of cis- and trans-1,3 dichloropropene

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

Analyte above NYS Groundwater Standard or Guidance Value

TABLE 9. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Brownfield Remedial Investigation
 175 Roger Avenue
 Inwood, New York

Sample ID: Lab Sample Number Date Collected Sample Depth (ft)* Units	BD -7 012 6/12/2008 10 µg/L	BD -7 011 6/12/2008 20 µg/L	BD -7 010 6/12/2008 30 µg/L	BD -7 009 6/12/2008 35 µg/L	MW - 10R 004 6/12/2008 10 µg/L	MW - 10R 003 6/12/2008 20 µg/L	MW - 10R 002 6/12/2008 30 µg/L	MW - 10R 001 6/12/2008 35 µg/L	NY STATE GLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES µg/L
Dichlorodifluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Chloride	<5.0	<5.0	<5.0	<5.0	6	18	170	900	2 STD
Chloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Bromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Chloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Trichlorofluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrolein	<25	<25	<25	<25	<25	<25	<25	<25	5 STD
Acetone	<25	<25	<25	<25	<25	<25	<25	<25	50 GV
1,1-Dichloroethylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	4 J	7	5 STD
Iodomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Carbon Disulfide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Methylene Chloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrylonitrile	<25	<25	<25	<25	<25	<25	<25	<25	5 STD
Methyl-Tert-Butyl-Ether	<5.0	1 J	4 J	<5.0	<5.0	<5.0	<5.0	<5.0	10 GV
trans-1,2-Dichloroethylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	7	9	5 STD
1,1-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Acetate	<25	<25	<25	<25	<25	<25	<25	<25	--
2-Butanone-(MEK)	<25	<25	<25	<25	<25	<25	<25	<25	50 GV
2,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
cis-1,2-Dichloroethylene	<5.0	<5.0	<5.0	<5.0	52	150	2,200	5,400	5 STD
Chloroform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	7 STD
Bromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Carbon Tetrachloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Benzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD
1,2-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.6 STD
Trichloroethylene	<5.0	<5.0	<5.0	<5.0	<5.0	7	78	17	5 STD
1,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Methyl-2-Pentanone (MIBK)	<25	<25	<25	<25	<25	<25	<25	<25	--
2-Chloroethyl vinyl ether	<25	<25	<25	<25	<25	<25	<25	<25	--
cis-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Toluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 ST
trans-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Bromodichloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Dibromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD

TABLE 9. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID: Lab Sample Number Date Collected Sample Depth (ft) ^a Units	BD -7 012 6/12/2008 10 µg/L	BD -7 011 6/12/2008 20 µg/L	BD -7 010 6/12/2008 30 µg/L	BD -7 009 6/12/2008 35 µg/L	MW -10R 004 6/12/2008 10 µg/L	MW -10R 003 6/12/2008 20 µg/L	MW -10R 002 6/12/2008 30 µg/L	MW -10R 001 6/12/2008 35 µg/L	NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES µg/L
1,2-Dibromoethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	-
2-Hexanone	<25	<25	<25	<25	<25	<25	<25	<25	50 STD
1,3-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Tetrachloroethylene	3 J	8	1 J	2 J	2 J	7	100	2 J	5 STD
Dibromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Chlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Ethylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
M&P-Xylene	<10	<10	<10	<10	<10	<10	<10	<10	5 STD
O-Xylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Styrene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromoform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Isopropylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,3-Trichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
n-Propylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
trans-1,4-Dichloro-2-butene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
2-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3,5-Trimethylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
tert-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,4-Trimethylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
sec-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Isopropyltoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,4-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
n-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	3 STD
1,2-Dibromo-3-Chloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
1,2,4-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Hexachlorobutadiene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.5 STD
Naphthalene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	10 GV
1,2,3-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD

^a Sample depth is in feet below ground surface

(a) <5.0 Compound not detected above the Practical Quantitation Limit of 5.0 µg/kg

STD New York State Ambient Groundwater Quality Standard, NYCRR Title 6, Chapter X, Part 700-705

GV New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 1.1.1

t Applies to sum of cis- and trans-1,3 dichloropropane

J Estimated value Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

µg/L Analyte above NYS Groundwater Standard or Guidance Value

TABLE 9. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Browfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID, Lab Sample Number	MW - 12R 008	MW - 12R 007	MW - 12R 006	MW - 12R 005	MW - 17 008	MW - 17 007	MW - 17 006	MW - 17 005	NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES
Date Collected	6/5/2008	6/5/2008	6/5/2008	6/5/2008	6/11/2008	6/11/2008	6/11/2008	6/11/2008	
Sample Depth (ft)*	10	20	30	35	10	20	30	35	
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Dichlorodifluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Chloride	2 J	6	180	611	9	32	110	670	2 STD
Chloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Bromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Chloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Trichlorofluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrolein	<25	<25	<25	<25	<25	<25	<25	<25	5 STD
Acetone	<25	<25	<25	<25	<25	<25	<25	<25	50 GV
1,1-Dichloroethylene	<5.0	<5.0	5	17	<5.0	<5.0	3 J	5	5 STD
Iodomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Carbon Disulfide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Methylene Chloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrylonitrile	<25	<25	<25	<25	<25	<25	<25	<25	5 STD
Methyl-Tert-Butyl-Ether	<5.0	<5.0	4 J	3 J	<5.0	<5.0	<5.0	<5.0	10 GV
trans-1,2-Dichloroethylene	<5.0	<5.0	23	21	<5.0	<5.0	9	26	5 STD
1,1-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Acetate	<25	<25	<25	<25	<25	<25	<25	<25	--
2-Butanone-(MEK)	<25	<25	<25	<25	<25	<25	<25	<25	50 GV
2,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
cis-1,2-Dichloroethylene	43	62	2,800	6,900	67	220	1,400	5,800	5 STD
Chloroform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	7 STD
Bromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Carbon Tetrachloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Benzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD
1,2-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.6 STD
Trichloroethylene	32	30	1,600	2,000	4 J	17	83	130	5 STD
1,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Methyl-2-Pentanone (MIBK)	<25	<25	<25	<25	<25	<25	<25	<25	--
2-Chloroethyl vinyl ether	<25	<25	<25	<25	<25	<25	<25	<25	--
cis-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD
Toluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 J	<5.0	5 STD
trans-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD
Bromodichloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Dibromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD

TABLE 9. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Browfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Date Collected Sample Depth (ft) ^a Units	MW - 12R 008 6/5/2008 10 µg/L	MW - 12R 007 6/5/2008 20 µg/L	MW - 12R 006 6/5/2008 30 µg/L	MW - 12R 005 6/5/2008 35 µg/L	MW - 17 008 6/11/2008 10 µg/L	MW - 17 007 6/11/2008 20 µg/L	MW - 17 006 6/11/2008 30 µg/L	MW - 17 005 6/11/2008 35 µg/L	NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES µg/L
1,2-Dibromoethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	—
2-Hexanone	<25	<25	<25	<25	<25	<25	<25	<25	50 STD
1,3-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Tetrachloroethylene	88	100	4,400	3,900	3 J	25	120	140	5 STD
Dibromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Chlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Ethylbenzene	<5.0	<5.0	1 J	21	<5.0	<5.0	2 J	<5.0	5 STD
M&P-Xylene	<10	<10	<10	<10	<10	<10	20	<10	5 STD
O-Xylene	<5.0	<5.0	1 J	5 J	<5.0	<5.0	3 J	<5.0	5 STD
Styrene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromoforn	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Isopropylbenzene	<5.0	<5.0	<5.0	5 J	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,3-Trichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
n-Propylbenzene	<5.0	<5.0	<5.0	6	<5.0	<5.0	<5.0	<5.0	5 STD
trans-1,4-Dichloro-2-butene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
2-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3,5-Trimethylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
tert-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,4-Trimethylbenzene	<5.0	<5.0	<5.0	23	<5.0	<5.0	10	<5.0	5 STD
sec-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Isopropyltoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,4-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
n-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	3 STD
1,2-Dibromo-3-Chloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
1,2,4-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Hexachlorobutadiene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.5 STD
Naphthalene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	10 GV
1,2,3-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD

^aSample depth is in feet below ground surface

(a) <5.0: Compound not detected above the Practical Quantitation Limit of 5.0 µg/Kg

STD: New York State Ambient Groundwater Quality Standard, NYCRR Title 6, Chapter X, Part 700-705

GV: New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 1.1.1

J: Applies to sum of cis- and trans-1,3 dichloropropene

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

Analyte above NYS Groundwater Standard or Guidance Value

TABLE 9. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Brownfield Remedial Investigation
 175 Roger Avenue
 Inwood, New York

Sample ID Lab Sample Number Date Collected Sample Depth (ft) ^a Units	MW - 18 004 6/11/2008 10 µg/L	MW - 18 003 6/11/2008 20 µg/L	MW - 18 002 6/11/2008 30 µg/L	MW - 18 001 6/11/2008 35 µg/L	MW - 19 017 6/9/2008 10 µg/L	MW - 19 016 6/9/2008 20 µg/L	MW - 19 015 6/9/2008 30 µg/L	MW - 19 014 6/9/2008 35 µg/L	NY STATE CLASS-GA GROUNDWATER STANDARDS/GUIDANCE VALUES µg/L
Dichlorodifluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Chloride	14	38	290	840	<5.0	120	94	69	2 STD
Chloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Bromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Chloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Trichlorofluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrolein	<25	<25	<25	<25	<25	<25	<25	<25	5 STD
Acetone	<25	<25	<25	<25	25 J	16 J	<25	<25	50 GV
1,1-Dichloroethylene	<5.0	<5.0	2 J	6	<5.0	4 J	10	18	5 STD
Iodomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Carbon Disulfide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Methylene Chloride	<5.0	<5.0	<5.0	<5.0	2 J	<5.0	<5.0	<5.0	5 STD
Acrylonitrile	<25	<25	<25	<25	<25	<25	<25	<25	5 STD
Methyl-Tert-Butyl-Ether	<5.0	<5.0	20	<5.0	<5.0	25	8	8	10 GV
trans-1,2-Dichloroethylene	<5.0	3 J	22	29	<5.0	4 J	13	4 J	5 STD
1,1-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Acetate	<25	<25	<25	<25	<25	<25	<25	<25	--
2-Butanone-(MEK)	<25	<25	<25	<25	<25	<25	<25	<25	50 GV
2,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
cis-1,2-Dichloroethylene	95	262	2,600	9,300	18	620	2,400	980	5 STD
Chloroform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	7 STD
Bromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Carbon Tetrachloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Benzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD
1,2-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.6 STD
Trichloroethylene	<5.0	14	170	25	9	250	6,100	2,800	5 STD
1,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Methyl-2-Pentanone (MIBK)	<25	<25	<25	<25	<25	<25	<25	<25	--
2-Chloroethyl vinyl ether	<25	<25	<25	<25	<25	<25	<25	<25	--
cis-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Toluene	<5.0	1 J	<5.0	1 J	400	2 J	1 J	4 J	5 ST
trans-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Bromodichloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Dibromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD

TABLE 9. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Date Collected Sample Depth (ft) ^a Units	MW - 18 004 6/11/2008 10 µg/L	MW - 18 003 6/11/2008 20 µg/L	MW - 18 002 6/11/2008 30 µg/L	MW - 18 001 6/11/2008 35 µg/L	MW - 19 017 6/9/2008 10 µg/L	MW - 19 016 6/9/2008 20 µg/L	MW - 19 015 6/9/2008 30 µg/L	MW - 19 014 6/9/2008 35 µg/L	NY STATE/GLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES µg/L
1,2-Dibromoethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
2-Hexanone	<25	<25	<25	<25	<25	<25	<25	<25	50 STD
1,3-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Tetrachloroethylene	3 J	11	140	3 J	13	430	15,000	2,100	5 STD
Dibromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Chlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Ethylbenzene	<5.0	2 J	<5.0	<5.0	430	7	14	10	5 STD
M&P-Xylene	<10	<10	<10	<10	1,700	37	31	46	5 STD
O-Xylene	<5.0	2 J	2 J	3 J	970	12	5 J	21	5 STD
Styrene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromoform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Isopropylbenzene	<5.0	<5.0	<5.0	<5.0	29	2 J	3 J	2 J	5 STD
1,1,2,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,3-Trichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
n-Propylbenzene	<5.0	<5.0	<5.0	<5.0	40	3 J	1 J	4 J	5 STD
trans-1,4-Dichloro-2-butene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
2-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3,5-Trimethylbenzene	<5.0	<5.0	<5.0	<5.0	73	<5.0	2 J	5	5 STD
4-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
tert-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	7	<5.0	<5.0	5 STD
1,2,4-Trimethylbenzene	<5.0	<5.0	<5.0	<5.0	200	16	12	19	5 STD
sec-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	1 J	<5.0	<5.0	5 STD
4-Isopropyltoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,4-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
n-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	3 STD
1,2-Dibromo-3-Chloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
1,2,4-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Hexachlorobutadiene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.5 STD
Naphthalene	<5.0	<5.0	<5.0	<5.0	5 J	<5.0	<5.0	<5.0	10 GV
1,2,3-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD

^a Sample depth is in feet below ground surface

(a) <5.0 Compound not detected above the Practical Quantitation Limit of 5.0 µg/Kg

STD New York State Ambient Groundwater Quality Standard; NYCRR Title 6, Chapter X, Part 700-705

GV New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 1.1.1

J Applies to sum of cis- and trans-1,3 dichloropropene

J Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)
Analyte above NYS Groundwater Standard or Guidance Value

TABLE 9. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Date Collected Sample Depth (ft)* Units	MW -20 013 6/9/2008 10 µg/L	MW -20 012 6/9/2008 20 µg/L	MW -20 011 6/9/2008 30 µg/L	MW -20 010 6/9/2008 35 µg/L	MW -21 004 6/10/2008 10 µg/L	MW -21 003 6/10/2008 20 µg/L	MW -21 002 6/10/2008 30 µg/L	MW -21 001 6/10/2008 35 µg/L	NY STATE GLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES µg/L
Dichlorodifluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Chloride	<5.0	<5.0	2 J	<5.0	39	22	260	42	2 STD
Chloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Bromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Chloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Trichlorofluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrolein	<25	<25	<25	<25	<25	<25	<25	<25	5 STD
Acetone	9 J	<25	<25	<25	<25	<25	<25	<25	50 GV
1,1-Dichloroethylene	<5.0	<5.0	3 J	<5.0	5 J	<5.0	5	1 J	5 STD
Iodomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Carbon Disulfide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Methylene Chloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrylonitrile	<25	<25	<25	<25	<25	<25	<25	<25	5 STD
Methyl-Terl-Butyl-Ether	<5.0	2 J	3 J	<5.0	4 J	1 J	4 J	<5.0	10 GV
trans-1,2-Dichloroethylene	<5.0	<5.0	<5.0	<5.0	15	<5.0	33	4 J	5 STD
1,1-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Acetate	<25	<25	<25	<25	<25	<25	<25	<25	--
2-Butanone-(MEK)	<25	<25	<25	<25	<25	<25	<25	<25	50 GV
2,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
cis-1,2-Dichloroethylene	<5.0	6	120	<5.0	610	96	3,300	1,300	5 STD
Chloroform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	7 STD
Bromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Carbon Tetrachloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Benzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD
1,2-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.6 STD
Trichloroethylene	7	19	700	<5.0	1,300	13	810	9	5 STD
1,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Methyl-2-Pentanone (MIBK)	<25	<25	<25	<25	<25	<25	<25	<25	--
2-Chloroethyl vinyl ether	<25	<25	<25	<25	<25	<25	<25	<25	--
cis-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD'
Toluene	<5.0	<5.0	<5.0	<5.0	2 J	3 J	2 J	6	5 ST
trans-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD'
Bromodichloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Dibromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD

TABLE 9. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID.	MW - 20	MW - 20	MW - 20	MW - 20	MW - 21	MW - 21	MW - 21	MW - 21	NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE VALUES
Lab Sample Number	013	012	011	010	004	003	002	001	
Date Collected	6/9/2008	6/9/2008	6/9/2008	6/9/2008	6/10/2008	6/10/2008	6/10/2008	6/10/2008	
Sample Depth (ft)*	10	20	30	35	10	20	30	35	
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
1,2-Dibromoethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
2-Hexanone	<25	<25	<25	<25	<25	<25	<25	<25	50 STD
1,3-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Tetrachloroethylene	58	100	2,100	2 J	540	5	37	8	5 STD
Dibromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Chlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Ethylbenzene	<5.0	<5.0	2 J	<5.0	3 J	4 J	3 J	8	5 STD
m&p-Xylene	<10	<10	29	<10	24	28	23	38	5 STD
o-Xylene	<5.0	<5.0	22	<5.0	5	8	4 J	14	5 STD
Styrene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromoform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Isopropylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,3-Trichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
n-Propylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
trans-1,4-Dichloro-2-butene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
2-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3,5-Trimethylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
tert-Butylbenzene	<5.0	<5.0	<5.0	<5.0	3 J	1 J	<5.0	<5.0	5 STD
1,2,4-Trimethylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	11	5 STD
sec-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Isopropyltoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,4-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	2 J	<5.0	<5.0	5 STD
n-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	3 STD
1,2-Dibromo-3-Chloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
1,2,4-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Hexachlorobutadiene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.5 STD
Naphthalene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	10 GV
1,2,3-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD

*-Sample depth is in feet below ground surface

(a) <5.0: Compound not detected above the Practical Quantitation Limit of 5.0 ug/Kg

STD New York State Ambient Groundwater Quality Standard, NYCRR Title 6, Chapter X, Part 700-705

GV New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 1.1.1

J Applies to sum of cis- and trans-1,3 dichloropropene

J Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

Analyte above NYS Groundwater Standard or Guidance Value

TABLE 9. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Brownfield Remedial Assessment
175 Roger Avenue
Inwood, New York

Sample ID.	MW - 22	MW - 22	MW - 22	MW - 22	MW - 23	MW - 23	MW - 23	MW - 23 DUP (RD - 2)	MW - 23	NY STATE CLASS GA
Lab Sample Number	004	003	002	001	012	011	010	013	009	GROUNDWATER
Date Collected	6/9/2008	6/9/2008	6/9/2008	6/9/2008	6/11/2008	6/11/2008	6/11/2008	6/11/2008	6/11/2008	STANDARDS/GUIDANCE
Sample Depth (ft)*	10	20	30	35	10	20	30	30	35	VALUES
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Dichlorodifluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Chloride	<5.0	64	15	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	2 STD
Chloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Bromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Chloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Trichlorofluoromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrolein	<25	<25	<25	<25	<25	<25	<25	<25	<25	5 STD
Acetone	<25	<25	<25	<25	17 J	9 J	11 J	17 J	<25	50 GV
1,1-Dichloroethylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Iodomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Carbon Disulfide	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
Methylene Chloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Acrylonitrile	<25	<25	<25	<25	<25	<25	<25	<25	<25	5 STD
Methyl-Tert-Butyl-Ether	<5.0	<5.0	<5.0	<5.0	<5.0	2 J	2 J	3 J	<5.0	10 GV
trans-1,2-Dichloroethylene	<5.0	4 J	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Vinyl Acetate	<25	<25	<25	<25	<25	<25	<25	<25	<25	--
2-Butanone-(MEK)	<25	<25	<25	<25	<25	<25	<25	<25	<25	50 GV
2,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
cis-1,2-Dichloroethylene	1 J	690	100	<5.0	6	43	140	140	2 J	5 STD
Chloroform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	7 STD
Bromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Carbon Tetrachloride	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Benzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD
1,2-Dichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.6 STD
Trichloroethylene	<5.0	120	15	<5.0	<5.0	9	<5.0	<5.0	<5.0	5 STD
1,2-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
4-Methyl-2-Pentanone (MIBK)	<25	<25	<25	<25	<25	<25	<25	<25	<25	--
2-Chloroethyl vinyl ether	<25	<25	<25	<25	<25	<25	<25	<25	<25	--
cis-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Toluene	<5.0	1 J	2 J	10	<5.0	1 J	1 J	2 J	<5.0	5 ST
trans-1,3-Dichloropropene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.4 STD ¹
Bromodichloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Dibromomethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2-Trichloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	1 STD

TABLE 9. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Brownfield Remedial Assessment
175 Roger Avenue
Inwood, New York

Sample ID.	MW-22	MW - 22	MW - 22	MW - 22	MW - 23	MW - 23	MW - 23	MW - 23/DUP (RD - 2)	MW - 23	NY STATE CLASS GA
Lab Sample Number	004	003	002	001	012	011	010	013	009	GROUNDWATER STANDARDS/GUIDANCE VALUES
Date Collected	6/9/2008	6/9/2008	6/9/2008	6/9/2008	6/11/2008	6/11/2008	6/11/2008	6/11/2008	6/11/2008	VIAUES
Sample Depth (ft) ^a	10	20	30	35	10	20	30	30	35	µg/L
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
1,2-Dibromoethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	--
2-Hexanone	<25	<25	<25	<25	<25	<25	<25	<25	<25	50 STD
1,3-Dichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Tetrachloroethylene	2 J	480	33	6	8	18	<5.0	2 J	2 J	5 STD
Dibromochloromethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Chlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,1,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Ethylbenzene	<5.0	1 J	<5.0	3 J	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
M&P-Xylene	<10	<10	<10	18	<10	<10	<10	<10	<10	5 STD
O-Xylene	<5.0	<5.0	<5.0	2 J	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Styrene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromoform	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	50 GV
Isopropylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,1,2,2-Tetrachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,3-Trichloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
n-Propylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
trans-1,4-Dichloro-2-butene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Bromobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
2-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3,5-Trimethylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1-Chlorotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
tert-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2,4-Trimethylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
sec-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1-Isopropyltoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,4-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
n-Butylbenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
1,2-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	3 STD
1,2-Dibromo-3-Chloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.04 STD
1,2,4-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD
Hexachlorobutadiene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	0.5 STD
Naphthalene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	10 GV
1,2,3-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5 STD

^a Sample depth is in feet below ground surface

(a) <5.0, Compound not detected above the Practical Quantitation Limit of 5.0 ug/Kg

STD: New York State Ambient Groundwater Quality Standard, NYCRR Title 6, Chapter X, Part 700-705

GV: New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 111

J: Applies to sum of cis- and trans-1,3 dichloropropene

J: Estimated value, Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

J: Analyte above NYS Groundwater Standard or Guidance Value

TABLE 9. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Brownfield Remedial Assessment
175 Roger Avenue
Inwood, New York

Sample ID, Lab Sample Number Date Collected Units	T.B. (Trip Blank) 009 6/10/2008 µg/L	Trip Blank 1 014 6/12/2008 µg/L	Trip Blank 2 015 6/12/2008 µg/L	µg/L	µg/L	µg/L	µg/L	NY STATE GHASS GA GROUNDWATER STANDARDS/GUIDANCE µg/L
Dichlorodifluoromethane	<5.0	<5.0	<5.0					5 STD
Vinyl Chloride	<5.0	<5.0	<5.0					2 STD
Chloromethane	<5.0	<5.0	<5.0					--
Bromomethane	<5.0	<5.0	<5.0					5 STD
Chloroethane	<5.0	<5.0	<5.0					5 STD
Trichlorofluoromethane	<5.0	<5.0	<5.0					5 STD
Acrolein	<25	<25	<25					5 STD
Acetone	50 B	38	47					50 GV
1,1-Dichloroethylene	<5.0	<5.0	<5.0					5 STD
Iodomethane	<5.0	<5.0	<5.0					--
Carbon Disulfide	<5.0	<5.0	<5.0					--
Methylene Chloride	<5.0	<5.0	<5.0					5 STD
Acrylonitrile	<25	<25	<25					5 STD
Methyl-Tert-Butyl-Ether	<5.0	<5.0	<5.0					10 GV
trans-1,2-Dichloroethylene	<5.0	<5.0	<5.0					5 STD
1,1-Dichloroethane	<5.0	<5.0	<5.0					5 STD
Vinyl Acetate	<25	<25	<25					--
2-Butanone-(MEK)	<25	<25	<25					50 GV
2,2-Dichloropropane	<5.0	<5.0	<5.0					5 STD
cis-1,2-Dichloroethylene	<5.0	<5.0	<5.0					5 STD
Chloroform	<5.0	<5.0	<5.0					7 STD
Bromochloromethane	<5.0	<5.0	<5.0					5 STD
1,1,1-Trichloroethane	<5.0	<5.0	<5.0					5 STD
1,1-Dichloropropene	<5.0	<5.0	<5.0					5 STD
Carbon Tetrachloride	<5.0	<5.0	<5.0					5 STD
Benzene	<5.0	<5.0	<5.0					1 STD
1,2-Dichloroethane	<5.0	<5.0	<5.0					0.6 STD
Trichloromethylene	<5.0	<5.0	<5.0					5 STD
1,2-Dichloropropane	<5.0	<5.0	<5.0					5 STD
4-Methyl-2-Pentanone (MIBK)	<25	<25	<25					--
2-Chloroethyl vinyl ether	<25	<25	<25					--
cis-1,3-Dichloropropene	<5.0	<5.0	<5.0					0.4 STD ¹
Toluene	<5.0	<5.0	<5.0					5 ST
trans-1,3-Dichloropropene	<5.0	<5.0	<5.0					0.4 STD ¹
Bromodichloromethane	<5.0	<5.0	<5.0					50 GV
Dibromomethane	<5.0	<5.0	<5.0					5 STD
1,1,2-Trichloroethane	<5.0	<5.0	<5.0					1 STD

TABLE 9. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - VOLATILE ORGANIC COMPOUNDS (VOCs)

Brownfield Remedial Assessment
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Date Collected Units	T.B. (Trip Blank) 009 6/10/2008 µg/L	Trip Blank 1 014 6/12/2008 µg/L	Trip Blank 2 015 6/12/2008 µg/L	µg/L	µg/L	µg/L	µg/L	NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE µg/L
1,2-Dibromoethane	<5.0	<5.0	<5.0					-
2-Hexanone	<25	<25	<25					50 STD
1,3-Dichloropropane	<5.0	<5.0	<5.0					5 STD
Tetrachloroethylene	<5.0	<5.0	<5.0					5 STD
Dibromochloromethane	<5.0	<5.0	<5.0					50 GV
Chlorobenzene	<5.0	<5.0	<5.0					5 STD
1,1,1,2-Tetrachloroethane	<5.0	<5.0	<5.0					5 STD
Ethylbenzene	<5.0	<5.0	<5.0					5 STD
M&P-Xylene	<10	<10	<10					5 STD
O-Xylene	<5.0	<5.0	<5.0					5 STD
Styrene	<5.0	<5.0	<5.0					5 STD
Bromoform	<5.0	<5.0	<5.0					50 GV
Isopropylbenzene	<5.0	<5.0	<5.0					5 STD
1,1,2,2-Tetrachloroethane	<5.0	<5.0	<5.0					5 STD
1,2,3-Trichloropropane	<5.0	<5.0	<5.0					0.04 STD
n-Propylbenzene	<5.0	<5.0	<5.0					5 STD
trans-1,4-Dichloro-2-butene	<5.0	<5.0	<5.0					5 STD
Bromobenzene	<5.0	<5.0	<5.0					5 STD
2-Chlorotoluene	<5.0	<5.0	<5.0					5 STD
1,3,5-Trimethylbenzene	<5.0	<5.0	<5.0					5 STD
4-Chlorotoluene	<5.0	<5.0	<5.0					5 STD
tert-Butylbenzene	<5.0	<5.0	<5.0					5 STD
1,2,4-Trimethylbenzene	<5.0	<5.0	<5.0					5 STD
sec-Butylbenzene	<5.0	<5.0	<5.0					5 STD
4-Isopropyltoluene	<5.0	<5.0	<5.0					5 STD
1,3-Dichlorobenzene	<5.0	<5.0	<5.0					5 STD
1,4-Dichlorobenzene	<5.0	<5.0	<5.0					5 STD
n-Butylbenzene	<5.0	<5.0	<5.0					5 STD
1,2-Dichlorobenzene	<5.0	<5.0	<5.0					3 STD
1,2-Dibromo-3-Chloropropane	<5.0	<5.0	<5.0					0.04 STD
1,2,4-Trichlorobenzene	<5.0	<5.0	<5.0					5 STD
Hexachlorobutadiene	<5.0	<5.0	<5.0					0.5 STD
Naphthalene	<5.0	<5.0	<5.0					10 GV
1,2,3-Trichlorobenzene	<5.0	<5.0	<5.0					5 STD

*-Sample depth is in feet below ground surface

(a) <5.0: Compound not detected above the Practical Quantitation Limit of 5.0 ug/Kg

STD New York State Ambient Groundwater Quality Standard; NYCRR Title 6, Chapter X, Part 700-705

GV New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 1.1.1

I: Applies to sum of cis- and trans-1,3 dichloropropene

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

B: Analyte was detected in the associated Method Blank

Analyte above NYS Groundwater Standard or Guidance Value

TABLE 10. MONITORING WELLS - SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs) MEASURED IN GROUNDWATER, JUNE 2008

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID.	MW - 1	MW - 2	MW - 3	MW - 4	MW - 5	MW - 6	MW - 6 (DUP (FD - 2)	MW - 7	MW - 8	MW - 9	NY STATE CLASS GA
Lab Sample Number Date Collected Units	017 6/18/2008 µg/L	011 6/19/2008 µg/L	027 6/19/2008 µg/L	021 6/19/2008 µg/L	019 6/18/2008 µg/L	023 6/19/2008 µg/L	029 6/19/2008 µg/L	009 6/19/2008 µg/L	005 6/19/2008 µg/L	003 6/19/2008 µg/L	GROUNDWATER STANDARDS/GUIDANCE µg/L
N-Nitrosodimethylamine	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	---
Aniline	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 STD
bis(2-Chloroethyl)ether	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	1.0 STD
Phenol	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	1 STD*
2-Chlorophenol	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	50 GV
1,3-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	3 STD
1,4-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	3 STD
1,2-Dichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	3 STD
2,2'-oxybis(1-Chloropropane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 STD
Benzyl Alcohol	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	---
2-Methyl Phenol	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	1 STD*
Hexachloroethane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 STD
N-Nitroso-di-n-propylamine	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	---
3&4-Methyl Phenol	<10	23	<10	<10	<10	<10	<10	NS	<10	<10	1 STD*
Nitrobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 GV
Isophorone	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	50 STD
2-Nitrophenol	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 GV
2,4-Dimethylphenol	<5.0	43	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	50 GV
bis(2-Chloroethoxy)methane	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 STD
2,4-Dichlorophenol	<5.0	<5.0	<5.0	7	<5.0	<5.0	<5.0	NS	<5.0	<5.0	1 GV
1,2,4-Trichlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 STD
Benzoic Acid	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	---
Naphthalene	<5.0	29	13	<5.0	<5.0	15	15	NS	<5.0	<5.0	10 GV
4-Chloroaniline	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 STD
Hexachlorobutadiene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	0.5 STD
4-Chloro-3-methylphenol	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 GV
2-Methylnaphthalene	<5.0	1 J	<5.0	<5.0	<5.0	5 J	5 J	NS	<5.0	<5.0	50 GV
Hexachlorocyclopentadiene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 STD
2,4,6-Trichlorophenol	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 STD
2,4,5-Trichlorophenol	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 STD
2-Chloronaphthalene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	10 GV
2-Nitroaniline	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 STD
Acenaphthylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	20 GV
Dimethyl Phthalate	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	50 GV
2,6-Dinitrotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 STD
Acenaphthene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	20 GV
3-Nitroaniline	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 STD

TABLE 10. MONITORING WELLS - SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs) MEASURED IN GROUNDWATER, JUNE 2008

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID.	MW -1	MW -2	MW -3	MW -4	MW -5	MW -6	MW -6 DUE (FD - 2)	MW -7	MW -8	MW -9	NY STATE CLASS GA
Lab Sample Number	017	011	027	021	019	023	029	009	005	003	GROUNDWATER
Date Collected	6/18/2008	6/19/2008	6/19/2008	6/19/2008	6/18/2008	6/19/2008	6/19/2008	6/19/2008	6/19/2008	6/19/2008	STANDARDS/GUIDANCE
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
2,4-Dinitrophenol	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 GV
Dibenzofuran	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	---
2,4-Dinitrotoluene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 STD
4-Nitrophenol	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 GV
Fluorene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	50 GV
4-Chlorophenyl Phenyl Ether	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	---
Diethyl Phthalate	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	50 GV
4-Nitroaniline	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 STD
2-Methyl-4,6-dinitrophenol	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	1 STD*
N-Nitrosodiphenylamine	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	50 GV
4-Bromophenyl Phenyl Ether	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	---
Hexachlorobenzene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	0.35 GV
Pentachlorophenol	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	1 STD*
Phenanthrene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	50 GV
Anthracene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	50 GV
Carbazole	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	---
Di-n-butylphthalate	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	50 STD
Fluoranthene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	50 GV
Benzidine	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 STD
Pyrene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	50 GV
Butyl Benzyl Phthalate	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	50 GV
3,3'-Dichlorobenzidine	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 STD
Benzo(a)anthracene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	0.002 GV
Chrysene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	0.002 GV
bis(2-Ethylhexyl)phthalate	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	50 GV
Di-n-octyl phthalate	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	50 GV
Indeno (1,2,3-cd)pyrene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	0.002 GV
Benzo(h)fluoranthene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	0.002 GV
Benzo(k)fluoranthene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	0.002 GV
Benzo(a)pyrene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	0.002(ND) STD
Dibenzo(a,h)Anthracene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	50 GV
Benzo (g,h,i) perylene	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	NS	<5.0	<5.0	5 STD

*- Total Phenols

(a) <5.0: Compound not detected above the Practical Quantitation Limit of 5.0 ug/Kg

STD New York State Ambient Groundwater Quality Standard; NYCRR Title 6, Chapter X, Part 700-705

GV New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 1.1.1

f Estimated value Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

Analyte above NYS Groundwater Standard or Guidance Value

NS Not Sampled

TABLE 10. MONITORING WELLS - SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs) MEASURED IN GROUNDWATER, JUNE 2008

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID,	MW - 10R	MW - 12R	MW - 13	MW - 14	MW - 15	MW - 16	MW - 17	MW - 18	MW - 19	MW - 19.DUP (RD-1)	NY STATE CLASS GA
Lab Sample Number	001	019	017	007	013	015	003	005	007	021	GROUNDWATER
Date Collected	6/19/2008	6/19/2008	6/19/2008	6/19/2008	6/19/2008	6/19/2008	6/18/2008	6/18/2008	6/18/2008	6/18/2008	STANDARDS/GUIDANCE
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
N-Nitrosodimethylamine	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	---
Aniline	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 STD
bis(2-Chloroethyl)ether	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	10 STD
Phenol	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	1 STD*
2-Chlorophenol	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	50 GV
1,3-Dichlorobenzene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	3 STD
1,4-Dichlorobenzene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	3 STD
1,2-Dichlorobenzene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	3 STD
2,2'-oxybis(1-Chloropropane)	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 STD
Benzyl Alcohol	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	---
2-Methyl Phenol	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	1 STD*
Hexachloroethane	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 STD
N-Nitroso-di-n-propylamine	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	---
3&4-Methyl Phenol	<10	<10	NS	<10	<10	NS	<10	NS	<10	<10	1 STD*
Nitrobenzene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 GV
Isophorone	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	50 STD
2-Nitrophenol	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 GV
2,4-Dimethylphenol	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	50 GV
bis(2-Chloroethoxy)methane	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 STD
2,4-Dichlorophenol	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	1 GV
1,2,4-Trichlorobenzene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 STD
Benzoic Acid	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	---
Naphthalene	<5.0	<5.0	NS	<5.0	ND	NS	<5.0	NS	ND	ND	10 GV
4-Chloroaniline	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 STD
Hexachlorobutadiene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	0.5 STD
4-Chloro-3-methylphenol	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 GV
2-Methylnaphthalene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	ND	ND	50 GV
Hexachlorocyclopentadiene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 STD
2,4,6-Trichlorophenol	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 STD
2,4,5-Trichlorophenol	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 STD
2-Chloronaphthalene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	10 GV
2-Nitroaniline	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 STD
Acenaphthylene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	20 GV
Dimethyl Phthalate	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	50 GV
2,6-Dinitrotoluene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 STD
Acenaphthene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	20 GV
3-Nitroaniline	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 STD

TABLE 10. MONITORING WELLS - SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs) MEASURED IN GROUNDWATER, JUNE 2008

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID.	MW - 10R	MW - 12R	MW - 13	MW - 14	MW - 15	MW - 16	MW - 17	MW - 18	MW - 19	MW - 19 DUP (FD - 1)	NY STATE CLASS GA
Lab Sample Number	001	019	017	007	013	015	003	005	007	021	GROUNDWATER STANDARDS/GUIDANCE
Date Collected	6/19/2008	6/19/2008	6/19/2008	6/19/2008	6/19/2008	6/19/2008	6/18/2008	6/18/2008	6/18/2008	6/18/2008	
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	
2,4-Dinitrophenol	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 GV
Dibenzofuran	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	---
2,4-Dinitrotoluene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 STD
4-Nitrophenol	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 GV
Fluorene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	50 GV
4-Chlorophenyl Phenyl Ether	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	---
Diethyl Phthalate	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	50 GV
4-Nitroaniline	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 STD
2-Methyl-4,6-dinitrophenol	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	1 STD*
N-Nitrosodiphenylamine	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	50 GV
4-Bromophenyl Phenyl Ether	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	---
Hexachlorobenzene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	0.35 GV
Pentachlorophenol	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	1 STD*
Phenanthrene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	50 GV
Anthracene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	50 GV
Carbazole	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	---
Di-n-butyl phthalate	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	2 J	2 J	50 STD
Fluoranthene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	50 GV
Benzo(d)pyrene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 STD
Pyrene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	50 GV
Butyl Benzyl Phthalate	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	50 GV
3,3'-Dichlorobenzidine	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 STD
Benzo(a)anthracene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	0.002 GV
Chrysene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	0.002 GV
bis(2-Ethylhexyl)phthalate	1 J	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	1 J	50 GV
Di-n-octyl phthalate	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	50 GV
Indeno (1,2,3-cd)pyrene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	0.002 GV
Benzo(b)fluoranthene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	0.002 GV
Benzo(k)fluoranthene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	0.002 GV
Benzo(a)pyrene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	0.002(ND) STD
Dibenzo(a,h)Anthracene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	50 GV
Benzo (g,h,i) perylene	<5.0	<5.0	NS	<5.0	<5.0	NS	<5.0	NS	<5.0	<5.0	5 STD

* - Total Phenols

(a) <5.0: Compound not detected above the Practical Quantitation Limit of 5.0 µg/Kg

STD: New York State Ambient Groundwater Quality Standard, NYCRR Title 6, Chapter X, Part 700-705

GV: New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS I I I

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

B: Analyte was detected in the associated Method Blank

█ Analyte above NYS Groundwater Standard or Guidance Value

NS: Not Sampled

TABLE 10. MONITORING WELLS - SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs) MEASURED IN GROUNDWATER, JUNE 2008

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Date Collected Units	MW -19D 009 6/18/2008 µg/L	MW -20 011 6/18/2008 µg/L	MW -21 013 6/18/2008 µg/L	MW -22 001 6/18/2008 µg/L	MW -23 015 6/18/2008 µg/L	MW-24D 025 6/19/2008 µg/L				NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE µg/L
N-Nitrosodimethylamine	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Aniline	<5.0	NS	<5.0	<5.0	<5.0	<5.0				2 STD
bis(2-Chloroethyl)ether	<5.0	NS	<5.0	<5.0	<5.0	<5.0				--
Phenol	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
2-Chlorophenol	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
1,3-Dichlorobenzene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
1,4-Dichlorobenzene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
1,2-Dichlorobenzene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				50 GV
2,2'-oxybis(1-Chloropropane	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Benzyl Alcohol	<5.0	NS	<5.0	<5.0	<5.0	<5.0				--
2-Methyl Phenol	<5.0	NS	<5.0	<5.0	<5.0	<5.0				--
Hexachloroethane	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
N-Nitroso-di-n-propylamine	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
3&4-Methyl Phenol	<10	NS	<10	<10	<10	<10				10 GV
Nitrobenzene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Isophorone	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
2-Nitrophenol	<5.0	NS	<5.0	<5.0	<5.0	<5.0				--
2,4-Dimethylphenol	<5.0	NS	<5.0	<5.0	<5.0	<5.0				50 GV
bis(2-Chloroethoxy)methane	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
2,4-Dichlorophenol	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
1,2,4-Trichlorobenzene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				7 STD
Benzoic Acid	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Naphthalene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
4-Chloroaniline	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Hexachlorobutadiene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
4-Chloro-3-methylphenol	<5.0	NS	<5.0	<5.0	<5.0	<5.0				1 STD
2-Methylnaphthalene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				0.6 STD
Hexachlorocyclopentadiene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
2,4,6-Trichlorophenol	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
2,4,5-Trichlorophenol	<5.0	NS	<5.0	<5.0	<5.0	<5.0				--
2-Chloronaphthalene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				--
2-Nitroaniline	<5.0	NS	<5.0	<5.0	<5.0	<5.0				0.4 STD *
Acenaphthylene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 ST
Dimethyl Phthalate	<5.0	NS	<5.0	<5.0	<5.0	<5.0				0.4 STD *
2,6-Dinitrotoluene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				50 GV
Acenaphthene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
3-Nitroaniline	<5.0	NS	<5.0	<5.0	<5.0	<5.0				1 STD

TABLE 10. MONITORING WELLS - SEMIVOLATILE ORGANIC COMPOUNDS (SVOCs) MEASURED IN GROUNDWATER, JUNE 2008

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID, Lab Sample Number Date Collected Units	MW-19D 009 6/18/2008 µg/L	MW-20 011 6/18/2008 µg/L	MW-21 013 6/18/2008 µg/L	MW-22 001 6/18/2008 µg/L	MW-23 015 6/18/2008 µg/L	MW-24D 025 6/19/2008 µg/L				NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE µg/L
2,4-Dinitrophenol	<5.0	NS	<5.0	<5.0	<5.0	<5.0				-
Dibenzofuran	<5.0	NS	<5.0	<5.0	<5.0	<5.0				50 STD
2,4-Dinitrotoluene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
4-Nitrophenol	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Fluorene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				50 GV
4-Chlorophenyl Phenyl Ether	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Diethyl Phthalate	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
4-Nitroaniline	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
2-Methyl-4,6-dinitrophenol	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
N-Nitrosodiphenylamine	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
4-Bromophenyl Phenyl Ether	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Hexachlorobenzene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				50 GV
Pentachlorophenol	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Phenanthrene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Anthracene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				0.04 STD
Carbazole	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Di-n-butylphthalate	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Fluoranthene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Benzidine	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Pyrene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Butyl Benzyl Phthalate	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
3,3'-Dichlorobenzidine	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Benzo(a)anthracene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Chrysene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
bis(2-Ethylhexyl)phthalate	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Di-n-octyl phthalate	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Indeno (1,2,3-cd)Pyrene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Benzo(b)fluoranthene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Benzo(k)fluoranthene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				3 STD
Benzo(a)pyrene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				0.04 STD
Dibenzo(a,h)Anthracene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				5 STD
Benzo (g,h,i) perylene	<5.0	NS	<5.0	<5.0	<5.0	<5.0				0.5 STD

* - Total Phenols

(a) <5.0: Compound not detected above the Practical Quantitation Limit of 5.0 ug/Kg

STD: New York State Ambient Groundwater Quality Standard, NYCRR Title 6, Chapter X, Part 700-705

GV: New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 1.1.1

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

NY State Standard Analyte above NYS Groundwater Standard or Guidance Value

NS: Not Sampled

TABLE 11. MONITORING WELLS - PRIORITY POLLUTANT METALS MEASURED IN GROUNDWATER, JUNE 2008

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID.	MW - 1	MW - 2	MW - 3	MW - 4	MW - 5	MW - 6	MW - 6 DUP (RD - 2)	MW - 7	MW - 8	MW - 9	NY STATE CLASS GA GROUNDWATER STANDARDS/GUIDANCE mg/L
Lab Sample Number	017/018	011/012	027/028	021/022	019/020	023/024	029/030	009/010	005/006	003/004	
Date Collected	6/18/2008	6/19/2008	6/19/2008	6/19/2008	6/18/2008	6/19/2008	6/19/2008	6/19/2008	6/19/2008	6/19/2008	
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	
Priority Pollutant Metals - Total											
Arsenic	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.025 STD
Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003 STD
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003 GV
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005 STD
Chromium	0.00645	ND	ND	ND	0.00932	ND	ND	ND	ND	0.0173	0.05 STD
Copper	ND	0.00640	ND	ND	0.00921	ND	ND	ND	ND	0.00784	0.2 STD
Lead	ND	0.0226	0.0193	ND	ND	ND	ND	ND	ND	0.0200	0.025 STD
Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0007 STD
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 STD
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05 STD
Selenium	ND	ND	ND	ND	ND	ND	0.0202	ND	ND	ND	0.01 STD
Thallium	ND	ND	0.0284	ND	ND	0.0341	0.0361	ND	ND	ND	0.0005 GV
Zinc	ND	0.0543	ND	ND	ND	ND	ND	ND	ND	0.0569	2 GV
Priority Pollutant Metals - Dissolved											
Arsenic	0.0115	0.0186	0.0226	ND	0.0111	0.0282	0.0300	ND	0.0130	ND	0.025 STD
Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003 STD
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003 GV
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005 STD
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05 STD
Copper	ND	ND	ND	ND	0.00575	ND	ND	ND	0.0197	0.0251	0.2 STD
Lead	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.025 STD
Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0007 STD
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 STD
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05 STD
Selenium	ND	ND	ND	ND	ND	0.0208	0.0225	ND	ND	ND	0.01 STD
Thallium	ND	0.0299	0.0270	ND	ND	0.0328	0.0384	ND	ND	ND	0.0005 GV
Zinc	ND	0.0776	0.0545	0.0524	ND	0.0602	0.0622	0.0569	0.0765	0.0626	2 GV

ND Compound not detected above the Practical Quantitation Limit

STD New York State Ambient Groundwater Quality Standard, NYCRR Title 6, Chapter X, Part 700-705

GV New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 111

J Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

Analyte above NYS Ground Water Standard or Guidance Value

TABLE 11. MONITORING WELLS - PRIORITY POLLUTANT METALS MEASURED IN GROUNDWATER, JUNE 2008

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID.	MW - 10R	MW - 12R	MW - 13	MW - 14	MW - 15	MW - 16	MW - 17	MW - 18	MW - 19	MW - 19 DUP (ED - 1)	NY STATE CLASS GA
Lab Sample Number	001/002	019/020	017/018	007/008	013/014	015/016	003/004	005/006	007	021	GROUNDWATER STANDARDS/GUIDANCE
Date Collected	6/19/2008	6/19/2008	6/19/2008	6/19/2008	6/19/2008	6/19/2008	6/18/2008	6/18/2008	6/18/2008	6/18/2008	
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Priority Pollutant Metals - Total											
Arsenic	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.025 STD
Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003 STD
Beryllium	ND	ND	ND	ND	ND	0.00264	ND	ND	ND	ND	0.003 GV
Cadmium	ND	ND	ND	ND	ND	0.00212	ND	ND	ND	ND	0.005 STD
Chromium	ND	ND	0.0127	ND	ND	0.0391	0.00948 M	0.00620	0.0144 M	0.0148	0.05 STD
Copper	ND	ND	0.00721	ND	0.0103	0.0301	0.00593 L	0.00818	0.0148 L	0.0120	0.2 STD
Lead	ND	ND	0.0142	ND	0.0424	0.0690	ND	ND	0.0168	0.0186	0.025 STD
Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0007 STD
Nickel	ND	ND	ND	ND	ND	0.0429	ND	ND	ND	ND	0.1 STD
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05 STD
Selenium	ND	ND	ND	ND	ND	0.0213	ND	ND	ND	ND	0.01 STD
Thallium	ND	0.0214	ND	0.0275	0.0405	0.0524	ND	ND	ND	ND	0.0005 GV
Zinc	ND	ND	ND	ND	0.0738	0.142	ND	ND	ND	ND	2 GV
Priority Pollutant Metals - Dissolved											
Arsenic	ND	ND	ND	0.0163	0.0158	0.0227	ND	ND	0.0270	0.0190	0.025 STD
Antimony	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003 STD
Beryllium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003 GV
Cadmium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.005 STD
Chromium	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05 STD
Copper	ND	ND	ND	ND	ND	0.0225	ND	ND	ND	ND	0.2 STD
Lead	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.025 STD
Mercury	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0007 STD
Nickel	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1 STD
Silver	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05 STD
Selenium	ND	ND	ND	ND	0.0242	0.0280	ND	ND	ND	ND	0.01 STD
Thallium	ND	0.0256	ND	0.0304	0.0467	0.0550	ND	ND	0.0228	0.0209	0.0005 GV
Zinc	ND	ND	0.0712	0.0564	0.0578	0.130	ND	0.0617	0.0605	0.0588	2 GV

ND: Compound not detected above the Practical Quantitation Limit

STD: New York State Ambient Groundwater Quality Standard; NYCRR Title 6, Chapter X, Part 700-705

GV: New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOQS 111

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

M: Matrix Spike Recovery was Outside the Method Control Limits

L: Laboratory Control Sample Recovery was Above Method Control Limits

Analyte above NYS Ground Water Standard or Guidance Value

TABLE 11. MONITORING WELLS - PRIORITY POLLUTANT METALS MEASURED IN GROUNDWATER, JUNE 2008

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID. Lab Sample Number Date Collected Units	MW-19D 009/010 6/18/2008 mg/L	MW-20 011/012 6/18/2008 mg/L	MW-21 013/014 6/18/2008 mg/L	MW-22 001/002 6/18/2008 mg/L	MW-23 015/016 6/18/2008 mg/L	MW-24D 025/026 6/19/2008 mg/L	NY STATE GLASS GA GROUNDWATER STANDARDS/GUIDANCE mg/L
Priority Pollutant Metals - Total							
Arsenic	ND	ND	ND	ND	ND	ND	0.025 STD
Antimony	ND	ND	ND	ND	ND	ND	0.003 STD
Beryllium	ND	ND	ND	ND	ND	ND	0.003 GV
Cadmium	ND	ND	ND	ND	ND	ND	0.005 STD
Chromium	ND	ND	0.0102	0.0121 M	ND	ND	0.05 STD
Copper	ND	0.00659 L	0.00556	0.00859 L	ND	ND	0.2 STD
Lead	ND	ND	0.0135	ND	ND	0.0105	0.025 STD
Mercury	ND	ND	ND	ND	ND	ND	0.0007 STD
Nickel	ND	ND	0.0492	ND	ND	ND	0.1 STD
Silver	ND	ND	ND	ND	ND	ND	0.05 STD
Selenium	ND	ND	ND	ND	ND	ND	0.01 STD
Thallium	ND	ND	0.0279	ND	0.0311	ND	0.0005 GV
Zinc	ND	ND	0.0773	ND	ND	ND	2 GV
Priority Pollutant Metals - Dissolved							
Arsenic	0.0146	0.0121	0.0204	0.0179	0.0142	0.0123	0.025 STD
Antimony	ND	ND	ND	ND	ND	ND	0.003 STD
Beryllium	ND	ND	ND	ND	ND	ND	0.003 GV
Cadmium	ND	ND	ND	ND	ND	ND	0.005 STD
Chromium	ND	ND	ND	ND	ND	ND	0.05 STD
Copper	ND	ND	0.00802	ND	ND	ND	0.2 STD
Lead	ND	ND	ND	ND	ND	ND	0.025 STD
Mercury	ND	ND	ND	ND	ND	ND	0.0007 STD
Nickel	ND	ND	ND	ND	ND	ND	0.1 STD
Silver	ND	ND	ND	ND	ND	ND	0.05 STD
Selenium	ND	ND	ND	ND	ND	ND	0.01 STD
Thallium	0.0200	0.0219	0.0311	0.0291	0.0316	0.0229	0.0005 GV
Zinc	0.0560	0.0624	0.0824	0.0683	0.0754	ND	2 GV

ND: Compound not detected above the Practical Quantitation Limit

STD: New York State Ambient Groundwater Quality Standard, NYCRR Title 6, Chapter X, Part 700-705

GV: New York State Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations, TOGS 1.1.1

J: Estimated value. Analyte detected at a level less than the Practical Quantitation Limit (PQL) and greater than or equal to the Method Detection Limit (MDL)

M: Matrix Spike Recovery was Outside the Method Control Limits

L: Laboratory Control Sample Recovery was Above Method Control Limits

Analyte above NYS Ground Water Standard or Guidance Value

TABLE 12. HORIZONTAL GROUNDWATER DELINEATION ASSESSMENT, JULY 2007 - FIELD AND NATURAL ATTENUATION PARAMETERS

**Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York**

Sample ID. Lab Sample Number Sample Depth (ft)* Date Collected	Units	BW - 01 001 8.5 - 12 7/26/2007	BS - 1 (BW - 01 DUP) 008 8.5 - 12 7/26/2007	BW - 02 002 12.5 - 16 7/26/2007	BW - 03 003 12.5 - 16 7/26/2007	BW - 04 004 12.5 - 16 7/26/2007	BW - 05 005 12.5 - 16 7/26/2007	BW - 06 006 12.5 - 16 7/26/2007
Total Dissolved Solids	mg/L	180	390	200	350	370	160	350
Nitrogen, Nitrate	mg/L	0.075	4.1	0.073	0.13	0.14	0.063	0.13
Sulfate	mg/L	30	43	31	26	29	27	26
Alkalinity	mg/L	90	120	180	160	130	63	130
Iron, Dissolved	mg/L	1.2	ND	1.2	0.34	0.31	1.0	0.12
Manganese, Dissolved	mg/L	0.26	1.29	0.34	1.1	0.35	0.25	1.1
Total Organic Carbon	mg/L	12	6.0	14	93	10	10	8.6
Methane	ug/L	4.9	<2.2	<2.2	<2.2	<2.2	<2.2	<2.2
Dissolved Oxygen	mg/L	5.07		6.15	1.32	1.77	2.35	6.19
pH	SU	6.88		6.9	5.72	6.42	6.67	6.5
Temperature	°C	24.2		26.8	20.3	20.4	19.2	23.7
Oxidation-Reduction Potential (ORP)	mV	-79		-3	34	-48	-143	-117
Specific Conductivity	S/m	0.99		0.86	0.99	0.9	0.34	0.9
Salinity	Percent	0.6		0	0.2	0.1	0	0

*-Sample depth is in feet below ground surface

TABLE 13. HORIZONTAL GROUNDWATER DELINEATION ASSESSMENT, AUGUST 2007 - FIELD AND NATURAL ATTENUATION PARAMETERS

Brownfield Remedial Investigation
 175 Roger Avenue
 Inwood, New York

Sample ID: Lab Sample Number Date Collected	Units	MW - 01 001 8/7/2007	MW - 02 001 8/14/2007	MW - 03 001 8/6/2007	MW - 04 002 8/14/2007	MW - 05 004 8/7/2007	MW - 5 DUP 005 8/7/2007	MW - 06 002 8/6/2007
Total Dissolved Solids	mg/L	290	310	350	130	510	500	470
Nitrogen, Nitrate	mg/L	0.50	0.24	<0.050	2.4	4.0	4.1	<0.050
Sulfate	mg/L	26	15	<3.0	19	35	35	24
Alkalinity	mg/L	120	120	270	59	57	55	300
Iron, Dissolved	mg/L	0.65	15	11	0.43	<0.10	<0.10	19
Manganese, Dissolved	mg/L	0.64	0.50	0.58	0.0088	0.012	0.012	0.9
Total Organic Carbon	mg/L	5.6	23	25	1.7	4.9	4.9	43
Methane	ug/L	23	<2.2	580	<2.2	<2.2	<2.2	660
Dissolved Oxygen	mg/L	0.40	1.09	0.38	1.33	5.17		0.42
pH	SU	6.57	6.18	6.53	5.77	6.14		6.36
Temperature	oC	21.40	21.00	19.70	22.50	20.80		23.30
Oxidation-Reduction Potential (ORP)	mV	-79.00	-123.00	-185.00	14.00	133.00		-170.00
Specific Conductivity	S/m	0.64	0.69	0.74	0.26	0.80		0.97
Salinity	Percent	0.00	0.00	0.00	0.00	0.00		0.00

*-Sample depth is in feet below ground surface

TABLE 13. HORIZONTAL GROUNDWATER DELINEATION ASSESSMENT, AUGUST 2007 - FIELD AND NATURAL ATTENUATION PARAMETERS

**Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York**

Sample ID. Lab Sample Number Date Collected	Units	MW - 07 003 8/14/2007	MW - 08 001 8/7/2007	MW - 09 002 8/7/2007	MW - 13 004 8/6/2007	MW - 14 005 8/6/2007	MW - 15 005 8/14/2007	MW - 16 003 8/6/2007
Total Dissolved Solids	mg/L	190	160	140	220	240	490	570.00
Nitrogen, Nitrate	mg/L	2.2	1.5	0.060	1.0	0.88	0.20	7.70
Sulfate	mg/L	38	17	15	84	120	130	240.00
Alkalinity	mg/L	88	86	110	74	63	150	150.00
Iron, Dissolved	mg/L	1.6	0.27	<0.10	<0.10	<0.10	1.4	ND
Manganese, Dissolved	mg/L	<0.0070	0.0087	0.14	0.17	0.9	0.42	0.15
Total Organic Carbon	mg/L	2.2	7.9	7.1	3.6	3.2	5.3	7.40
Methane	ug/L	<2.2	<2.2	11	<2.2	<2.2	1,500	3.30
Dissolved Oxygen	mg/L	6.24	4.08	0.84	0.39	0.30	0.76	0.35
pH	SU	7.01	6.60	6.95	6.32	6.21	6.52	6.21
Temperature	oC	22.00	22.20	22.50	23.00	21.40	19.80	21.00
Oxidation-Reduction Potential (ORP)	mV	23.00	103.00	72.00	76.00	100.00	-136.00	60.00
Specific Conductivity	S/m	0.43	0.32	0.29	0.45	0.52	0.93	0.98
Salinity	Percent	0.00	0.00	0.00	0.00	0.00	0.00	0.00

*-Sample depth is in feet below ground surface

TABLE 14. DW-01 DW-02 VERTICAL GROUNDWATER DELINEATION ASSESSMENT, AUGUST 2007 - FIELD AND NATURAL ATTENUATION PARAMETERS

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID, Lab Sample Number Date Collected Sample Depth (ft)*	Units	DW - 01 001 8/1/2007 33.25-36.75	DW - 01 DUP 003 8/1/2007 33.25-36.75	DW - 01 002 8/1/2007 28.25-31.75	DW - 01 004 8/1/2007 18.25-21.75	DW - 01 005 8/1/2007 10.25-13.75
Total Dissolved Solids	mg/L	280	280	250.00	320	240.00
Nitrogen, Nitrate	mg/L	<0.050	<0.050		<0.050	
Sulfate	mg/L	53	56		20	
Alkalinity	mg/L	130	80		260	
Iron, Dissolved	mg/L	<0.10	<0.10		2.7	
Manganese, Dissolved	mg/L	0.35	0.34		1.9	
Total Organic Carbon	mg/L	10	6.2		13	
Methane	ug/L	5.3	20		210	
Dissolved Oxygen	mg/L	0.47		0.44	0.75	0.00
pH	SU	6.60		5.02	5.90	6.54
Temperature	oC	17.10		16.60	17.40	18.70
Oxidation-Reduction Potential (ORP)	mV	-159.00		43.00	-25.00	-176.00
Specific Conductivity	S/m	0.52		0.45	0.60	0.50

*-Sample depth is in feet below ground surface

Sample ID, Lab Sample Number Date Collected Sample Depth (ft)*	Units	DW - 02 006 8/1/2007 33.25-36.75	DW - 02 007 8/1/2007 28.25-31.75	DW - 02 008 8/1/2007 18.25-21.75	DW - 02 009 8/1/2007 10.25-13.75
Total Dissolved Solids	mg/L	220	190.00	150	140.00
Nitrogen, Nitrate	mg/L	<0.050		1.4	
Sulfate	mg/L	50		28	
Alkalinity	mg/L	40		<20	
Iron, Dissolved	mg/L	7.7		2.6	
Manganese, Dissolved	mg/L	0.33		0.84	
Total Organic Carbon	mg/L	3.0		3.1	
Methane	ug/L	<2.2		12	
Dissolved Oxygen	mg/L	0.23	1.74	2.28	7.76
pH	SU	6.31	5.89	5.34	6.67
Temperature	oC	22.10	18.10	19.90	23.40
Oxidation-Reduction Potential (ORP)	mV	-110.00	118.00	58.00	-83.00
Specific Conductivity	S/m	0.45	0.37	0.29	0.26

*-Sample depth is in feet below ground surface

TABLE 15. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - FIELD AND NATURAL ATTENUATION PARAMETERS

Brownfield Remedial Investigation
 175 Roger Avenue
 Inwood, New York

Sample ID, Lab Sample Number Date Collected Sample Depth (ft)*	Units	BD-4 001 6/5/2008 35'	BD-4 002 6/5/2008 30'	BD-4 003 6/5/2008 20'	BD-4 004 6/5/2008 10'
Total Dissolved Solids	mg/L	NS	260	NS	420
Nitrogen, Nitrate	mg/L	NS	<0.05	NS	0.26
Sulfate	mg/L	NS	44	NS	76
Alkalinity	mg/L	NS	<20	NS	<20
Iron, Dissolved	mg/L	NS	8.37	NS	<0.100
Manganese, Dissolved	mg/L	NS	0.263	NS	1.760
Total Organic Carbon	mg/L	NS	2.2	NS	6.6
Methane	ug/L	NS	1500	NS	560
Dissolved Oxygen	mg/L	0.27	1.80	2.54	8.36
pH	SU	6.96	5.89	6.76	7.86
Temperature	oC	16.70	15.60	14.70	17.80
Oxidation-Reduction Potential (ORP)	mV	-68.00	10.00	-141.00	-91.00
Specific Conductivity	S/m	99.90	0.51	0.52	0.73

Sample ID, Lab Sample Number Date Collected Sample Depth (ft)*	Units	MW-12R 005 6/5/2008 35'	MW-12R 006 6/5/2008 30'	MW-12R 007 6/5/2008 20'	MW-12R 008 6/5/2008 10'
Total Dissolved Solids	mg/L	NS	290	NS	310
Nitrogen, Nitrate	mg/L	NS	<0.05	NS	4.3
Sulfate	mg/L	NS	80	NS	100
Alkalinity	mg/L	NS	<20	NS	27.30
Iron, Dissolved	mg/L	NS	7.37	NS	<0.1
Manganese, Dissolved	mg/L	NS	0.224	NS	0.156
Total Organic Carbon	mg/L	NS	3.0	NS	2.1
Methane	ug/L	NS	11	NS	<2.3
Dissolved Oxygen	mg/L	2.27	0.21	0.19	8.59
pH	SU	7.78	6.35	6.48	7.56
Temperature	oC	16.60	15.90	15.10	16.20
Oxidation-Reduction Potential (ORP)	mV	-161.00	46.00	34.00	-14.00
Specific Conductivity	S/m	5.80	0.90	0.39	0.57

* - Sample depth is in feet below ground surface
 NS: Not Sampled

**TABLE 15. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - FIELD AND NATURAL
ATTENUATION PARAMETERS**

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID, Lab Sample Number Date Collected Sample Depth (ft)*	Units	MW-22 001 6/9/2008 35'	MW-22 002 6/9/2008 30'	MW-22 003 6/9/2008 20'	MW-22 004 6/9/2008 10'
Total Dissolved Solids	mg/L	NS	190.00	NS	180
Nitrogen, Nitrate	mg/L	NS	<0.05	NS	2.10
Sulfate	mg/L	NS	35.00	NS	19
Alkalinity	mg/L	NS	23.10	NS	108.00
Iron, Dissolved	mg/L	NS	2.90	NS	<0.1
Manganese, Dissolved	mg/L	NS	0.26	NS	0.0382
Total Organic Carbon	mg/L	NS	6.40	NS	28
Methane	ug/L	NS	29.00	NS	<2.3
Dissolved Oxygen	mg/L	5.94	0.40	0.05	1.40
pH	SU	7.51	6.66	6.01	6.94
Temperature	oC	18.00	15.40	13.80	13.90
Oxidation-Reduction Potential (ORP)	mV	-38.00	51.00	68.00	34.00
Specific Conductivity	S/m	1.98	47.00	0.34	0.35

Sample ID, Lab Sample Number Date Collected Sample Depth (ft)*	Units	BD-6 005 6/9/2008 35'	BD-6 006 6/9/2008 30'	BD-6/DUP 009 6/9/2008 30'	BD-6 007 6/9/2008 20'	BD-6 008 6/9/2008 10'
Total Dissolved Solids	mg/L	NS	1400	140	NS	540.00
Nitrogen, Nitrate	mg/L	NS	0.05	0.05	NS	0.74
Sulfate	mg/L	NS	34	33	NS	20.00
Alkalinity	mg/L	NS	<20	<20	NS	131.00
Iron, Dissolved	mg/L	NS	3.46	3.38	NS	2.19
Manganese, Dissolved	mg/L	NS	0.1690	0.1670	NS	0.19
Total Organic Carbon	mg/L	NS	12	5	NS	37.00
Methane	ug/L	NS	33	16	NS	2.60
Dissolved Oxygen	mg/L	0.33		0.92	0.20	0.73
pH	SU	7.33		6.58	6.36	7.42
Temperature	oC	16.40		15.20	14.20	14.10
Oxidation-Reduction Potential (ORP)	mV	-70.00		25.00	41.00	-92.00
Specific Conductivity	S/m	0.90		0.99	0.90	0.68

*-Sample depth is in feet below ground surface
NS: Not Sampled



TABLE 15. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - FIELD AND NATURAL ATTENUATION PARAMETERS

Brownfield Remedial Investigation
 175 Roger Avenue
 Inwood, New York

Sample ID, Lab Sample Number Date Collected Sample Depth (ft)*	Units	MW-20 010 6/9/2008 35'	MW-20 011 6/9/2008 30'	MW-20 012 6/9/2008 20'	MW-20 013 6/9/2008 10'
Total Dissolved Solids	mg/L	NS	130	NS	190
Nitrogen, Nitrate	mg/L	NS	<0.5	NS	0.62
Sulfate	mg/L	NS	38	NS	9.20
Alkalinity	mg/L	NS	26.2	NS	123
Iron, Dissolved	mg/L	NS	2.46	NS	0.283
Manganese, Dissolved	mg/L	NS	0.229	NS	0.0948
Total Organic Carbon	mg/L	NS	6.7	NS	31
Methane	ug/L	NS	4.3	NS	<2.3
Dissolved Oxygen	mg/L	0.12	0.24	0.37	0.78
pH	SU	7.70	7.52	6.67	7.94
Temperature	oC	16.10	15.20	14.50	14.40
Oxidation-Reduction Potential (ORP)	mV	-173.00	-61.00	30.00	-54.00
Specific Conductivity	S/m	0.49	0.99	28.00	80.00

Sample ID, Lab Sample Number Date Collected Sample Depth (ft)*	Units	MW-19 014 6/9/2008 35'	MW-19 015 6/9/2008 30'	MW-19 016 6/9/2008 20'	MW-19 017 6/9/2008 10'
Total Dissolved Solids	mg/L	NS	190	NS	230
Nitrogen, Nitrate	mg/L	NS	<0.05	NS	0.09
Sulfate	mg/L	NS	34	NS	4
Alkalinity	mg/L	NS	47	NS	237
Iron, Dissolved	mg/L	NS	10.8	NS	<0.1
Manganese, Dissolved	mg/L	NS	0.248	NS	0.964
Total Organic Carbon	mg/L	NS	13	NS	9.9
Methane	ug/L	NS	280	NS	40
Dissolved Oxygen	mg/L	0.11	0.29	0.19	8.60
pH	SU	7.86	7.11	6.90	7.72
Temperature	oC	16.10	15.00	13.80	14.70
Oxidation-Reduction Potential (ORP)	mV	-163.00	-16.00	1.00	-132.00
Specific Conductivity	S/m	0.90	0.90	0.99	0.59

*-Sample depth is in feet below ground surface

NS: Not Sampled

TABLE 15. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - FIELD AND NATURAL ATTENUATION PARAMETERS

Brownfield Remedial Investigation
 175 Roger Avenue
 Inwood, New York

Sample ID. Lab Sample Number Date Collected Sample Depth (ft)*	Units	MW-18 001 6/11/2008 35'	MW-18 002 6/11/2008 30'	MW-18 003 6/11/2008 20'	MW-18 004 6/11/2008 10'
Total Dissolved Solids	mg/L	NS	220	NS	250
Nitrogen, Nitrate	mg/L	NS	0.05	NS	0.06
Sulfate	mg/L	NS	46	NS	18
Alkalinity	mg/L	NS	51.3	NS	170
Iron, Dissolved	mg/L	NS	3.55	NS	0.162
Manganese, Dissolved	mg/L	NS	0.261	NS	0.322
Total Organic Carbon	mg/L	NS	1.6	NS	4.6
Methane	ug/L	NS	780	NS	40
Dissolved Oxygen	mg/L	5.70	9.62	7.40	4.94
pH	SU	7.76	6.67	7.02	7.60
Temperature	oC	15.60	14.10	13.60	16.00
Oxidation-Reduction Potential (ORP)	mV	-94.00	57.00	-22.00	-84.00
Specific Conductivity	S/m	0.99	0.73	5.80	17.80

Sample ID. Lab Sample Number Date Collected Sample Depth (ft)*	Units	MW-17 005 6/11/2008 35'	MW-17 006 6/11/2008 30'	MW-17 007 6/11/2008 20'	MW-17 008 6/11/2008 10'
Total Dissolved Solids	mg/L	NS	280	NS	200
Nitrogen, Nitrate	mg/L	NS	0.06	NS	1.30
Sulfate	mg/L	NS	49	NS	25
Alkalinity	mg/L	NS	73.9	NS	63
Iron, Dissolved	mg/L	NS	10.30	NS	<0.1
Manganese, Dissolved	mg/L	NS	0.237	NS	0.397
Total Organic Carbon	mg/L	NS	2.8	NS	2.0
Methane	ug/L	NS	530	NS	14
Dissolved Oxygen	mg/L	2.57	0.71	0.95	0.92
pH	SU	7.95	7.36	7.47	7.64
Temperature	oC	15.70	14.60	14.40	13.90
Oxidation-Reduction Potential (ORP)	mV	-60.00	-27.00	-6.00	-21.00
Specific Conductivity	S/m	2.75	99.90	99.90	99.90

*-Sample depth is in feet below ground surface
 NS: Not Sampled

TABLE 15. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - FIELD AND NATURAL ATTENUATION PARAMETERS

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID, Lab Sample Number Date Collected Sample Depth (ft)*	Units	MW-23 009 6/11/2008 35'	MW-23 010 6/11/2008 30'	MW-23 DUP 013 6/11/2008 30'	MW-23 011 6/11/2008 20'	MW-23 012 6/11/2008 10'
Total Dissolved Solids	mg/L	NS	160	180	NS	510
Nitrogen, Nitrate	mg/L	NS	<0.05	0.07	NS	3.2
Sulfate	mg/L	NS	40	40	NS	37
Alkalinity	mg/L	NS	37.5	30.6	NS	178
Iron, Dissolved	mg/L	NS	3.92	3.68	NS	<0.1
Manganese, Dissolved	mg/L	NS	0.457	0.440	NS	0.534
Total Organic Carbon	mg/L	NS	<1.0	1.1	NS	5.1
Methane	ug/L	NS	<2.3	7.6	NS	<2.3
Dissolved Oxygen	mg/L	0.31		5.96	2.72	1.31
pH	SU	8.50		8.43	7.92	7.65
Temperature	oC	18.20		18.40	18.30	16.60
Oxidation-Reduction Potential (ORP)	mV	-159.00		-130.00	-67.00	-31.00
Specific Conductivity	S/m	99.90		3.32	6.83	99.90

Sample ID, Lab Sample Number Date Collected Sample Depth (ft)*	Units	MW-10R 001 6/12/2008 35'	MW-10R 002 6/12/2008 30'	MW-10R 003 6/12/2008 20'	MW-10R 004 6/12/2008 10'
Total Dissolved Solids	mg/L	NS	220	NS	160
Nitrogen, Nitrate	mg/L	NS	0.06	NS	0.76
Sulfate	mg/L	NS	55	NS	26
Alkalinity	mg/L	NS	57.8	NS	76.3
Iron, Dissolved	mg/L	NS	9.99	NS	0.111
Manganese, Dissolved	mg/L	NS	0.217	NS	0.0502
Total Organic Carbon	mg/L	NS	6.2	NS	6.3
Methane	ug/L	NS	570	NS	26
Dissolved Oxygen	mg/L	0.48	0.72	1.03	1.27
pH	SU	8.52	7.98	7.85	7.59
Temperature	oC	17.40	15.50	15.30	15.00
Oxidation-Reduction Potential (ORP)	mV	-157.00	-92.00	-18.00	-26.00
Specific Conductivity	S/m	97.20	99.90	99.90	99.90

*-Sample depth is in feet below ground surface

NS: Not Sampled

TABLE 15. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - FIELD AND NATURAL ATTENUATION PARAMETERS

Brownfield Remedial Investigation
 175 Roger Avenue
 Inwood, New York

Sample ID, Lab Sample Number Date Collected Sample Depth (ft)*	Units	BD-3 005 6/12/2008 35'	BD-3 006 6/12/2008 30'	BD-3 DUP 013 6/12/2008 30'	BD-3 007 6/12/2008 20'	BD-3 008 6/12/2008 10'
Total Dissolved Solids	mg/L	NS	250	230	NS	910
Nitrogen, Nitrate	mg/L	NS	0.05	<0.05	NS	8.7
Sulfate	mg/L	NS	44	43	NS	83
Alkalinity	mg/L	NS	97.1	72.7	NS	364
Iron, Dissolved	mg/L	NS	2.64	1.66	NS	1
Manganese, Dissolved	mg/L	NS	0.15	0.109	NS	0.963
Total Organic Carbon	mg/L	NS	2.8	2.7	NS	17
Methane	ug/L	NS	170	140	NS	140
Dissolved Oxygen	mg/L	0.45	1.07	1.07	0.52	2.12
pH	SU	8.33	8.19	8.19	7.64	6.94
Temperature	oC	20.50	20.40	20.40	20.60	21.20
Oxidation-Reduction Potential (ORP)	mV	-148.00	-13.00	-13.00	-42.00	-70.00
Specific Conductivity	S/m	5.44	99.90	99.90	99.90	99.90

Sample ID, Lab Sample Number Date Collected Sample Depth (ft)*	Units	BD-7 009 6/12/2008 35'	BD-7 010 6/12/2008 30'	BD-7 011 6/12/2008 20'	BD-7 012 6/12/2008 10'
Total Dissolved Solids	mg/L	NS	200	NS	1300
Nitrogen, Nitrate	mg/L	NS	0.1	NS	1.2
Sulfate	mg/L	NS	42	NS	23
Alkalinity	mg/L	NS	51	NS	68.1
Iron, Dissolved	mg/L	NS	8.08	NS	3.41
Manganese, Dissolved	mg/L	NS	0.273	NS	1.56
Total Organic Carbon	mg/L	NS	1.3	NS	4.8
Methane	ug/L	NS	<2.3	NS	95
Dissolved Oxygen	mg/L	1.06	1.32	4.44	1.07
pH	SU	8.46	8.91	8.55	7.89
Temperature	oC	25.20	19.38	19.02	19.52
Oxidation-Reduction Potential (ORP)	mV	-185.00	-209.00	-125.00	-73.00
Specific Conductivity	S/m	99.90	99.90	6.98	99.90

*-Sample depth is in feet below ground surface
 NS: Not Sampled

TABLE 15. VERTICAL GROUNDWATER DELINEATION ASSESSMENT, JUNE 2008 - FIELD AND NATURAL ATTENUATION PARAMETERS

Brownfield Remedial Investigation
 175 Roger Avenue
 Inwood, New York

Sample ID, Lab Sample Number Date Collected Sample Depth (ft)*	Units	MW-21 001 6/10/2008 35'	MW-21 002 6/10/2008 30'	MW-21 003 6/10/2008 20'	MW-21 004 6/10/2008 10'
Total Dissolved Solids	mg/L	NS	120	NS	350
Nitrogen, Nitrate	mg/L	NS	<0.05	NS	<0.05
Sulfate	mg/L	NS	28	NS	15
Alkalinity	mg/L	NS	25.3	NS	143
Iron, Dissolved	mg/L	NS	3.42	NS	0.40
Manganese, Dissolved	mg/L	NS	0.20	NS	1.19
Total Organic Carbon	mg/L	NS	15	NS	10.3
Methane	ug/L	NS	240	NS	110
Dissolved Oxygen	mg/L	5.75	0.19	0.17	4.67
pH	SU	7.60	6.69	7.06	7.3
Temperature	oC	15.70	15.2	14.70	14.2
Oxidation-Reduction Potential (ORP)	mV	-88.00	54.00	-17.00	-67.00
Specific Conductivity	S/m	1.25	2.24	99.90	0.99

Sample ID, Lab Sample Number Date Collected Sample Depth (ft)*	Units	BD-5 005 6/10/2008 35'	BD-5 006 6/10/2008 30'	BD-5 007 6/10/2008 20'	BD-5 008 6/10/2008 10'
Total Dissolved Solids	mg/L	NS	170	NS	150
Nitrogen, Nitrate	mg/L	NS	<0.05	NS	1.30
Sulfate	mg/L	NS	28	NS	120
Alkalinity	mg/L	NS	48.9	NS	215
Iron, Dissolved	mg/L	NS	4.27	NS	0.126
Manganese, Dissolved	mg/L	NS	0.487	NS	1.60
Total Organic Carbon	mg/L	NS	16	NS	35
Methane	ug/L	NS	690	NS	260
Dissolved Oxygen	mg/L	5.59	0.06	5.07	2.85
pH	SU	7.60	6.50	6.97	7.42
Temperature	oC	16.10	15.40	15.70	16.80
Oxidation-Reduction Potential (ORP)	mV	-80.00	54.00	45.00	-27.00
Specific Conductivity	S/m	0.45	24.50	0.58	8.33

*-Sample depth is in feet below ground surface
 NS: Not Sampled

TABLE 16. MONITORING WELLS - FIELD SAMPLING PARAMETERS, JUNE 2008

Brownfield Remedial Investigation
 175 Roger Avenue
 Inwood, New York

Sample ID.	MW-1	MW-2	MW-3	MW-4	MW-5
Date Collected	6/18/2008	6/19/2008	6/19/2008	6/19/2008	6/18/2008
Dissolved Oxygen	mg/L 0.31	0.08	0.00	1.74	1.22
pH	SU 7.59	7.16	7.30	6.71	7.21
Temperature	oC 16.42	17.83	17.11	20.53	17.76
Oxidation-Reduction Potential (ORP)	mV -20.00	-76.00	-103.00	72.00	104.00
Specific Conductivity	S/m 74.70	2.93	0.90	93.30	99.90

Sample ID.	MW-6	MW-7	MW-8	MW-9	MW-10R
Date Collected	6/19/2008	6/19/2008	6/19/2008	6/19/2008	6/19/2008
Dissolved Oxygen	mg/L 0.14	6.30	1.59	0.32	0.55
pH	SU 7.25	7.74	7.66	8.16	7.50
Temperature	oC 20.09	19.50	19.13	16.06	13.78
Oxidation-Reduction Potential (ORP)	mV -81.00	128.00	101.00	-27.00	12.00
Specific Conductivity	S/m 2.48	0.90	99.90	33.20	99.90

Sample ID.	MW-12R	MW-13	MW-14	MW-15	MW-16
Date Collected	6/19/2008	6/19/2008	6/19/2008	6/19/2008	6/19/2008
Dissolved Oxygen	mg/L 5.13	0.43	0.08	5.86	5.56
pH	SU 7.70	7.39	7.16	7.53	7.48
Temperature	oC 21.44	17.79	17.30	16.20	17.14
Oxidation-Reduction Potential (ORP)	mV 79.00	71.00	87.00	-52.00	44.00
Specific Conductivity	S/m 4.38	54.90	31.70	1.28	1.16

Sample ID.	MW-17	MW-18	MW-19	MW-19D	MW-20
Date Collected	6/18/2008	6/18/2008	6/18/2008	6/18/2008	6/18/2008
Dissolved Oxygen	mg/L 0.72	0.52	0.07	0.00	1.64
pH	SU 9.97	8.36	7.36	8.06	7.52
Temperature	oC 13.32	13.93	13.90	14.39	14.67
Oxidation-Reduction Potential (ORP)	mV -66.00	40.00	-131.00	-196.00	-15.00
Specific Conductivity	S/m 99.90	99.90	0.90	0.90	0.90

Sample ID.	MW-21	MW-22	MW-23	MW-24D
Date Collected	6/18/2008	6/18/2008	6/18/2008	6/19/2008
Dissolved Oxygen	mg/L 0.88	0.36	0.69	0.09
pH	SU 7.69	8.77	7.55	7.93
Temperature	oC 14.05	13.93	17.40	16.63
Oxidation-Reduction Potential (ORP)	mV -113.00	-188.00	-5.00	-145.00
Specific Conductivity	S/m 0.96	65.10	1.58	2.78

TABLE 17 SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCs) DETECTED IN SOIL VAPOR AND SUB-SLAB VAPOR SAMPLES

Brownfield Remedial Investigation
175 Roger Avenue
Inwood,
New York

Sample ID Lab ID Sampling Date Matrix Unit	Sub Slab Vapor 1	Sub Slab Vapor 2	Sub Slab Vapor 3	Sub Slab Vapor 4	Sub Slab Vapor 5	NYSDOH Air Guideline Values (ug/m3)	NYSDOH Fuel Oil 2003 Upper Ferrie Limit (ug/m3) (1)		USEPA BASE Data 90% Percentile Value (ug/m3) (1)		HEI RIOPA 2005 95% Percentile Value (ug/m3) (1)	
	722366	722366	722367	722366	722366		Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor
	8/30/2007	8/30/2007	8/30/2007	8/30/2007	8/30/2007							
VOCs - Compound Name												
Acetone	ND	360	ND	55	ND	NA	115	30	98.9	43.7	45.6	19.6
Benzene	ND	4.2	2.1	ND	ND	NA	13	4.8	9.4	6.6	10	5.16
Bromodichloromethane	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Bromoethene	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Bromoform	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Bromomethane	ND	ND	ND	ND	ND	NA	0.5	0.5	1.7	1.6	NA	NA
1,3-Butadiene	ND	ND	ND	ND	ND	NA	NA	NA	3	3.4	NA	NA
2-Butanone (MEK)	ND	240	ND	18	120	NA	16	0.5	12	11.3	NA	NA
Carbon Disulfide	ND	ND	ND	ND	ND	NA	NA	NA	4.2	3.7	NA	NA
Carbon tetrachloride	ND	ND	ND	ND	ND	NA	1.3	1.2	<1.3	0.7	1.1	1
Chlorobenzene	ND	ND	ND	ND	ND	NA	0.4	NA	<0.9	<0.8	NA	NA
Chloroethane	ND	ND	ND	ND	ND	NA	0.4	0.4	<1.1	<1.2	NA	NA
Chloroform	ND	ND	ND	1.5	ND	NA	1.2	0.5	1.1	0.6	6.34	0.76
Chloromethane	ND	ND	ND	ND	ND	NA	4.2	4.3	3.7	3.7	NA	NA
3-Chloropropene	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
2-Chlorotoluene	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Cyclohexane	ND	ND	ND	ND	ND	NA	6.3	0.9	NA	NA	NA	NA
Dibromochloromethane	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	ND	ND	ND	ND	ND	NA	0.4	0.4	1.5	1.6	NA	NA
1,2-Dichlorobenzene	ND	ND	ND	ND	ND	NA	0.5	0.4	<1.3	<1.2	NA	NA
1,3-Dichlorobenzene	ND	ND	ND	ND	ND	NA	0.5	0.4	<2.4	<2.2	NA	NA
1,4-Dichlorobenzene	ND	ND	ND	ND	ND	NA	1.2	0.5	5.5	1.2	344	3.66
Dichlorodifluoromethane (Freon 12)	ND	ND	ND	ND	ND	NA	NA	NA	16.5	8.1	NA	NA
1,1-Dichloroethane	ND	ND	ND	ND	ND	NA	0.4	NA	<0.7	<0.6	NA	NA
1,2-Dichloroethane	ND	ND	ND	ND	ND	NA	0.4	0.4	<0.9	<0.8	NA	NA
1,1-Dichloroethene	ND	ND	ND	ND	ND	NA	0.4	0.4	<1.4	<1.4	NA	NA
1,2-Dichloroethene (total)	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	NA	0.4	0.4	<1.9	<1.2	NA	NA
trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	ND	ND	ND	ND	ND	NA	0.4	0.4	<1.6	<1.6	NA	NA
Cis-1,3-Dichloropropene (total)	ND	ND	ND	ND	ND	NA	0.4	0.4	2.3	2.2	NA	NA
1,2-Dichlorotetrafluoroethane (Freon 114)	ND	ND	ND	ND	ND	NA	0.4	0.5	NA	NA	NA	NA
1,4-Dioxane	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	370	20	16	3.6	79	NA	6.4	1	5.7	3.5	7.62	3.04
4-Ethyltoluene	1,100	210	150	59	460	NA	NA	NA	3.6	3	NA	NA
n-Heptane	ND	ND	ND	ND	ND	NA	18	4.5	NA	NA	NA	NA
Hexachlorobutadiene	ND	ND	ND	ND	ND	NA	0.5	0.5	6.8	6.4	NA	NA
n-Hexane	ND	ND	ND	ND	ND	NA	14	2.2	10.2	6.4	NA	NA
Isopropyl Alcohol	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	ND	ND	ND	ND	ND	60	16	1.6	10	6.1	7.5	2.46

TABLE 17 SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCs) DETECTED IN SOIL VAPOR AND SUB-SLAB VAPOR SAMPLES

Brownfield Remedial Investigation
175 Roger Avenue
Inwood,
New York

Sample ID Lab ID Sampling Date Matrix Unit	Sub Slab Vapor 1	Sub Slab Vapor 2	Sub Slab Vapor 3	Sub Slab Vapor 4	Sub Slab Vapor 5	NYSDOH Air Guideline Values (ug/m3)	NYSDOH Fuel Oil 2003 Upper Fence Limit (ug/m3) (1)		USEPA BASE Data 90% Percentile Value (ug/m3) (1)		HEI RIOPA 2005 95% Percentile Value (ug/m3) (1)		
	722395	722396	722397	722398	722399		Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor	
	8/30/2007	8/30/2007	8/30/2007	8/30/2007	8/30/2007								Air ug/m3
Methyl Butyl Ketone	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA
Methyl Isobutyl Ketone (MIBK)	ND	17	ND	2.6	ND	NA	1.9	0.5	NA	NA	NA	NA	NA
Methyl-tert-butyl ether (MTBE)	ND	9.4	ND	ND	ND	NA	14	NA	11.5	6.2	36	22.1	
Styrene	27	ND	ND	ND	ND	NA	1.4	0.5	1.9	1.3	5.13	1.29	
Tertiary butyl alcohol (TBA)	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	
1,1,2,2 - Tetrachloroethane	ND	ND	ND	ND	ND	NA	0.4	0.4	NA	NA	NA	NA	
Tetrachloroethylene (PCE)	4,300	1,200	420	8.8	4,100	100	2.5	0.7	15.9	6.5	6.01	3.17	
Tetrahydrofuran	ND	ND	ND	ND	ND	NA	0.8	0.4	NA	NA	NA	NA	
Toluene	100	34	26	4.5	41	NA	57	5.1	43	33.7	39	NA	
Trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	NA	NA	NA	1.3	1.4	NA	NA	
1,2,4 - Trichlorobenzene	ND	ND	ND	ND	ND	NA	0.5	0.4	6.8	6.4	NA	NA	
1,1,1 - Trichloroethane	ND	ND	ND	ND	ND	NA	2.5	0.6	20.6	2.6	NA	NA	
1,1,2 - Trichloroethane	ND	ND	ND	ND	ND	NA	0.4	0.3	1.5	1.6	NA	NA	
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113, Freon TF)	ND	ND	ND	ND	ND	NA	NA	NA	3.5	1.6	NA	NA	
Trichloroethene (TCE)	54	ND	9.1	ND	44	5	0.5	0.4	4.2	1.3	1.36	0.79	
Trichlorofluoromethane (Freon 11)	ND	ND	ND	ND	ND	NA	NA	NA	18.1	4.3	NA	NA	
1,2,4 - Trimethylbenzene	1,300	450	270	140	1,200	NA	9.8	1.9	9.5	5.8	NA	NA	
1,3,5 - Trimethylbenzene	580	170	120	54	470	NA	3.9	0.7	3.7	2.7	NA	NA	
2,2,4-Trimethylpentane	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA	
Vinyl Chloride	ND	ND	ND	ND	ND	NA	0.4	0.4	<1.9	<1.8	NA	NA	
Xylene (m,p)	1,700	100	78	20	150	NA	11	1	22.2	12.8	22.2	10	
Xylene (o)	870	33	23	6.5	61	NA	7.1	1.5	7.9	4.6	7.24	3.23	

Note:

ug/m3 - micrograms per cubic meter of air

ND - Analyte not detected at reporting limit

NA - Not Available

(1) - As per Appendix C of the Final NYSDOH Guidance document.

Shading - Concentration Exceeds NYSDOH Air Guideline Value (AGV)

Bold - Concentration Detected Above Reporting Limit

Underline - Concentration Exceeds NYSDOH Background Levels.

BASE - building assessment and survey evaluation

HEI RIOPA - Health Effect Institute: Relationship of Indoor, Outdoor and Personal Air (personal exposure)

NYSDOH Fuel Oil - Data collected from homes heated by fuel oil

TABLE 17. SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCs) DETECTED IN SOIL VAPOR AND SUB-SLAB VAPOR SAMPLES

Brownfield Remedial Investigation
 175 Roger Avenue
 Inwood, New York

Sample ID Lab ID Sampling Date Matrix Unit	Soil Vapor 1	Soil Vapor 2	Soil Vapor 3	Soil Vapor 4	Soil Vapor 5	NYSDOH Air Guideline Values (ug/m3)	NYSDOH Fuel Oil 2003 Upper Force Limit (ug/m3) (1)		USEPA/BAE Data 90% Percentile Value (ug/m3) (1)		HEI RIOPA 2005 95% Percentile Value (ug/m3) (1)	
	722390 8/29/2007 Air ug/m3	722391 8/29/2007 Air ug/m3	722392 8/29/2007 Air ug/m3	722393 8/29/2007 Air ug/m3	722394 8/29/2007 Air ug/m3		Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor
	VOCs - Compound Name											
Acelone	ND	ND	1300	1400	16	NA	115	30	98.9	43.7	45.8	19.6
Benzene	ND	ND	ND	ND	ND	NA	13	4.8	9.4	6.6	10	5.16
Bromodichloromethane	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Bromoethene	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Bromoform	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Bromomethane	ND	ND	ND	ND	ND	NA	0.5	0.5	1.7	1.6	NA	NA
1,3 - Butadiene	ND	ND	ND	ND	ND	NA	NA	NA	3	3.4	NA	NA
2 - Butanone (MEK)	ND	ND	ND	59	2.1	NA	16	0.5	12	11.3	NA	NA
Carbon Disulfide	ND	ND	ND	ND	ND	NA	NA	NA	4.2	3.7	NA	NA
Carbon tetrachloride	ND	ND	ND	ND	ND	NA	1.3	1.2	<1.3	0.7	1.1	1
Chlorobenzene	ND	ND	ND	ND	ND	NA	0.4	NA	<0.9	<0.8	NA	NA
Chloroethane	ND	ND	ND	ND	ND	NA	0.4	0.4	<1.1	<1.2	NA	NA
Chloroform	ND	ND	ND	ND	1.1	NA	1.2	0.5	1.1	0.6	6.34	0.76
Chloromethane	ND	ND	ND	ND	ND	NA	4.2	4.3	3.7	3.7	NA	NA
3-Chloropropene	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
2-Chlorotoluene	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Cyclohexane	ND	ND	ND	ND	ND	NA	6.3	0.9	NA	NA	NA	NA
Dibromochloromethane	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
1,2 - Dibromoethane	ND	ND	ND	ND	ND	NA	0.4	0.4	1.5	1.6	NA	NA
1,2 - Dichlorobenzene	ND	ND	ND	ND	ND	NA	0.5	0.4	<1.3	<1.2	NA	NA
1,3 - Dichlorobenzene	ND	ND	ND	ND	ND	NA	0.5	0.4	<2.4	<2.2	NA	NA
1,4 - Dichlorobenzene	ND	ND	ND	ND	ND	NA	1.2	0.5	5.5	1.2	344	3.66
Dichlorodifluoromethane (Freon 12)	ND	ND	ND	ND	ND	NA	NA	NA	16.5	8.1	NA	NA
1,1 - Dichloroethane	ND	ND	ND	ND	ND	NA	0.4	NA	<0.7	<0.6	NA	NA
1,2 - Dichloroethane	ND	ND	ND	ND	ND	NA	0.4	0.4	<0.9	<0.8	NA	NA
1,1 - Dichloroethene	ND	ND	ND	ND	ND	NA	0.4	0.4	<1.4	<1.4	NA	NA
1,2-Dichloroethene (total)	ND	ND	ND	ND	3.6	NA	NA	NA	NA	NA	NA	NA
cis- 1, 2-Dichloroethene	ND	ND	ND	ND	3.6	NA	0.4	0.4	<1.9	<1.2	NA	NA
trans- 1, 2 - Dichloroethene	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
1,2 - Dichloropropane	ND	ND	ND	ND	ND	NA	0.4	0.4	<1.6	<1.6	NA	NA
Cis-1,3-Dichloropropene (total)	ND	ND	ND	ND	ND	NA	0.4	0.4	2.3	2.2	NA	NA
1,2 - Dichlorotetrafluoroethane (Freon 114)	ND	ND	ND	ND	ND	NA	0.4	0.5	NA	NA	NA	NA
1,4-Dioxane	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	ND	ND	ND	ND	2.7	NA	6.4	1	5.7	3.5	7.62	3.04
4- Ethyltoluene	23	ND	ND	ND	9.3	NA	NA	NA	3.6	3	NA	NA
n-Heptane	ND	ND	ND	ND	ND	NA	18	4.5	NA	NA	NA	NA
Hexachlorobutadiene	ND	ND	ND	ND	ND	NA	0.5	0.5	6.8	6.4	NA	NA
n-Hexane	ND	ND	ND	ND	ND	NA	14	2.2	10.2	6.4	NA	NA
Isopropyl Alcohol	ND	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	ND	ND	ND	ND	ND	60	16	1.6	10	6.1	7.5	2.46

TABLE 17. SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCs) DETECTED IN SOIL VAPOR AND SUB-SLAB VAPOR SAMPLES

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID Lab ID Sampling Date Matrix Unit	Soil Vapor 1	Soil Vapor 2	Soil Vapor 3	Soil Vapor 4	Soil Vapor 6	NYSDOH Air Guideline Value (ug/m3)	NYSDOH Fuel Oil 2003 Upper Fence Limit (ug/m3) (1)		USEPA BASE Data 90% Percentile Value (ug/m3) (1)		HEI RIOPA 2005 95% Percentile Value (ug/m3) (1)	
	722390	722391	722392	722393	722394		Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor
	8/29/2007	8/29/2007	8/29/2007	8/29/2007	8/29/2007							
Methyl Butyl Ketone		ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Methyl Isobutyl Ketone (MIBK)	ND	ND	ND	ND	ND	NA	1.9	0.5	NA	NA	NA	NA
Methyl-tert-butyl ether (MTBE)	ND	ND	ND	ND	ND	NA	14	NA	11.5	6.2	36	22.1
Styrene	ND	ND	ND	ND	ND	NA	1.4	0.5	1.9	1.3	5.13	1.29
Tertiary butyl alcohol (TBA)	ND	ND	810	330	ND	NA	NA	NA	NA	NA	NA	NA
1,1,2,2 - Tetrachloroethane	ND	ND	ND	ND	ND	NA	0.4	0.4	NA	NA	NA	NA
Tetrachloroethylene (PCE)	2,800	8,100	ND	ND	18	100	2.5	0.7	15.9	6.5	6.01	3.17
Tetrahydrofuran	ND	ND	ND	ND	ND	NA	0.8	0.4	NA	NA	NA	NA
Toluene	ND	ND	ND	ND	4.9	NA	57	5.1	43	33.7	39	NA
Trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	NA	NA	NA	1.3	1.4	NA	NA
1,2,4 - Trichlorobenzene	ND	ND	ND	ND	ND	NA	0.5	0.4	6.8	6.4	NA	NA
1,1,1 - Trichloroethane	ND	ND	ND	ND	ND	NA	2.5	0.6	20.6	2.6	NA	NA
1,1,2 - Trichloroethane	ND	ND	ND	ND	ND	NA	0.4	0.3	1.5	1.6	NA	NA
1, 1, 2-Trichloro-1,2,2-trifluoroethane (Freon 113, Freon TF)	ND	ND	ND	ND	ND	NA	NA	NA	3.5	1.6	NA	NA
Trichloroethene (TCE)	89	170	ND	ND	0.91	5	0.5	0.4	4.2	1.3	1.36	0.79
Trichlorofluoromethane (Freon 111)	ND	ND	ND	21	2.6	NA	NA	NA	18.1	4.3	NA	NA
1,2,4 - Trimethylbenzene	79	ND	ND	ND	14	NA	9.8	1.9	9.5	5.8	NA	NA
1,3,5 - Trimethylbenzene	25	ND	ND	ND	3.3	NA	3.9	0.7	3.7	2.7	NA	NA
2,2,4-Trimethylpentane	ND	ND	ND	ND	3.3	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	ND	ND	ND	ND	ND	NA	0.4	0.4	<1.9	<1.8	NA	NA
Xylene (m,p)	ND	ND	ND	ND	11	NA	11	1	22.2	12.8	22.2	10
Xylene (o)	ND	ND	ND	ND	4	NA	7.1	1.5	7.9	4.6	7.24	3.23

Note:

ug/m3 - micrograms per cubic meter of air

ND - Analyte not detected at reporting limit

NA - Not Available

(1) - As per Appendix C of the Final NYSDOH Guidance document.

Shading - Concentration Exceeds NYSDOH Air Guideline Value (AGV)

Bold - Concentration Detected Above Reporting Limit

Underline - Concentration Exceeds NYSDOH Background Levels.

BASE - building assessment and survey evaluation

HEI RIOPA - Health Effect Institute: Relationship of Indoor, Outdoor and Personal Air (personal exposure)

NYSDOH Fuel Oil - Data collected from homes heated by fuel oil

TABLE 17. SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCs) DETECTED IN SOIL VAPOR AND SUB-SLAB VAPOR SAMPLES

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID Lab ID Sampling Date Matrix Unit	Soil Vapor 6	Soil Vapor 7	Soil Vapor 8	Soil Vapor 9	NYSDOH Air Guideline Values (ug/m3)	NYSDOH Fuel Oil 2003 Upper Fence Limit (ug/m3) (1)		USEPA BASE Data 90% Percentile Value (ug/m3) (1)		HEI RIOPA 2005 95% Percentile Value (ug/m3) (1)	
	757581	757582	757583	757584		Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor
	6/24/2008	6/24/2008	6/24/2008	6/24/2008							
VOCs - Compound Name											
Acetone	69	ND	24	160	NA	115	30	98.9	43.7	45.8	19.6
Benzene	3.6	ND	2.1	ND	NA	13	4.8	9.4	6.6	10	5.16
Bromodichloromethane	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Bromoethene	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Bromoforn	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Bromomethane	ND	ND	ND	ND	NA	0.5	0.5	1.7	1.6	NA	NA
1,3 - Butadiene	ND	ND	ND	ND	NA	NA	NA	3	3.4	NA	NA
2 - Butanone (MEK)	8.6	ND	3.6	12	NA	16	0.5	12	11.3	NA	NA
Carbon Disulfide	ND	ND	ND	ND	NA	NA	NA	4.2	3.7	NA	NA
Carbon tetrachloride	ND	ND	ND	ND	NA	1.3	1.2	<1.3	0.7	1.1	1
Chlorobenzene	ND	ND	ND	ND	NA	0.4	NA	<0.9	<0.8	NA	NA
Chloroethane	ND	ND	ND	ND	NA	0.4	0.4	<1.1	<1.2	NA	NA
Chloroform	ND	5.4	1.3	46	NA	1.2	0.5	1.1	0.6	6.34	0.76
Chloromethane	ND	ND	1.6	ND	NA	4.2	4.3	3.7	3.7	NA	NA
3-Chloropropene	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
2-Chlorotoluene	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Cyclohexane	ND	ND	1.4	ND	NA	6.3	0.9	NA	NA	NA	NA
Dibromochloromethane	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
1,2 - Dibromoethane	ND	ND	ND	ND	NA	0.4	0.4	1.5	1.6	NA	NA
1,2 - Dichlorobenzene	ND	ND	ND	ND	NA	0.5	0.4	<1.3	<1.2	NA	NA
1,3 - Dichlorobenzene	ND	ND	ND	ND	NA	0.5	0.4	<2.4	<2.2	NA	NA
1,4 - Dichlorobenzene	ND	ND	ND	ND	NA	1.2	0.5	5.5	1.2	344	3.66
Dichlorodifluoromethane (Freon 12)	ND	ND	ND	ND	NA	NA	NA	16.5	8.1	NA	NA
1,1 - Dichloroethane	ND	ND	ND	ND	NA	0.4	NA	<0.7	<0.6	NA	NA
1,2 - Dichloroethane	ND	ND	ND	ND	NA	0.4	0.4	<0.9	<0.8	NA	NA
1,1 - Dichloroethene	ND	ND	ND	ND	NA	0.4	0.4	<1.4	<1.4	NA	NA
1,2-Dichloroethene (total)	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
cis- 1, 2-Dichloroethene	ND	ND	ND	ND	NA	0.4	0.4	<1.9	<1.2	NA	NA
trans- 1, 2 - Dichloroethene	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
1,2 - Dichloropropane	ND	ND	ND	ND	NA	0.4	0.4	<1.6	<1.6	NA	NA
Cis-1,3-Dichloropropene (total)	ND	ND	ND	ND	NA	0.4	0.4	2.3	2.2	NA	NA
1,2 - Dichlorotetrafluoroethane (Freon 114)	ND	ND	ND	ND	NA	0.4	0.5	NA	NA	NA	NA
1,4-Dioxane	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	30	22	24	ND	NA	6.4	1	5.7	3.5	7.62	3.04
4- Ethyltoluene	95	130	85	ND	NA	NA	NA	3.6	3	NA	NA
n-Heptane	9.8	3.8	5.3	ND	NA	18	4.5	NA	NA	NA	NA
Hexachlorobutadiene	ND	ND	ND	ND	NA	0.5	0.5	6.8	6.4	NA	NA
n-Hexane	11	ND	4.9	ND	NA	14	2.2	10.2	6.4	NA	NA
Isopropyl Alcohol	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	ND	ND	ND	ND	60	16	1.6	10	6.1	7.5	2.46

TABLE 17. SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCs) DETECTED IN SOIL VAPOR AND SUB-SLAB VAPOR SAMPLES

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID Lab ID Sampling Date Matrix Unit	Soil Vapor 6	Soil Vapor 7	Soil Vapor 8	Soil Vapor 9	NYSDOH/Air Guideline Values (ug/m3)	NYSDOH Fuel Oil 2003 Upper Fence Limit (ug/m3) (1)		USEPA BASE Data 90% Percentile Value (ug/m3) (1)		HEI RIOPA 2005 95% Percentile Value (ug/m3) (1)	
	767581	767582	767583	767584		Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor
	6/24/2008	6/24/2008	6/24/2008	6/24/2008							
Methyl Butyl Ketone	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Methyl Isobutyl Ketone (MIBK)	ND	ND	ND	ND	NA	1.9	0.5	NA	NA	NA	NA
Methyl-tert-butyl ether (MTBE)	ND	ND	ND	ND	NA	14	NA	11.5	6.2	36	22.1
Styrene	ND	3.4	2.7	ND	NA	1.4	0.5	1.9	1.3	5.13	1.29
Tertiary butyl alcohol (TBA)	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
1,1,2,2 - Tetrachloroethane	ND	ND	ND	ND	NA	0.4	0.4	NA	NA	NA	NA
Tetrachloroethylene (PCE)	1,100	609	260	1,200	100	2.5	0.7	15.9	6.5	6.01	3.17
Tetrahydrofuran	ND	ND	ND	ND	NA	0.8	0.4	NA	NA	NA	NA
Toluene	75	53	57	4.5	NA	57	5.1	43	33.7	39	NA
Trans-1,3-Dichloropropene	ND	ND	ND	ND	NA	NA	NA	1.3	1.4	NA	NA
1,2,4 - Trichlorobenzene	ND	ND	ND	ND	NA	0.5	0.4	6.8	6.4	NA	NA
1,1,1 - Trichloroethane	ND	ND	ND	490	NA	2.5	0.6	20.6	2.6	NA	NA
1,1,2 - Trichloroethane	ND	ND	ND	ND	NA	0.4	0.3	1.5	1.6	NA	NA
1,1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113, Freon TF)	ND	ND	ND	ND	NA	NA	NA	3.5	1.6	NA	NA
Trichloroethene (TCE)	ND	ND	ND	ND	5	0.5	0.4	4.2	1.3	1.36	0.79
Trichlorofluoromethane (Freon 11)	ND	3.3	1.3	ND	NA	NA	NA	18.1	4.3	NA	NA
1,2,4 - Trimethylbenzene	140	180	120	9.5	NA	9.8	1.9	9.5	5.8	NA	NA
1,3,5 - Trimethylbenzene	37	38	25	ND	NA	3.9	0.7	3.7	2.7	NA	NA
2,2,4-Trimethylpentane	8.9	2.8	4.7	ND	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	ND	ND	ND	ND	NA	0.4	0.4	<1.9	<1.8	NA	NA
Xylene (m,p)	130	140	110	ND	NA	11	1	22.2	12.8	22.2	10
Xylene (o)	43	42	33	4.5	NA	7.1	1.5	7.9	4.6	7.24	3.23

Note:

ug/m3 - micrograms per cubic meter of air

ND - Analyte not detected at reporting limit

NA - Not Available

(1) - As per Appendix C of the Final NYSDOH Guidance document.

Shading - Concentration Exceeds NYSDOH Air Guideline Value (AGV)

Bold - Concentration Detected Above Reporting Limit

Underline - Concentration Exceeds NYSDOH Background Levels.

BASE - building assessment and survey evaluation

HEI RIOPA - Health Effect Institute: Relationship of Indoor, Outdoor and Personal Air (personal exposure)

NYSDOH Fuel Oil - Data collected from homes heated by fuel oil

**TABLE 18
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCs) DETECTED IN INDOOR AIR AND OUTDOOR AIR SAMPLES**

**Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York**

Sample ID	Inside Air 1	Inside Air 2	Outside Air 1	Trip Blank 1	NYSDOH Air Guideline Values (ug/m ³)	NYSDOH Fuel Oil 2003 Upper Fence Limit (ug/m ³)(1)		USEPA BASE Data 90% Percentile Value (ug/m ³) (1)		HEI RIOPA 2005 95% Percentile Value (ug/m ³) (1)	
	722387	722388	722389	722400		Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor
Lab ID	722387	722388	722389	722400							
Sampling Date	8/29/2007	8/29/2007	8/29/2007	8/29/2007							
Matrix	Air	Air	Air	Air							
Unit	ug/m ³	ug/m ³	ug/m ³	ug/m ³							
VOCs - Compound Name											
Acetone	ND	ND	ND	ND	NA	115	30	98.9	43.7	45.8	19.6
Benzene	0.89	0.80	0.48	ND	NA	13	4.8	9.4	6.6	10	5.16
Bromodichloromethane	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Bromoethene	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Bromoform	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Bromomethane	ND	ND	ND	ND	NA	0.5	0.5	1.7	1.6	NA	NA
1,3-Butadiene	0.24	0.18	ND	ND	NA	NA	NA	3	3.4	NA	NA
2-Butanone (MEK)	ND	ND	ND	ND	NA	16	0.5	12	11.3	NA	NA
Carbon Disulfide	ND	ND	ND	ND	NA	NA	NA	4.2	3.7	NA	NA
Carbon tetrachloride	0.45	0.43	0.39	ND	NA	1.3	1.2	<1.3	0.7	1.1	1
Chlorobenzene	ND	ND	ND	ND	NA	0.4	NA	<0.9	<0.8	NA	NA
Chloroethane	ND	ND	ND	ND	NA	0.4	0.4	<1.1	<1.2	NA	NA
Chloroform	0.25	0.24	ND	ND	NA	1.2	0.5	1.1	0.6	6.34	0.76
Chloromethane	ND	ND	ND	ND	NA	4.2	4.3	3.7	3.7	NA	NA
3-Chloropropene	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
2-Chlorotoluene	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Cyclohexane	0.38	0.31	0.21	ND	NA	6.3	0.9	NA	NA	NA	NA
Dibromochloromethane	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	ND	ND	ND	ND	NA	0.4	0.4	1.5	1.6	NA	NA
1,2-Dichlorobenzene	ND	ND	ND	ND	NA	0.5	0.4	<1.3	<1.2	NA	NA
1,3-Dichlorobenzene	ND	ND	ND	ND	NA	0.5	0.4	<2.4	<2.2	NA	NA
1,4-Dichlorobenzene	ND	ND	ND	ND	NA	1.2	0.5	5.5	1.2	344	3.66
Dichlorodifluoromethane (Freon 12)	2.3	2.3	2.2	ND	NA	NA	NA	16.5	8.1	NA	NA
1,1-Dichloroethane	ND	ND	ND	ND	NA	0.4	NA	<0.7	<0.6	NA	NA
1,2-Dichloroethane	ND	ND	ND	ND	NA	0.4	0.4	<0.9	<0.8	NA	NA
1,1-Dichloroethene	ND	ND	ND	ND	NA	0.4	0.4	<1.4	<1.4	NA	NA
1,2-Dichloroethene (total)	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
cis-1,2-Dichloroethene	ND	ND	ND	ND	NA	0.4	0.4	<1.9	<1.2	NA	NA
trans-1,2-Dichloroethene	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	ND	ND	ND	ND	NA	0.4	0.4	<1.6	<1.6	NA	NA
Cis-1,3-Dichloropropane (total)	ND	ND	ND	ND	NA	0.4	0.4	2.3	2.2	NA	NA
1,2-Dichlorotetrafluoroethane (Freon 114)	ND	ND	ND	ND	NA	0.4	0.5	NA	NA	NA	NA
1,4-Dioxane	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	1.1	0.83	0.36	ND	NA	6.4	1	5.7	3.5	7.62	3.04
4-Ethyltoluene	1.2	0.59	0.26	ND	NA	NA	NA	3.6	3	NA	NA
n-Heptane	1.3	0.86	0.57	ND	NA	18	4.5	NA	NA	NA	NA
Hexachlorobutadiene	ND	ND	ND	ND	NA	0.5	0.5	6.8	6.4	NA	NA
n-Hexane	3.1	1.7	0.81	ND	NA	14	2.2	10.2	6.4	NA	NA
Isopropyl Alcohol	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA

**TABLE 18
SUMMARY OF VOLATILE ORGANIC COMPOUNDS (VOCs) DETECTED IN INDOOR AIR AND OUTDOOR AIR SAMPLES**

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Sample ID	Inside Air 1	Inside Air 2	Outside Air 1	Trip Blank 1	NYSDOH Air Guideline Values (ug/m3)	NYSDOH Fuel Oil 2003 Upper Fence Limit (ug/m3) (1)		USEPA BASE Data 90% Percentile Value (ug/m3) (1)		HEI/RIOPA 2005 95% Percentile Value (ug/m3) (1)	
	722387	722388	722389	722400		Indoor	Outdoor	Indoor	Outdoor	Indoor	Outdoor
Lab ID	722387	722388	722389	722400							
Sampling Date	8/29/2007	8/29/2007	8/29/2007	8/29/2007							
Matrix	Air	Air	Air	Air							
Unit	ug/m3	ug/m3	ug/m3	ug/m3							
Methylene Chloride	6.6	3.8	ND	ND	60	16	1.6	10	6.1	7.5	2.46
Methyl Butyl Ketone	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
Methyl Isobutyl Ketone (MIBK)	ND	ND	ND	ND	NA	1.9	0.5	NA	NA	NA	NA
Methyl-tert-butyl ether (MTBE)	ND	ND	ND	ND	NA	14	NA	11.5	6.2	36	22.1
Styrene	ND	ND	ND	ND	NA	1.4	0.5	1.9	1.3	5.13	1.29
Tertiary butyl alcohol (TBA)	ND	ND	ND	ND	NA	NA	NA	NA	NA	NA	NA
1,1,2,2 - Tetrachloroethane	ND	ND	ND	ND	NA	0.4	0.4	NA	NA	NA	NA
Tetrachloroethylene (PCE)	6.4	ND	ND	ND	100	2.5	0.7	15.9	6.5	6.01	3.17
Tetrahydrofuran	ND	ND	ND	ND	NA	0.8	0.4	NA	NA	NA	NA
Toluene	4.9	3.8	1.7	ND	NA	57	5.1	43	33.7	39	NA
Trans-1,3-Dichloropropene	ND	ND	ND	ND	NA	NA	NA	1.3	1.4	NA	NA
1,2,4 - Trichlorobenzene	ND	ND	ND	ND	NA	0.5	0.4	6.8	6.4	NA	NA
1,1,1 - Trichloroethane	ND	ND	ND	ND	NA	2.5	0.6	20.6	2.6	NA	NA
1,1,2 - Trichloroethane	ND	ND	ND	ND	NA	0.4	0.3	1.5	1.6	NA	NA
1, 1, 2-Trichloro-1,2,2-trifluoroethane (Freon 113, Freon TF)	ND	ND	ND	ND	NA	NA	NA	3.5	1.6	NA	NA
Trichloroethene (TCE)	0.43	ND	ND	ND	5	0.5	0.4	4.2	1.3	1.36	0.79
Trichlorofluoromethane (Freon 11)	1.3	1.2	1.1	ND	NA	NA	NA	18.1	4.3	NA	NA
1,2,4 - Trimethylbenzene	ND	ND	ND	ND	NA	9.8	1.9	9.5	5.8	NA	NA
1,3,5 - Trimethylbenzene	0.59	0.25	ND	ND	NA	3.9	0.7	3.7	2.7	NA	NA
2,2,4-Trimethylpentane	1.4	1.2	0.79	ND	NA	NA	NA	NA	NA	NA	NA
Vinyl Chloride	ND	ND	ND	ND	NA	0.4	0.4	<1.9	<1.8	NA	NA
Xylene (m,p)	3.6	2.3	0.91	ND	NA	11	1	22.2	12.8	22.2	10
Xylene (o)	1.3	0.78	0.36	ND	NA	7.1	1.5	7.9	4.6	7.24	3.23

Note:

ug/m3 - micrograms per cubic meter of air

ND - Analyte not detected at reporting limit

NA - Not Available

(1) - As per Appendix C of the Final NYSDOH Guidance document.

Bold - Concentration Detected Above Reporting Limit

BASE - building assessment and survey evaluation

HEI/RIOPA - Health Effect Institute: Relationship of Indoor, Outdoor and Personal Air (personal exposure)

NYSDOH Fuel Oil - Data collected from homes heated by fuel oil

*Remedial Investigation Report
175 Roger Avenue
Inwood, New York*

**APPENDIX A
Boring Logs**

ATC Associates Inc. 104 East 25 th Street New York, NY 10010 212-353-8280		Client: Cargo Ventures Project Number: 015.75316.0005 Task Number: 0001		Boring No.: SB-4 Boring location: See Figure 4
Driller: HydoTech Geologist: John Mascioli Groundwater Observations: GW at ~ 7 feet		Project Location: 175 Roger Avenue Type: Geoprobe Macrocore Size: 2-inch		Date: 7/16/07
Depth	Sample Identification	Recovery (ft.)	PID Reading	Field Identification of Soil and Observations
0				0-4" Asphalt
				4"-1'1" No recovery
			0.0	1'1" - 4' Dark brown fine SAND, little GRAVEL
		N/A Hand Cleared to 5' bgs		4'-5' Brown fine SAND, some GRAVEL
5				5'-5'4" No Recovery
				5'4"-6' Dark brown fine SAND, some GRAVEL
				6'-6'10" Light brown fine SAND, little GRAVEL
	Sample SB-4 (7')	4'8"	0.0	6'-10"-7'8" Gray fine SAND and SILT
				7'8"-9'6" Gray SILT and CLAY
				9'6"-10' Dark gray SILT and CLAY
10				End of boring at 10 ftgs.

ATC Associates Inc. 104 East 25 th Street New York, NY 10010 212-353-8280			Client: Cargo Ventures	Boring No.: SB-8
Driller: HydroTech Geologist: John Mascioli			Project Location: 175 Roger Avenue	Boring location: See Figure 4
Groundwater Observations: GW at ~ 7 feet			Type: Geoprobe Macrocore Size: 2-inch	
Date: 7/16/07				
Depth	Sample Identification	Recovery (ft.)	PID Reading	Field Identification of Soil and Observations
0			0.0	0-4" Concrete
		N/A	0.5	4"-4'8" Dark brown fine SAND, some GRAVEL
		Hand Cleared to 5' bgs	0.2	4'8"-5' Brown fine SAND, some GRAVEL
5				5'-6'1" No recovery
			0.3	6'1"-6'4" Brown fine SAND, some GRAVEL
			0.8	6'4"-6'8" Dark brown fine SAND, some GRAVEL
		3'11"	0.7	6'8"-7'10" Brown fine SAND, little GRAVEL
	Sample SB-8 (8')		40.5	7'10"-9' Gray-black fine SAND, some SILT, little CLAY
10			1.5	9'-10' Gray SILT and CLAY
End of boring at 10 ft bgs.				

ATC Associates Inc.
 104 East 25th Street
 New York, NY 10010
 212-353-8280

Client: Cargo Ventures

Boring No.: SB-13

Project Number: 015.75316.0005
 Task Number: 0001

Boring location:
 See Figure 4

Driller: HydroTech
 Geologist: John Mascioli
 Groundwater Observations:
 GW at ~ 7 feet

Project Location:
 175 Roger Avenue

Date:
 7/17/07

Type: Geoprobe
 Macrocore Size: 2-inch

Depth	Sample Identification	Recovery (ft)	PID Reading	Field Identification of Soil and Observations
0		N/A Hand Cleared to 5' bgs	0.0	0-4" Concrete
4			7.5	4"-2'2" No recovery
			8.0	2'2"-2'6" Dark brown fine SAND, little GRAVEL
				2'6"-4' Brownish-red fine SAND, little GRAVEL
				4'-4'6" No recovery
			40.5	4'6"-7' Light brown fine SAND, trace GRAVEL
		3'6"	250	7-7'4" Black fine SAND, little CLAY (staining observed)
			40	7'4"-8' Gray SILT and CLAY
8				End of boring at 8 ftbgs.

ATC Associates Inc.
 104 East 25th Street
 New York, NY 10010
 212-353-8280

Client: Cargo Ventures

Boring No.: BW-1

Project Number: 015.75316.0005
 Task Number: 0001

Boring location:
 See Figure 3

Driller: HydroTech
 Geologist: John Mascioli

Project Location:
 175 Roger Avenue

Groundwater Observations:
 GW at ~ 7 feet

Type: Geoprobe
 Macrocore Size: 2-inch

Date:
 7/26/07

Depth	Sample Identification	Recovery (ft.)	PID Reading	Field Identification of Soil and Observations
0				0-4" Asphalt
				4"-1'6" No recovery
		2'6"	0.0	1'6"-4' Dark brown fine SAND, trace fine-med GRAVEL
4				
		4'	0.0	4'-7' Brown fine SAND, little fine-med GRAVEL
8				
		4'	0.0	7'-12' Light brown fine SAND, trace fine-med GRAVEL
12				
				End of boring at 12 ftbgs.

ATC Associates Inc.

104 East 25th Street
 New York, NY 10010
 212-353-8280

Client: Cargo Ventures

Boring No.: BW-3

Project Number: 015.75316.0005
 Task Number: 0001

Boring location:
 See Figure 3

Driller: HydroTech

Geologist: John Mascioli

Project Location:
 175 Roger Avenue

Groundwater Observations:
 GW at ~ 7 feet

Type: Geoprobe

Macrocore Size: 2-inch

Date:
 7/26/07

Depth	Sample Identification	Recovery (ft)	PID Reading	Field Identification of Soil and Observations
0				0-4" Concrete
				4"-2" No recovery
		2'2"		
			0.0	2'2"-3'9" Dark brown fine SAND
4				
		4'		3'9"-7'1" Brown fine SAND, some fine-med GRAVEL
			0.0	
				7'1"-11'6" Gray fine SAND, little SILT, little fine-med GRAVEL
8				
		4'		
			0.0	11'6"-12'9" Light brown fine SAND
12				
		4'		
			0.0	12'9"-16' Brown fine SAND, little SILT
16				
				End of boring at 16 ftlbs.

ATC Associates Inc.
 104 East 25th Street
 New York, NY 10010
 212-353-8280

Client: Cargo Ventures

Boring No.: DW-1

Project Number: 015.75316.0005
 Task Number: 0001

Boring location:
 See Figure 3

Driller: HydroTech
 Geologist: John Mascioli

Project Location:
 175 Roger Avenue

Groundwater Observations:
 GW at ~ 7 feet

Type: Geoprobe
 Macrocore Size: 2-inch

Date:
 7/30/07

Depth	Sample Identification	Recovery (ft.)	PID Reading	Field Identification of Soil and Observations
0				0-4" Concrete 4'-2'4" No recovery 2'-4"-3'-2" Dark brown fine SAND, little fine-med GRAVEL 3'-2"-4'-6" Brown fine SAND, some fine GRAVEL 4'-6"-5' Dark brown fine SAND, little GRAVEL 5'-5'-10" No recovery 5'-10"-6'-8" Brownish-red fine SAND 6'-8"-7'-4" Dark gray-black fine SAND, some fine-med GRAVEL
8	DW-1 8'-8.5'			7'-4"-12' Dark gray silt, some clay, some fine SAND 12'-12'-11" Dark gray SAND, some SILT 12'-11"-14'-1" Dark gray SILT, some CLAY, little fine-med GRAVEL 14'-1"-14'-4" Black fine SAND and fine-med GRAVEL 14'-4"-15' Brownish-red fine SAND and fine-med GRAVEL 15'-16'-1" Brownish-red fine SAND, some fine GRAVEL
16	DW-1 15'-15.5'	8'	3.5	16'-1"-17'-2" Grayish-brown fine SAND, some fine-med GRAVEL 17'-2"-19' Fine GRAVEL, little coarse GRAVEL 19'-20' Brown very fine SAND, some fine GRAVEL 20'-25' Grayish-brown fine SAND, some SILT, some CLAY
24	DW-1 22'-22.5'	8'	4.6	25'-27'-2" Brown fine SAND and SILT, some CLAY 27'-2"-30' Dark gray fine SAND and SILT, some CLAY
32	DW-1 27.5'-28'	8'	16.5	30'-35' Very dark gray fine SAND and SILT, some CLAY
40	DW-1 34'-34.5'	8'	15.5	35'-40' Dark gray CLAY End of boring at 40 ftigs. Note: Blind Sample collected at 34'-34.5' (labeled on COC: DW-1 5'-5.5')

ATC Associates Inc. 104 East 25 th Street New York, NY 10010 212-353-8280		Client: Cargo Ventures Project Number: 015.75316.0005 Task Number: 0001	Boring No.: DW-2 Boring location: See Figure 3	
Driller: HydroTech Geologist: John Mascioli		Project Location: 175 Roger Avenue		
Groundwater Observations: GW at ~ 7 feet		Type: Geoprobe Macrocore Size: 2-inch	Date: 7/30/07	
Depth	Sample Identification	Recovery (ft)	PID Reading	Field Identification of Soil and Observations
0			0.0	0'-4" Concrete 4"-3' No recovery 3'-3'10" Dark brown fine SAND, little fine-med GRAVEL 3'10"-5' Brown fine SAND, little fine-med GRAVEL 5'-7'2" No recovery 7'2"-9'6" Brownish-red fine SAND, some fine-med GRAVEL
8	DW-2.7.5'-8"	3'2"	0.0	9'6"-10' Brown fine SAND, trace fine GRAVEL 10'-12'4" Brown fine SAND and fine GRAVEL 12'4"-14'6" Gray SILT and CLAY 14'6"-15' Brownish-red fine SAND and fine GRAVEL, trace course GRAVEL 15'-16' Brownish-red fine SAND, little fine-med GRAVEL
16			0.0	16'-17' Fine GRAVEL, trace course GRAVEL 17'-19'8" Brown fine SAND, little fine GRAVEL 19'8"-20' Brownish-red fine SAND, little fine-med GRAVEL 20'-25' Brown fine SAND, some SILT and CLAY
24	DW-2.22.5'-23"		0.0	
		8'	0.0	25'-28'4" Dark gray fine SAND and SILT, some CLAY 28'4"-30' Dark gray fine SAND, some SILT, trace CLAY
32	DW-2.34'-34.5"		0.0	30'-35' Dark gray fine SAND, some CLAY 35'-40' Dark gray CLAY
40		8'	0.0	End of boring at 40 ftbgs.

ATC Associates Inc. 104 East 25 th Street New York, NY 10010 212-353-8280			Client: Cargo Ventures	Boring No.: BD-3
Driller: HydoTech Geologist: John Mascioli			Project Number: 015.75316.0005 Task Number:	Boring location: See Figure
Groundwater Observations: GW ~ 7'			Type: Geoprobe Macrocore Size: 2-inch	Date: 6/03/2008
Depth	Sample Identification	Recovery (ft.)	PID Reading	Field Identification of Soil and Observations
0		13'		0-4" Concrete
				4"-3' No recovery
4		3'	0.2	3'-5' Brown fine SAND, trace fine-course GRAVEL
				5'-7' No recovery
8			0.2	7'-8" Light Brown fine SAND
			0.1	8"-10' Grayish-brown SANDY SILT
12			0.1	10'6"-13' Grayish-brown SANDY SILT, trace fine-med GRAVEL
			0	13'-16' Brownish-gray fine SAND, some fine-med GRAVEL
16		4'	0	16'-17'8" Grayish-brown fine SAND and fine-course GRAVEL
			0	17'8"-20'6" Reddish-brown fine SAND, trace fine-med GRAVEL.
20				20'6"-25'4" Brown SANDY SILT
24		4'	0	
			3.5	25'4"-28'6" Dark gray SANDY SILT, little CLAY
28		4'		
	BD-3 (30' bags)	4'	5	28'6"-30' Dark gray SILTY SAND
32			1.5	30'-36' Gray SANDY SILT, little sea shells
36		4'	0.1	36'-40' Dark gray CLAY
40				End of boring at 40' bgs
44				

ATC Associates Inc.
 104 East 25th Street
 New York, NY 10010
 212-353-8280

Client:
 Cargo Ventures

Boring No.: BD-4

Project Number: 015.75316.0005
 Task Number:

Boring location:
 See Figure

Driller: HydroTech
 Geologist: John Mascioji
 Groundwater Observations:
 GW ~ 6'

Project Location:
 175 Roger Avenue

Date: 5/30/2008

Type: Geoprobe
 Macrocore Size: 2-inch

Depth	Sample Identification	Recovery (ft.)	PID Reading	Field Identification of Soil and Observations
0		3.3'		0-4" Concrete 4"-2.6" No recovery
4		4'	0.2	2'6"-3'2" Very dark brown fine-med SAND, little fine-med GRAVEL
			0.1	3'2"-3'11" Light brown fine SAND, little seal shells
			0.2	3'11"-4'8" Very dark brown fine SAND, trace fine-med GRAVEL
			0.2	4'8"-5'6" Reddish-brown fine-med SAND, little fine-med GRAVEL
8		4'	0.2	5'6"-6'6" Brown fine SAND
			0.1	6'6"-8'6" Brownish-gray SAND and SILT, little CLAY
			0.3	8'6"-9'2" Reddish-brown fine-med SAND, trace SILT and GRAVEL
12		4'	0.1	9'2"-10' Fine-coarse GRAVEL and fine-med SAND
			1	10'-11' Gray SANDY SILT, little CLAY
			2.5	11'-13' Reddish brown-gray SILTY CLAY
16		4'	6	13'-15' Gray fine SAND and fine-coarse GRAVEL
			3.5	15'-15'8" Gray fine SAND
			3	15'8"-16'8" Fine-coarse GRAVEL
20		4'	15	16'8"-18'2" Dark gray fine SAND, some fine-med GRAVEL
	BD-4 (18" bgs)		8	18'2"-20'6" Reddish-brown-gray fine SAND
24		4'	1	20'6"-25' Brown SILT, little CLAY
28		4'	1	25'-27'4" Brown fine SAND and SILT, some CLAY
32		2'	0.5	27'4"-30' Dark gray fine SAND, some CLAY
36		3.75'	0.1	30'-35' Very dark gray fine SANDY SILT, some CLAY
40		4'	0.5	35'40' Dark gray CLAY
44				End of boring at 40' bgs

ATC Associates Inc.
 104 East 25th Street
 New York, NY 10010
 212-353-8280

Client:
 Cargo Ventures
 Project Number: 015.75316.0005
 Task Number:

Boring No.: BD-5
 Boring location:
 See Figure

Driller: HydroTech
 Geologist: John Mascioli
 Groundwater Observations:
 GW ~ 7'

Project Location:
 175 Roger Avenue

Date: 5/27/2008, 5/28/2008

Type: Geoprobe
 Macrocore Size: 2-inch

Depth	Sample Identification	Recovery (ft.)	PID Reading	Field Identification of Soil and Observations
0		3.5'	4	0-6" Concrete 6"-1' No recovery
4		4'	4	1'-5' Brownish-red fine-med SAND, trace fine-course GRAVEL
8	BD-5 (7" bgs)	4'	3.5	5'-5'-6" Brownish-red fine-med SAND and fine-course GRAVEL 5'6"-7' Brownish-red fine-med SAND, trace fine-course GRAVEL
12		4'	0	7'-10" Brown fine-med SAND, trace fine-med GRAVEL 10"-11'2" Brown fine-med SAND, trace SILT and fine GRAVEL
16		4'	0	11'2"-11'8" Brownish-red fine SAND and fine-med GRAVEL 11'8"-12'4" Brownish-red fine SAND, trace fine-med GRAVEL 12'4"-15'8" Grayish-brown CLAY, some SILT
20		4'	0	15'8"-19" Brown fine-med SAND and med-course GRAVEL 19"-20" Brownish-red fine-med SAND, trace fine GRAVEL
24		4'	0	20'-27'6" Brownish-red fine SAND
28		4'	0	27'6"-30" Brownish-red fine SAND, little CLAY
32		4'	0	30'-35'-8" Dark gray SILTY fine SAND, trace CLAY, little sea shells
36		4'	0	35'8"-40" Dark gray CLAY
40				End of boring at 40' bgs
44				

ATC Associates Inc.
 104 East 25th Street
 New York, NY 10010
 212-353-8280

Client:
 Cargo Ventures

Boring No.: BD-6

Project Number: 015.75316.0005
 Task Number:

Boring location:
 See Figure

Driller: HydroTech
 Geologist: John Mascioli

Project Location:
 175 Roger Avenue

Groundwater Observations:
 GW ~ 8.5'

Date: 5/21/2008, 5/22/2008

Type: Geoprobe
 Macrocore Size: 2-inch

Depth	Sample Identification	Recovery (ft.)	PID Reading	Field Identification of Soil and Observations
0		3.5'	0.1 0.0	0'-6" Asphalt 6"-1' Med brown fine SAND 1'-3'6" Light brown fine SAND
4		3'		3'-6"-5' No recovery
8			0.0	5'-10' Light brown fine SAND
12		4'	0.0	10'-12' light brown fine-med SAND 12"-13' No recovery
16		3'	0.0	13'-16' Gray CLAY, some SILT, trace med GRAVEL
20		4'	2.0	16'-18'4" Yellowish-orange fine-med SAND and fine-med GRAVEL
24		4'	3.0	18'4"-20' Brownish-orange fine SAND, some fine GRAVEL
28		4'	6.5	20'-23' Light brown SILTY SAND, some light gray CLAY
32		4'	4.0	23'-24' Gray CLAY, some SILT
36		4'	14.5 18.0	24'-36' Dark gray SILTY CLAY
40	BD-6 (40' bgs)	4'	100	36'-36'4" Dark gray CLAY and SILT
44			125	36'4"-40' Dark gray CLAY End of boring at 40' bgs

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 212-353-8280

Client:
 Cargo Ventures

Boring No.: BD-7

Project Number: 015.75316.0005
 Task Number:

Boring location:
 See Figure

Driller: HydroTech
 Geologist: John Mascioli

Project Location:
 175 Roger Avenue

Groundwater Observations:
 GW ~ 7'

Type: Geoprobe

Date: 6/02/2008

Macrocore Size: 2-inch

Depth	Sample Identification	Recovery (ft.)	PID Reading	Field Identification of Soil and Observations
0		2.6'	0.2	0'-4" Asphalt 4"-2' No recovery 2'-3'6" Dark brown fine SAND, trace fine-med GRAVEL
4		4'	0.3	3'6"-11'2" Light brown fine SAND, trace fine-med GRAVEL
8	BD-7 (7' bgs)			
		4'	0.2	11'2"-12' Fine-course GRAVEL and fine reddish-brown SAND
12			0.1	12'-14' Grayish-brown SILTY CLAY
		4'	0.1	14'-15'3" Reddish-brown SAND and fine-med GRAVEL
16			0.1	15'3"-18'2" Reddish-brown fine SAND, some fine-course GRAVEL
		4'		
20			0.2	18'2"-25'6" Brown SANDY SILT
		4'		
24			0.1	25'6"-27' Gray SANDY SILT, little CLAY
		4'		
28			0.2	27'-30' Gray SANDY SILT and CLAY
		4'		
32			0.2	30'-35'4" Gray SILTY SAND, little sea shell
		4'		
36			0.1	35'4"-40' Dark gray CLAY
		4'		
40				End of boring at 40' bgs
44				

ATC Associates Inc.
 104 East 25th Street
 New York, NY 10010
 212-353-8280

Client:
 Cargo Ventures

Boring No.: MW-12R

Project Number: 015.75316.0005
 Task Number:

Boring location:
 See Figure

Driller: HydoTech
 Geologist: John Mascioli

Project Location:
 175 Roger Avenue

Date: 6/04/2008

Groundwater Observations:
 GW ~ 6'

Type: Geoprobe

Macrocore Size: 2-inch

Depth	Sample Identification	Recovery (ft.)	PID Reading	Field Identification of Soil and Observations
0		3.5'	0	0-4" Asphalt 4"-10" No recovery 10"-3'6" Reddish-brown fine SAND, some fine-med GRAVEL
4	MW-12R (6' bgs)	4'	0	3'6"-7' Light brown fine SAND, trace fine-med GRAVEL
8			0	7'-9" Grayish brown SANDY SILT
12		4'	0	9'-9"-10" Reddish-brown fine SAND and fine-coarse GRAVEL 9'10"-10'10" Brown fine SAND, little fine-med GRAVEL 10'10"-12" Grayish-brown SILTY CLAY, little fine SAND 12'-14" No recovery
16		2'	0	14'-16" Fine-med GRAVEL and fine reddish brown SAND 16'-17" No recovery
20		3'	0	17'-19" Reddish-brown fine SAND, trace fine-med GRAVEL
24		4'	0	19'-21" Grayish-brown SILTY SAND 21'-22" Gray SANDY SILT 22'-22'10" Reddish-brown SILTY SAND 22'10"-23'2" Reddish-brown fine SAND 23'2"-23'6" Gray SILTY SAND
28		4'	0	23'6"-27' Gray SILTY CLAY
32		4'	0	27'-29' Gray SANDY SILT
36		4'	0	29'-35' Gray SILTY CLAY
40				35'-36' Dark gray CLAY
44				End of boring at 36' bgs

ATC Associates Inc.
 104 East 25th Street
 New York, NY 10010
 212-353-8280

Client:
 Cargo Ventures
Project Number: 015.75316.0005
Task Number:

Boring No.: MW-17

Boring location:
 See Figure

Driller: HydroTech
Geologist: John Mascioli
Groundwater Observations:
 GW ~ 6.5'

Project Location:
 175 Roger Avenue

Date: 5/29/2008

Type: Geoprobe
Macrocore Size: 2-inch

Depth	Sample Identification	Recovery (ft.)	PID Reading	Field Identification of Soil and Observations
0		3.3'	0	0-8" Concrete 8"-1.4" No recovery
			0	1.4"-1.8" Brown fine SAND, trace fine GRAVEL
			0	1.8"-6' Light brown fine SAND, trace fine GRAVEL
4		4'	0	
	MW-17			
	(7' bgs)			
8		4'	0	6'-10'2" Brown fine SAND, trace fine GRAVEL
			0	10'2"-13' Brownish-red fine SAND and fine-course GRAVEL
12		4'	0	13'-16' Grayish-brown CLAY, little SILT
			0	16'-19' Reddish-brown SILTY CLAY, some fine-med GRAVEL
16		4'	0	19'-20' Fine-course GRAVEL and fine brown SAND
20		4'	0	20'-24'6" Dark brown SANDY SILT
			0	24'6"-29' Dark gray SILT, some CLAY
24		4'	0	
			0	29'-30' Dark gray CLAY
28		2'	0	30'-32'4" No recovery
			0	32'4"-36'4" Dark gray SILT, little CLAY
32		3.75'	0	
			0	36'4"-40' Dark gray CLAY
36		4'	0	
			0	
40			0	
			0	
44			0	

End of boring at 40' bgs

ATC Associates Inc.
 104 East 25th Street
 New York, NY 10010
 212-353-8280

Client:
 Cargo Ventures

Boring No.: MW-18

Project Number: 015.75316.0005
 Task Number:

Boring location:
 See Figure

Driller: HydroTech
 Geologist: John Mascioiti

Project Location:
 175 Roger Avenue

Groundwater Observations:
 GW ~ 6.5'

Type: Geoprobe
 Date: 5/29/2008

Macrocore Size: 2-inch

Depth	Sample Identification	Recovery (ft.)	PID Reading	Field Identification of Soil and Observations
0		3'	0	0-8" Concrete 8'-11'8" No recovery 1'8"-4'8" Med brown fine SAND, trace fine GRAVEL
4		4'	0	4'8"-7' Light brown fine SAND, trace fine GRAVEL
8	MW-21 (7' bgs)		0	7'-7'10" Redish brown fine SAND, little fine GRAVEL 7'10"-8'3" Very dark gray fine SAND
12		4'	0	8'3"-11' Gray SILTY SAND, some CLAY 11'-11'10" Fine-coarse GRAVEL and SAND
16		4'	0	11'10"-15'4" Gray fine SAND, trace fine-med GRAVEL 15'4"-18' Fine-coarse GRAVEL and fine brown SAND
20		4'	0	18'-20'5" Brown fine SAND, little fine GRAVEL 20'5"-20'10" Brown fine SAND
24		4'	0	20'10"-25'4" Brown SANDY SILT
28		4'	0	25'4"-30' Dark gray SANDY SILT, little fine SAND
32		4'	0	30'-33' Brown SANDY SILT
36		4'	0	33'-37' Gray SANDY SILT
40			0	37'-40' Dark gray CLAY
44				End of boring at 40' bgs

ATC Associates Inc.
 104 East 25th Street
 New York, NY 10010
 212-353-8280

Client:
 Cargo Ventures

Boring No.: MW-19

Project Number: 015.75316.0005
 Task Number:

Boring location:
 See Figure

Driller: HydroTech
 Geologist: John Mascioli
 Groundwater Observations:
 GW ~ 7'

Project Location:
 175 Roger Avenue

Date: 5/23/2008, 5/27/2008

Type: Geoprobe
 Macrocore Size: 2-inch

Depth	Sample Identification	Recovery (ft.)	PID Reading	Field Identification of Soil and Observations
0		0'		0-4" Asphalt
				4"-5" No recovery
4		3'	45	5'-6-8" Brown fine-med SAND
			240	6'-8"-7-8" Dark gray fine-med SAND
			125	7'-8"-8' Gray fine-med SAND, little SILT
8	MW-19 (7' bags)			8'-9" No recovery
			105	9'-9"-10" Gray SILTY SAND
		3'	55	9'-10"-10'6" Dark gray SILTY SAND
			40	10'6"-11' Gray fine-med SAND and med GRAVEL
			25	11'-12'5" Brownish-red SILTY SAND, some CLAY
			35	12'5"-14'2" Gray CLAY and SILT
12		4'		14'2"-16' Med-coarse GRAVEL and brown fine-med SAND
			7	16'-17'6" No recovery
			1	17'6"-18'2" Med-coarse GRAVEL and brown fine SAND
16		2.5'		18'2"-20' Grayish brown fine-med SAND, little fine GRAVEL
			1.5	20'-22'6" Dark brown SILTY SAND, little CLAY
			2	22'6"-24' SILTY CLAY, little brown fine SAND
20		4'	7.5	24'-25' Brown fine-med SAND and SILT
			20	25'-25'8" Brown SILTY CLAY
			30	25'8"-28'6" Dark gray SILTY CLAY
			40	28'6"-30' Gray fine-med SAND
24		4'		30'-32' Dark gray fine-med SAND, trace SILT
			20	32'-36' Dark gray SILTY SAND, some sea shells
			5	36'-40' Dark gray CLAY
28		4'		
			0	
32		4'		
36		4'		
40				End of boring at 40' bgs
44				

ATC Associates Inc.
 104 East 25th Street
 New York, NY 10010
 212-353-8280

Client:
 Cargo Ventures

Boring No.: MW-20

Project Number: 015.75316.0005
 Task Number:

Boring location:
 See Figure

Driller: HydoTech
 Geologist: John Mascioli
 Groundwater Observations:
 GW ~ 6.5'

Project Location:
 175 Roger Avenue

Date: 5/22/2008

Type: Geoprobe
 Macrocore Size: 2-inch

Depth	Sample Identification	Recovery (ft.)	PID Reading	Field Identification of Soil and Observations
0		2.75'	9	0-6" Asphalt 6"-1'10" No recovery
4		4'	12.5	1'10"-5' Brown fine-med SAND, some fine GRAVEL 5'-8' Light brown fine-med SAND, trace fine GRAVEL
8		3'	15	8'-9' No recovery 9'-11'2" Light brown fine SAND, trace fine GRAVEL
12	MW-20 (12' bgs)	4'	50 25	11'2"-12' Brownish-gray fine-med SAND, some fine-med GRAVEL 12'-12'6" Brownish-gray fine-med SAND, trace fine GRAVEL
16		4'	13.5 35 10	12'6"-15' Brownish-gray CLAY, trace SILT 15'-17' Fine-coarse GRAVEL and fine brown SAND 17'-19'2" Brown fine-med SAND, some fine-med GRAVEL
20		4'	12	19'2"-20' SILTY CLAY, trace fine-med GRAVEL
24		4'	15	20'-25'10" Brown SILTY SAND, some CLAY
28		4'	10.5	25'10"-32' Dark gray SILTY CLAY
32		4'	8	32'-34' Dark gray SILTY CLAY, little sea shells
36			8 9.5	34'-35'6" Dark gray SILTY CLAY 35'6"-36' Dark gray CLAY
40				End of boring at 36' bgs
44				

ATC Associates Inc.
 104 East 25th Street
 New York, NY 10010
 212-353-8280

Client:
 Cargo Ventures

Boring No.: MW-21

Project Number: 015.75316.0005
 Task Number:

Boring location:
 See Figure

Driller: HydroTech
 Geologist: John Mascioli
 Groundwater Observations:
 GW ~ 7'

Project Location:
 175 Roger Avenue

Date: 5/28/2008

Type: Geoprobe
 Macrocore Size: 2-inch

Depth	Sample Identification	Recovery (ft.)	PID Reading	Field Identification of Soil and Observations
0				0'-6" Concrete
		2.5'	0.5	6"-2' No recovery
			0.5	2'-3' Brown fine SAND, trace fine-med GRAVEL
			0.5	3'-3'10" Dark brown fine SAND, trace fine-med GRAVEL
4			0.5	3'10"-4'2" Dark brown fine SAND, trace fine GRAVEL
	MW-21 (7' bgs)	4'	1.5	4'2"-7' Med brown fine-med SAND, little fine-med GRAVEL
			1	7'-9' Brownish-red fine-med SAND, little fine-coarse GRAVEL
			0.5	9'-10'6" Grayish-brown fine SAND, little fine-coarse GRAVEL
			1	10'6"-11' Dark brown fine SAND, trace fine GRAVEL
12		4'	1	11'-13' Brown SILTY CLAY
			1	13'-16' Grayish-brown CLAY and SILT
16		4'	1	16'-17' Fine-coarse GRAVEL and fine-med brownish-red SAND
			1	17'-20' Brownish-red fine SAND, little fine-med GRAVEL
20		4'	1	20'-25'6" Brownish-red SILTY CLAY
			1.5	25'6"-39' Dark gray SILTY CLAY
24		4'		
28		4'		
32		4'		
36		4'		
40			1.5	39'-40' Dark gray CLAY
44				End of boring at 40' bgs

ATC Associates Inc.
 104 East 25th Street
 New York, NY 10010
 212-353-8280

Client: Cargo Ventures
 Boring No.: MW-22

Project Number: 015.75316.0005
 Task Number:
 Boring location:
 See Figure

Driller: HydroTech
 Geologist: John Mascioli
 Groundwater Observations:
 GW ~ 7.5'

Project Location:
 175 Roger Avenue
 Type: Geoprobe
 Date: 5/20/2008

Macrocore Size: 2-inch

Depth	Sample Identification	Recovery (ft.)	PID Reading	Field Identification of Soil and Observations
0		2.5'		0'-6" Asphalt 6"-2' No recovery 2'-3.3" Light - med brown fine SAND, trace med GRAVEL 3.3"-3.5" Light brown fine SAND, some med GRAVEL 3.5"-4" Medium brown fine SAND, trace med GRAVEL 4'-5" No recovery
4		3'		5'-8" Med brown fine SAND, trace SILT and med GRAVEL 8'-10'4" Med brown fine SAND, trace fine GRAVEL 10'4"-12' Light brown fine SAND 12'-13'3" No recovery 13'3"-13'8" Med brown very fine SAND, trace med GRAVEL and SILT 13'8"-14'2" Yellowish-orange fine-coarse SAND, some fine-coarse GRAVEL 14'2"-15' Brownish-gray SILTY CLAY
8	MW-22 (7.5' bgs)	4'		15'-17' Gray SILTY CLAY 17'-18" Yellowish-orange fine-coarse SAND, trace med GRAVEL 18'-19' Med brown very fine SAND, trace SILT 19'-20" No recovery 20'-22'6" Light brown SILTY SAND, some CLAY 22'6" - 23'6" Dark gray CLAY
12		2.75'		23'6"-24' No recovery
16		3'		24'-32' Dark gray SILTY CLAY
20		3.5'		32'-37' Dark gray SILTY SAND and CLAY
24		4'		37'-40' Dark gray CLAY
28		4'		
32		4'		
36		4'		
40				End of boring at 40' bgs
44				

*Remedial Investigation Report
175 Roger Avenue
Inwood, New York*

**APPENDIX B
BIOSCREEN AND BIOCHLOR
Model Results**

BIOCHLOR Natural Attenuation Decision Support System

Version 2.2
Excel 2000

175 Roger Avenue
Motts Basin
Run Name

Data Input Instructions:

- 115 → 1. Enter value directly...or
↑ or ↓ 2. Calculate by filling in gray cells. Press Enter, then **C**
0.02
(To restore formulas, hit "Restore Formulas" button)
Variable* → Data used directly in model.

Test if Biotransformation is Occurring → Natural Attenuation Screening Protocol

TYPE OF CHLORINATED SOLVENT:

Ethenes
Ethenes

1. ADVECTION

Seepage Velocity* Vs (ft/yr)
or
Hydraulic Conductivity K (cm/sec)
Hydraulic Gradient i (ft/ft)
Effective Porosity n (-)

2. DISPERSION

Alpha x* (ft)
(Alpha y) / (Alpha x)* (-)
(Alpha z) / (Alpha x)* (-)

3. ADSORPTION

Retardation Factor* → R
or
Soil Bulk Density, rho (kg/L)
Fraction Organic Carbon, foc (-)
Partition Coefficient Koc (L/kg) → (-)
PCE (L/kg) → (-)
TCE (L/kg) → (-)
VC (L/kg) → (-)
ETH (L/kg) → (-)
Common R (used in model)* =

4. BIOTRANSFORMATION

-1st Order Decay Coefficient*
Zone 1 (1/yr) ← half-life (yrs) Yield
PCE → TCE ←
TCE → DCE ←
DCE → VC ←
VC → ETH ←
Zone 2 (1/yr) ← half-life (yrs) HELP
PCE → TCE ←
TCE → DCE ←
DCE → VC ←
VC → ETH ←

5. GENERAL

Simulation Time* (yr)
Modeled Area Width* (ft)
Modeled Area Length* (ft)
Zone 1 Length* (ft)
Zone 2 Length* (ft) Zone 2= L - Zone 1

6. SOURCE DATA

TYPE: Continuous Spatially-Varying
Source Options
Source Thickness in Sat. Zone* (ft)
Width* (ft) Y1 Y2 Y3
Conc. (mg/L)* C1 C2 C3 k_s^* (1/yr)
PCE
TCE
DCE
VC
ETH

Vertical Plane Source: Determine Source Well Location and Input Solvent Concentrations



View of Plume Looking Down

Observed Centerline Conc. at Monitoring Wells

7. FIELD DATA FOR COMPARISON

	15.0	13.0	.037	.009	.033						
PCE Conc. (mg/L)	15.0	13.0	.037	.009	.033						
TCE Conc. (mg/L)	6.1	2.9	.81	.008	.015						
DCE Conc. (mg/L)	2.62	2.43	3.34	1.2	.1						
VC Conc. (mg/L)	0.1	.024	.26	.024	.015						
ETH Conc. (mg/L)											
Distance from Source (ft)	0	77	136	219	280						
Date Data Collected	1998										

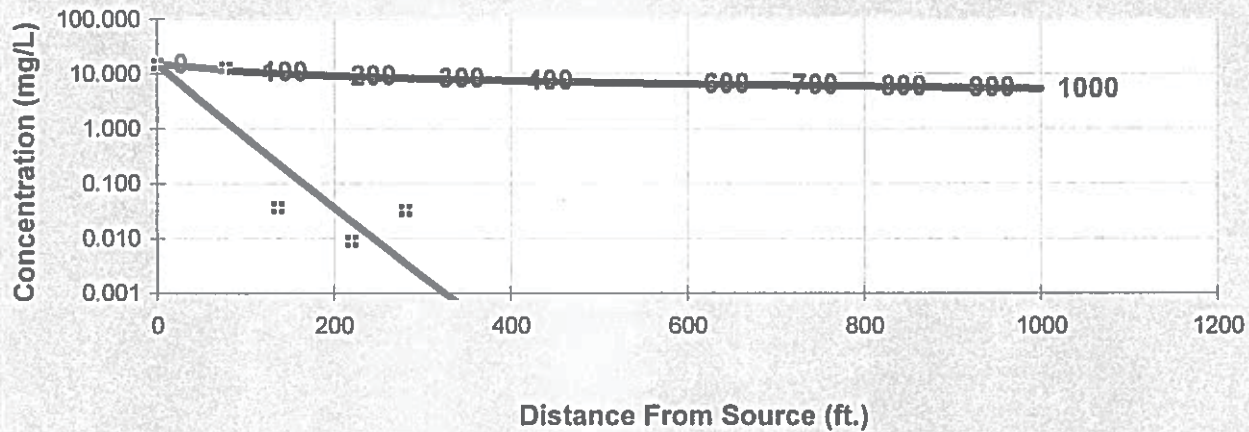
8. CHOOSE TYPE OF OUTPUT TO SEE:

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

PCE	Distance from Source (ft)										
	0	100	200	300	400	500	600	700	800	900	1000
No Degradation	15.000	10.971	9.226	8.238	7.547	7.015	6.585	6.222	5.904	5.613	5.332
Biotransformation	15.0000	0.696	0.037	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Field Data from Site	Monitoring Well Locations (ft)										
	0	77	136	219	280						
	15.000	13.000	0.037	0.009	0.033						

— No Degradation/Production
— Sequential 1st Order Decay
:: Field Data from Site



- [See PCE](#)
- [See TCE](#)
- [See DCE](#)
- [See VC](#)
- [See ETH](#)

[Prepare Animation](#)

Time:

[Return to Input](#)

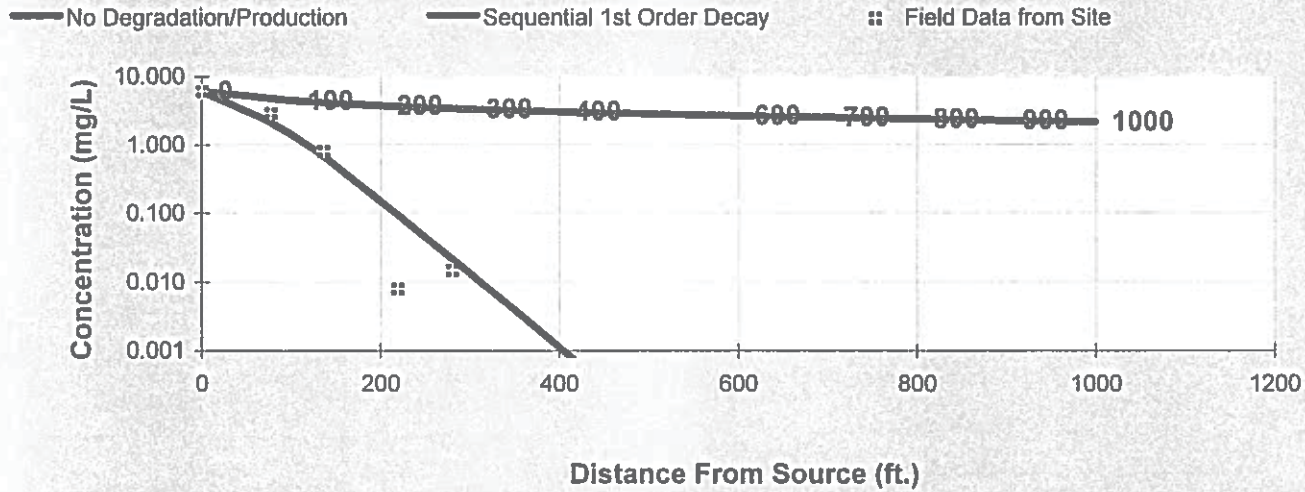
[To All](#)

[To Array](#)

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

TCE	Distance from Source (ft)										
	0	100	200	300	400	500	600	700	800	900	1000
No Degradation	6.100	4.458	3.749	3.348	3.067	2.852	2.677	2.529	2.400	2.282	2.168
Biotransformation	6.1000	1.447	0.152	0.014	0.001	0.000	0.000	0.000	0.000	0.000	0.000

Field Data from Site	Monitoring Well Locations (ft)										
	0	77	136	219	280						
Field Data from Site	6.100	2.900	0.810	0.008	0.015						



- [See PCE](#)
- [See TCE](#)
- [See DCE](#)
- [See VC](#)
- [See ETH](#)

Prepare Animation

Time:

Log Linear

Return to Input

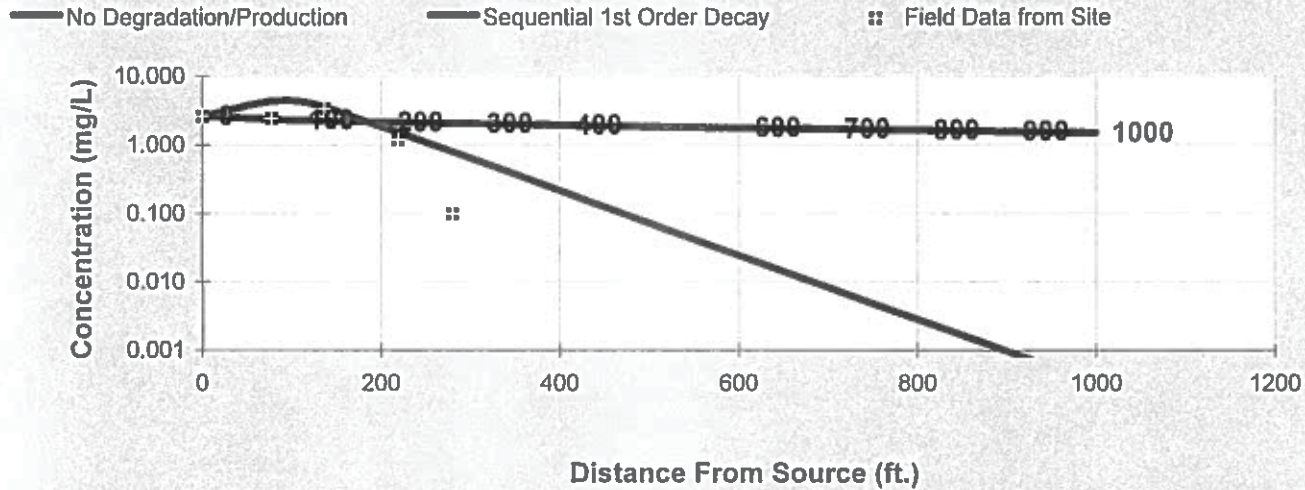
To All

To Array

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

DCE	Distance from Source (ft)										
	0	100	200	300	400	500	600	700	800	900	1000
No Degradation	2.624	2.282	2.142	2.039	1.944	1.857	1.777	1.703	1.635	1.568	1.501
Biotransformation	2.6240	4.431	1.840	0.642	0.216	0.073	0.025	0.008	0.003	0.001	0.000

Field Data from Site	Monitoring Well Locations (ft)										
	0	77	136	219	280						
Field Data from Site	2.620	2.430	3.340	1.200	0.100						



- [See PCE](#)
- [See TCE](#)
- [See DCE](#)
- [See VC](#)
- [See ETH](#)

[Prepare Animation](#)

Time:

 Log \longleftrightarrow Linear

[Return to Input](#)

[To All](#)

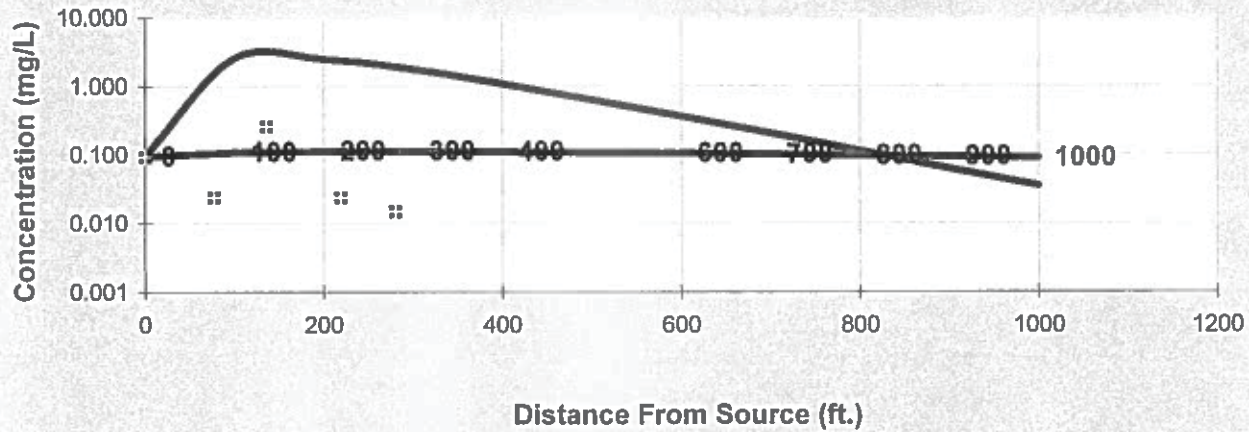
[To Array](#)

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

VC	Distance from Source (ft)										
	0	100	200	300	400	500	600	700	800	900	1000
No Degradation	0.094	0.109	0.113	0.113	0.111	0.108	0.104	0.101	0.097	0.094	0.090
Biotransformation	0.0940	2.552	2.520	1.767	1.093	0.639	0.364	0.204	0.114	0.063	0.035

Field Data from Site	Monitoring Well Locations (ft)										
	0	77	136	219	280						
Field Data from Site	0.094	0.024	0.260	0.024	0.015						

No Degradation/Production
 Sequential 1st Order Decay
 Field Data from Site



- See PCE
- See TCE
- See DCE
- See VC
- See ETH

Prepare Animation

Time:

 Log Linear

Return to Input

To All

To Array

BIOCHLOR Natural Attenuation Decision Support System

Version 2.2
Excel 2000

175 Roger Avenue
Channel
Run Name

Data Input Instructions:

- 115 → 1. Enter value directly....or
↑ or ↓ 2. Calculate by filling in gray cells. Press Enter, then **C**
0.02
(To restore formulas, hit "Restore Formulas" button)
Variable* → Data used directly in model.

TYPE OF CHLORINATED SOLVENT:

Ethenes
Ethanes

1. ADVECTION

Seepage Velocity* Vs (ft/yr)
Hydraulic Conductivity K (cm/sec)
Hydraulic Gradient i (ft/ft)
Effective Porosity n (-)

2. DISPERSION

Alpha x* (ft)
(Alpha y) / (Alpha x)* (-)
(Alpha z) / (Alpha x)* (-)

3. ADSORPTION

Retardation Factor*
Soil Bulk Density, rho (kg/L)
Fraction Organic Carbon, foc (-)
Partition Coefficient Koc
PCE (L/kg) (-)
TCE (L/kg) (-)
DCE (L/kg) (-)
VC (L/kg) (-)
ETH (L/kg) (-)
Common R (used in model)* =

4. BIOTRANSFORMATION

-1st Order Decay Coefficient*
Zone 1
PCE → TCE half-life (yrs) Yield
TCE → DCE half-life (yrs) Yield
DCE → VC half-life (yrs) Yield
VC → ETH half-life (yrs) Yield
Zone 2
PCE → TCE half-life (yrs)
TCE → DCE half-life (yrs)
DCE → VC half-life (yrs)
VC → ETH half-life (yrs)

5. GENERAL

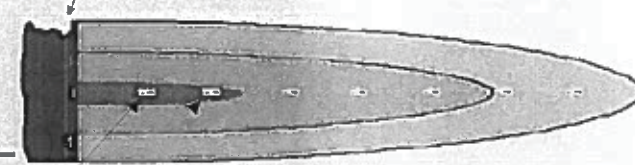
Simulation Time* (yr)
Modeled Area Width* (ft)
Modeled Area Length* (ft)
Zone 1 Length* (ft)
Zone 2 Length* (ft)
Zone 2 = L - Zone 1

6. SOURCE DATA

Source Options TYPE: Decaying Spatially-Varying
Source Thickness in Sat. Zone* (ft)
Width* (ft)
Conc. (mg/L)* C1 C2 C3 (1/yr)
PCE 15.0 5.747 3.492 0
TCE 6.1 2.323 1.426 0
DCE 2.624 1.790 1.799 0
VC .094 0.129 0.133 0
ETH

Test if Biotransformation is Occurring → Natural Attenuation Screening Protocol

Vertical Plane Source: Determine Source Well Location and Input Solvent Concentrations



View of Plume Looking Down

Observed Centerline Conc. at Monitoring Wells

7. FIELD DATA FOR COMPARISON

Conc. (mg/L)	15.0	13.0	.037	.009	.033						
PCE Conc. (mg/L)	15.0	13.0	.037	.009	.033						
TCE Conc. (mg/L)	6.1	2.9	.81	.008	.015						
DCE Conc. (mg/L)	2.62	2.43	3.34	1.2	.1						
VC Conc. (mg/L)	0.1	.024	.26	.024	.015						
ETH Conc. (mg/L)											
Distance from Source (ft)	0	77	136	219	280						
Date Data Collected	1998										

8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE

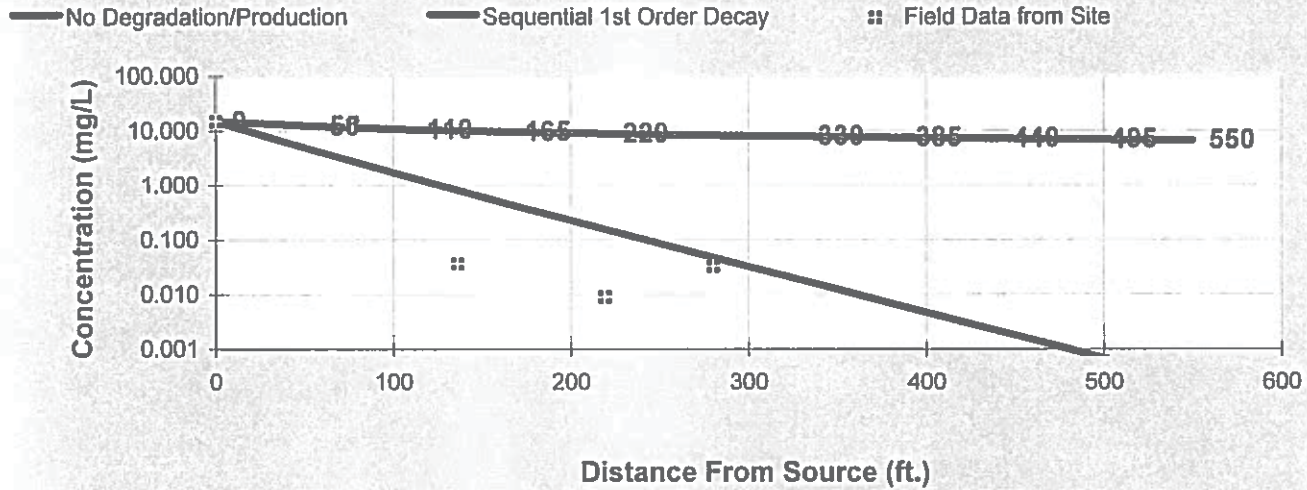
RUN ARRAY

Help Restore Formulas RESET
SEE OUTPUT Paste Example

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

PCE	Distance from Source (ft)										
	0	55	110	165	220	275	330	385	440	495	550
No Degradation	15.000	12.464	10.728	9.703	8.992	8.449	8.009	7.639	7.320	7.041	6.793
Biotransformation	15.0000	4.529	1.416	0.466	0.157	0.054	0.018	0.006	0.002	0.001	0.000

Field Data from Site	Monitoring Well Locations (ft)										
	0	77	136	219	280						
	15.000	13.000	0.037	0.009	0.033						



- [See PCE](#)
- [See TCE](#)
- [See DCE](#)
- [See VC](#)
- [See ETH](#)

[Prepare Animation](#)

Time:

 Log Linear

[Return to Input](#)

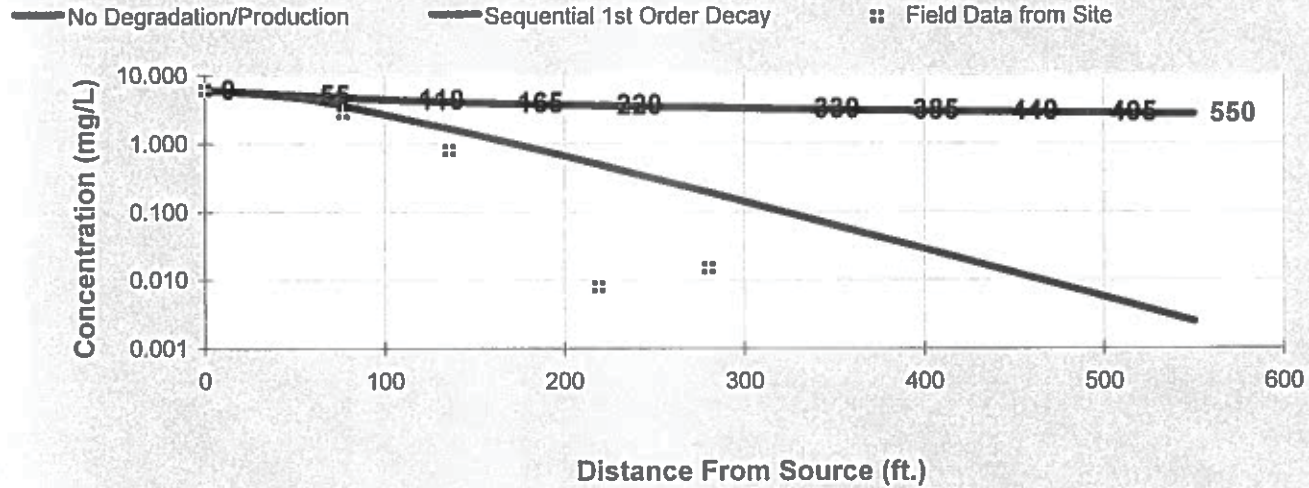
[To All](#)

[To Array](#)

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

		Distance from Source (ft)										
TCE		0	55	110	165	220	275	330	385	440	495	550
No Degradation		6.100	5.066	4.359	3.942	3.654	3.433	3.255	3.105	2.975	2.862	2.761
Biotransformation		6.1000	4.652	2.398	1.121	0.498	0.214	0.090	0.037	0.015	0.006	0.002

		Monitoring Well Locations (ft)										
Field Data from Site		0	77	136	219	280						
		6.100	2.900	0.810	0.008	0.015						



- [See PCE](#)
- [See TCE](#)
- [See DCE](#)
- [See VC](#)
- [See ETH](#)

[Prepare Animation](#)

Time:

 Log Linear

[Return to Input](#)

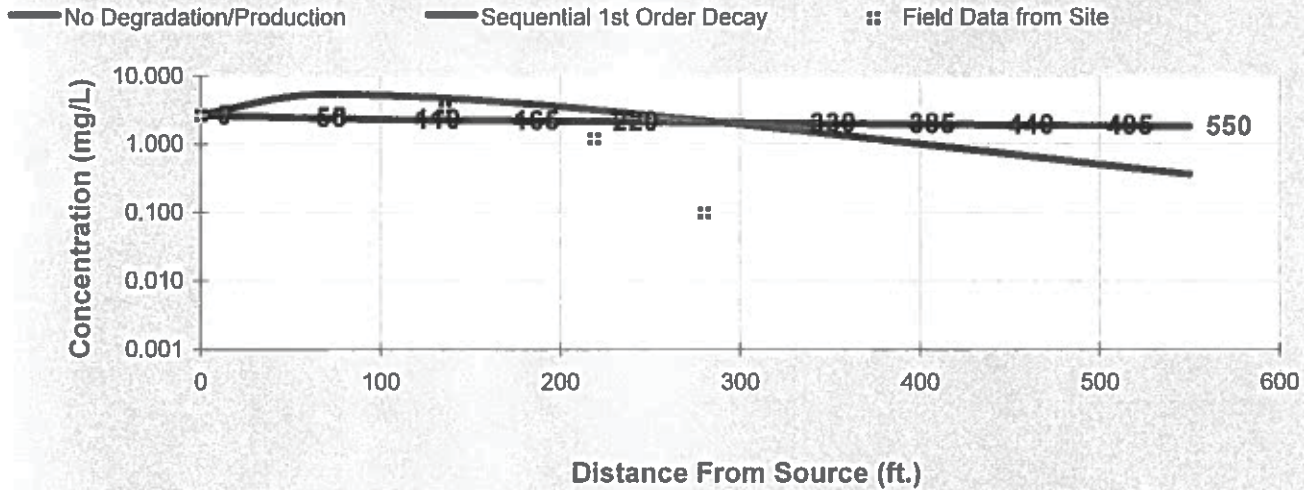
[To All](#)

[To Array](#)

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

		Distance from Source (ft)										
DCE		0	55	110	165	220	275	330	385	440	495	550
No Degradation		2.624	2.401	2.263	2.183	2.121	2.064	2.010	1.958	1.908	1.861	1.817
Biotransformation		2.6240	5.148	5.077	4.170	3.147	2.270	1.597	1.109	0.764	0.525	0.360

		Monitoring Well Locations (ft)										
		0	77	136	219	280						
Field Data from Site		2.620	2.430	3.340	1.200	0.100						



- [See PCE](#)
- [See TCE](#)
- [See DCE](#)
- [See VC](#)
- [See ETH](#)

Prepare Animation

Time:

Log Linear

Return to Input

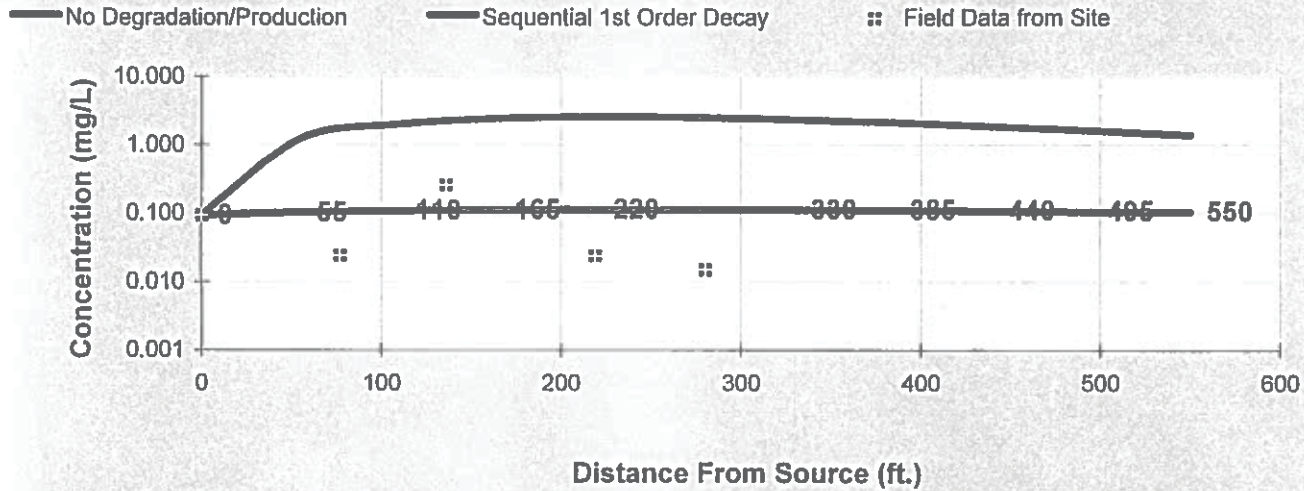
To All

To Array

DISSOLVED CHLORINATED SOLVENT CONCENTRATIONS ALONG PLUME CENTERLINE (mg/L) at Z=0

VC	Distance from Source (ft)										
	0	55	110	165	220	275	330	385	440	495	550
No Degradation	0.094	0.103	0.110	0.113	0.114	0.114	0.113	0.111	0.110	0.108	0.106
Biotransformation	0.0940	1.225	2.031	2.481	2.636	2.584	2.409	2.171	1.911	1.654	1.414

Field Data from Site	Monitoring Well Locations (ft)										
	0	77	136	219	280						
	0.094	0.024	0.260	0.024	0.015						



- [See PCE](#)
- [See TCE](#)
- [See DCE](#)
- [See VC](#)
- [See ETH](#)

[Prepare Animation](#)

Time:

 Log Linear

[Return to Input](#)

[To All](#)

[To Array](#)

BIOSCREEN Natural Attenuation Decision Support System

Air Force Center for Environmental Excellence

Version 1.4

175 Roger Avenue
Motts Basin
Run Name

Data Input Instructions:

115
↑ or
0.02

1. Enter value directly...or
 2. Calculate by filling in grey cells below. (To restore formulas, hit button below).
- Variable* → Data used directly in model.
20 → Value calculated by model. (Don't enter any data).

1. HYDROGEOLOGY

Seepage Velocity* Vs (ft/yr)
or
Hydraulic Conductivity K (cm/sec)
Hydraulic Gradient i (ft/ft)
Porosity n (-)

2. DISPERSION

Longitudinal Dispersivity alpha x (ft)
Transverse Dispersivity* alpha y (ft)
Vertical Dispersivity* alpha z (ft)
or
Estimated Plume Length Lp (ft)

3. ADSORPTION

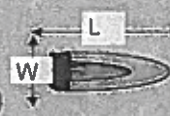
Retardation Factor* R (-)
or
Soil Bulk Density rho (kg/l)
Partition Coefficient Koc (L/kg)
Fraction Organic Carbon foc (-)

4. BIODEGRADATION

1st Order Decay Coeff* lambda (per yr)
or
Solute Half-Life t-half (year)
or **Instantaneous Reaction Mode**
Delta Oxygen* DO (mg/L)
Delta Nitrate* NO3 (mg/L)
Observed Ferrous Iron* Fe2+ (mg/L)
Delta Sulfate* SO4 (mg/L)
Observed Methane* CH4 (mg/L)

5. GENERAL

Modeled Area Length* (ft)
Modeled Area Width* (ft)
Simulation Time* (yr)



6. SOURCE DATA

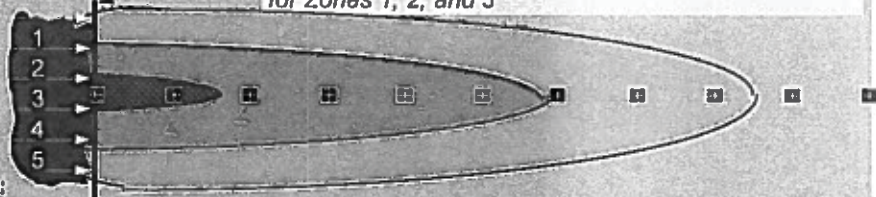
Source Thickness in Sat Zone (ft)

Source Zones:

Width* (ft)	Conc. (mg/L)*
40	4.04
40	17.7
40	124.6
40	17.7
40	4.04

Source Half-life (see Help):
Infinite Infinite (yr)
Inst. React. 1st Order
Soluble Mass Infinite (Kg)
In Source NAPL, Soil

Vertical Plane Source: Look at Plume Cross-Section and Input Concentrations & Widths for Zones 1, 2, and 3



View of Plume Looking Down

Observed Centerline Concentrations at Monitoring Wells
If No Data Leave Blank or Enter "0"

7. FIELD DATA FOR COMPARISON

Concentration (mg/L)	124.6	72.1	.11	.0									
Dist. from Source (ft)	0	31	154	295	395	495	595	695	795	895	995		

8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE

RUN ARRAY

View Output

View Output

Help

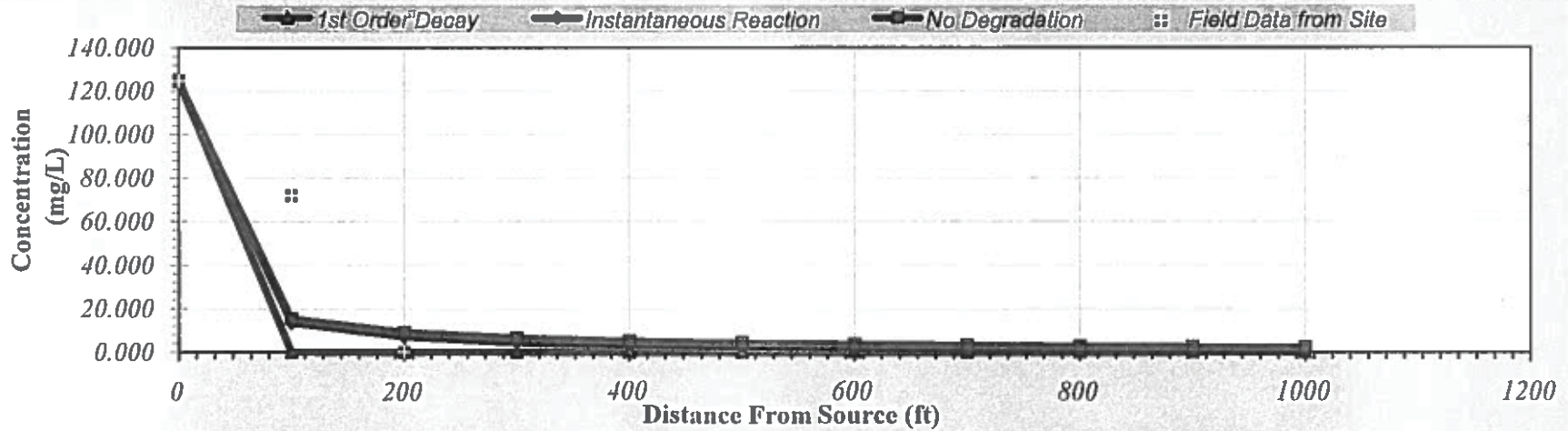
Recalculate This Sheet

Paste Example Dataset

Restore Formulas for Vs, Dispersivities, R, lambda, other

DISSOLVED HYDROCARBON CONCENTRATION ALONG PLUME CENTERLINE (mg/L at Z=0)

TYPE OF MODEL	Distance from Source (ft)										
	0	100	200	300	400	500	600	700	800	900	1000
No Degradation	124.600	15.274	8.897	6.366	4.987	4.112	3.504	3.056	2.712	2.438	2.215
1st Order Decay	124.600	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inst. Reaction	124.600	13.305	6.826	4.249	2.842	1.947	1.325	0.865	0.511	0.229	0.000
Field Data from Site	124.600	72.100	0.110								



Time:

BIOSCREEN Natural Attenuation Decision Support System

Air Force Center for Environmental Excellence

Version 1.4

175 Roger Avenue

Channel

Run Name

Data Input Instructions:

115

↑ or

0.02

1. Enter value directly...or
 2. Calculate by filling in grey cells below. (To restore formulas, hit button below).
- Variable* → Data used directly in model.
- 20 → Value calculated by model. (Don't enter any data).

1. HYDROGEOLOGY

Seepage Velocity*	Vs	6.1	(ft/yr)
or		↑ nr	
Hydraulic Conductivity	K	2.3E+04	(cm/sec)
Hydraulic Gradient	i	0.0084	(ft/ft)
Porosity	n	0.25	(-)

2. DISPERSION

Longitudinal Dispersivity	alpha x	13.8	(ft)
Transverse Dispersivity*	alpha y	1.4	(ft)
Vertical Dispersivity*	alpha z	13.5	(ft)
or		↑ or	
Estimated Plume Length	Lp	300	(ft)

3. ADSORPTION

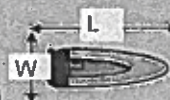
Retardation Factor*	R	1.9	(-)
or		↑ or	
Soil Bulk Density	rho	1.7	(kg/l)
Partition Coefficient	Koc	127	(L/kg)
Fraction Organic Carbon	foc	1.0E-3	(-)

4. BIODEGRADATION

1st Order Decay Coeff*	lambda	4.6E+0	(per.yr)
or		↑ nr	
Solute Half-Life	t-half	0.15	(year)
or Instantaneous Reaction Mode			
Delta Oxygen*	DO	2.99	(mg/L)
Delta Nitrate*	NO3	1.26	(mg/L)
Observed Ferrous Iron*	Fe2+	15	(mg/L)
Delta Sulfate*	SO4	2	(mg/L)
Observed Methane*	CH4	0	(mg/L)

5. GENERAL

Modeled Area Length*	550	(ft)
Modeled Area Width*	250	(ft)
Simulation Time*	1000	(yr)

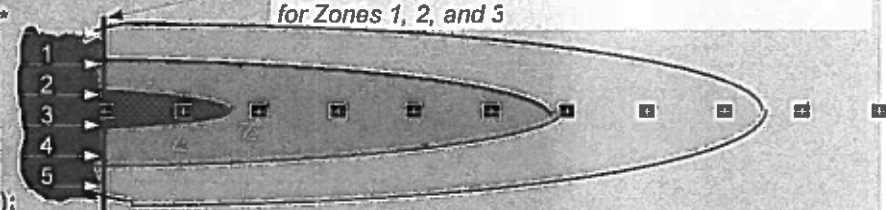


6. SOURCE DATA

Source Thickness in Sat. Zone 10 (ft)

Source Zones:

Width* (ft)	Conc. (mg/L)*
40	4.04
40	17.7
40	124.6
40	17.7
40	4.04



Vertical Plane Source: Look at Plume Cross-Section and Input Concentrations & Widths for Zones 1, 2, and 3

Source Halflife (see Help):

Infinite	Infinite	(yr)
Inst. React. ↑	1st Order	
Soluble Mass	Infinite	(Kg)
In Source NAPL, Soil		

View of Plume Looking Down

Observed Centerline Concentrations at Monitoring Wells
If No Data Leave Blank or Enter "0"

7. FIELD DATA FOR COMPARISON

Concentration (mg/L)	124.6	72.1	.11	.0								
Dist. from Source (ft)	0	31	154	295	350	405	460	515	570	625	680	

8. CHOOSE TYPE OF OUTPUT TO SEE:

RUN CENTERLINE

RUN ARRAY

View Output

View Output

Help

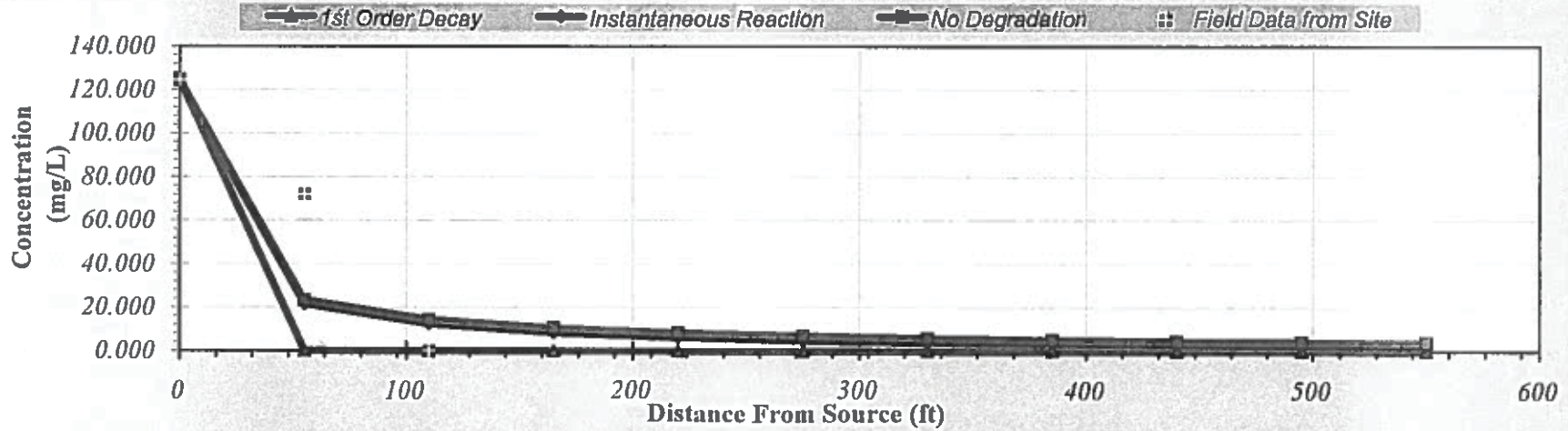
Recalculate This Sheet

Paste Example Dataset

Restore Formulas for Vs, Dispersivities, R, lambda, other

DISSOLVED HYDROCARBON CONCENTRATION ALONG PLUME CENTERLINE (mg/L at Z=0)

TYPE OF MODEL	Distance from Source (ft)										
	0	55	110	165	220	275	330	385	440	495	550
No Degradation	124.600	23.213	14.222	10.384	8.233	6.847	5.875	5.153	4.594	4.148	3.783
1st Order Decay	124.600	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Inst. Reaction	124.600	21.366	12.237	8.337	6.149	4.739	3.748	3.011	2.440	1.984	1.610
Field Data from Site	124.600	72.100	0.110								



Calculate Animation

Time:
1,000 Years

Return to Input

Recalculate This Sheet

**APPENDIX C
Tidal Influence Data
MW-15**

Summary of Ground Water Elevation Fluctuations at MW-15 with Tide Measured on August 9 through August 10, 2007

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Date	Time	Level-DTW (ft)	Pressure (PSI)	Temperature (°C)	Seconds	Tide Height
8/9/2007	12:34:22 PM	4.879	2.283	22.608	0	0.50 - Low Tide (12:16 PM)
8/9/2007	1:04:22 PM	4.885	2.280	22.566	1800.001	
8/9/2007	1:34:22 PM	4.877	2.283	22.559	3600.001	
8/9/2007	2:04:22 PM	4.872	2.285	22.553	5400.001	
8/9/2007	2:34:22 PM	4.862	2.289	22.570	7200.001	
8/9/2007	3:04:22 PM	4.840	2.289	22.551	9000.001	
8/9/2007	3:34:22 PM	4.827	2.305	22.530	10800.001	
8/9/2007	4:04:22 PM	4.805	2.314	22.529	12600.001	
8/9/2007	4:34:22 PM	4.784	2.324	22.509	14400.001	
8/9/2007	5:04:22 PM	4.753	2.337	22.495	16200.001	
8/9/2007	5:34:22 PM	4.736	2.344	22.496	18000.001	
8/9/2007	6:04:22 PM	4.725	2.349	22.488	19800.001	
8/9/2007	6:34:22 PM	4.714	2.354	22.482	21600.001	
8/9/2007	7:04:22 PM	4.705	2.358	22.480	23400.001	
8/9/2007	7:34:22 PM	4.705	2.358	22.487	25200.001	
8/9/2007	8:04:22 PM	4.707	2.357	22.486	27000.001	
8/9/2007	8:34:22 PM	4.714	2.354	22.493	28800.001	
8/9/2007	9:04:22 PM	4.722	2.350	22.501	30600.001	
8/9/2007	9:34:22 PM	4.735	2.345	22.504	32400.001	
8/9/2007	10:04:22 PM	4.746	2.340	22.521	34200.001	
8/9/2007	10:34:22 PM	4.761	2.333	22.537	36000.001	
8/9/2007	11:04:22 PM	4.773	2.328	22.547	37800.001	
8/9/2007	11:34:22 PM	4.786	2.323	22.559	39600.001	
8/10/2007	12:04:22 AM	4.807	2.314	22.574	41400.001	
8/10/2007	12:34:22 AM	4.823	2.307	22.588	43200.001	
8/10/2007	1:04:22 AM	4.842	2.298	22.599	45000.001	
8/10/2007	1:34:22 AM	4.853	2.294	22.609	46800.001	
8/10/2007	2:04:22 AM	4.858	2.291	22.605	48600.001	
8/10/2007	2:34:22 AM	4.853	2.284	22.607	50400.001	
8/10/2007	3:04:22 AM	4.846	2.287	22.613	52200.001	
8/10/2007	3:34:22 AM	4.833	2.302	22.607	54000.001	
8/10/2007	4:04:22 AM	4.820	2.308	22.600	55800.001	
8/10/2007	4:34:22 AM	4.800	2.317	22.599	57600.001	
8/10/2007	5:04:22 AM	4.791	2.321	22.594	59400.001	
8/10/2007	5:34:22 AM	4.781	2.325	22.587	61200.001	
8/10/2007	6:04:22 AM	4.767	2.331	22.583	63000.001	
8/10/2007	6:34:22 AM	4.732	2.346	22.574	64800.001	
8/10/2007	7:04:22 AM	4.749	2.339	22.578	66600.001	
8/10/2007	7:34:22 AM	4.734	2.345	22.576	68400.001	
8/10/2007	8:04:22 AM	4.725	2.349	22.580	70200.001	
8/10/2007	8:34:22 AM	4.725	2.349	22.575	72000.001	
8/10/2007	9:04:22 AM	4.728	2.348	22.581	73800.001	
8/10/2007	9:34:22 AM	4.733	2.346	22.589	75600.001	
8/10/2007	10:04:22 AM	4.741	2.342	22.594	77400.001	
8/10/2007	10:34:22 AM	4.750	2.338	22.602	79200.001	
8/10/2007	11:04:22 AM	4.767	2.331	22.618	81000.001	
8/10/2007	11:34:22 AM	4.710	2.356	22.625	82800.001	
8/10/2007	12:04:22 PM	4.635	2.388	22.642	84600.001	
8/10/2007	12:34:22 PM	4.578	2.413	22.640	86400.001	
						0.38 - Low Tide (1:12 PM)

Summary of Ground Water Elevation Fluctuations at MW-15 with Tide Measured on August 9 through August 10, 2007

Brownfield Remedial Investigation
175 Roger Avenue
Inwood, New York

Date	Time	Level-DTW (ft)	Pressure (PSI)	Temperature @	Seconds	Tide Height
8/9/2007	12:34:22 PM	4.879	2.283	22.608	0	0.50 - Low Tide (12:16 PM)
8/9/2007	1:04:22 PM	4.885	2.280	22.566	1800.001	
8/9/2007	1:34:22 PM	4.877	2.283	22.559	3600.001	
8/9/2007	2:04:22 PM	4.872	2.285	22.553	5400.001	
8/9/2007	2:34:22 PM	4.862	2.290	22.570	7200.001	
8/9/2007	3:04:22 PM	4.840	2.299	22.551	9000.001	
8/9/2007	3:34:22 PM	4.827	2.305	22.530	10800.001	
8/9/2007	4:04:22 PM	4.805	2.314	22.529	12600.001	
8/9/2007	4:34:22 PM	4.784	2.324	22.509	14400.001	
8/9/2007	5:04:22 PM	4.753	2.337	22.485	16200.001	
8/9/2007	5:34:22 PM	4.736	2.344	22.496	18000.001	6.24 - High Tide (6:14 PM)
8/9/2007	6:04:22 PM	4.725	2.349	22.488	19800.001	
8/9/2007	6:34:22 PM	4.714	2.354	22.482	21600.001	
8/9/2007	7:04:22 PM	4.705	2.358	22.480	23400.001	
8/9/2007	7:34:22 PM	4.705	2.358	22.487	25200.001	
8/9/2007	8:04:22 PM	4.707	2.357	22.486	27000.001	
8/9/2007	8:34:22 PM	4.714	2.354	22.493	28800.001	
8/9/2007	9:04:22 PM	4.722	2.350	22.501	30600.001	
8/9/2007	9:34:22 PM	4.735	2.345	22.504	32400.001	
8/9/2007	10:04:22 PM	4.746	2.340	22.521	34200.001	
8/9/2007	10:34:22 PM	4.761	2.333	22.537	36000.001	0.23 - Low Tide (1:18 AM)
8/9/2007	11:04:22 PM	4.773	2.328	22.547	37800.001	
8/9/2007	11:34:22 PM	4.786	2.323	22.559	39600.001	
8/10/2007	12:04:22 AM	4.807	2.314	22.574	41400.001	
8/10/2007	12:34:22 AM	4.823	2.307	22.588	43200.001	
8/10/2007	1:04:22 AM	4.842	2.298	22.589	45000.001	
8/10/2007	1:34:22 AM	4.853	2.294	22.609	46800.001	
8/10/2007	2:04:22 AM	4.858	2.291	22.605	48600.001	
8/10/2007	2:34:22 AM	4.853	2.294	22.607	50400.001	
8/10/2007	3:04:22 AM	4.846	2.297	22.613	52200.001	
8/10/2007	3:34:22 AM	4.833	2.302	22.607	54000.001	5.08 - High Tide (6:51 AM)
8/10/2007	4:04:22 AM	4.820	2.308	22.600	55800.001	
8/10/2007	4:34:22 AM	4.800	2.317	22.599	57600.001	
8/10/2007	5:04:22 AM	4.791	2.321	22.594	59400.001	
8/10/2007	5:34:22 AM	4.781	2.325	22.587	61200.001	
8/10/2007	6:04:22 AM	4.767	2.331	22.583	63000.001	
8/10/2007	6:34:22 AM	4.732	2.346	22.574	64800.001	
8/10/2007	7:04:22 AM	4.749	2.339	22.578	66600.001	
8/10/2007	7:34:22 AM	4.734	2.345	22.576	68400.001	
8/10/2007	8:04:22 AM	4.725	2.349	22.580	70200.001	
8/10/2007	8:34:22 AM	4.725	2.349	22.575	72000.001	0.38 - Low Tide (1:12 PM)
8/10/2007	9:04:22 AM	4.728	2.348	22.581	73800.001	
8/10/2007	9:34:22 AM	4.733	2.346	22.589	75600.001	
8/10/2007	10:04:22 AM	4.741	2.342	22.594	77400.001	
8/10/2007	10:34:22 AM	4.750	2.338	22.602	79200.001	
8/10/2007	11:04:22 AM	4.767	2.331	22.618	81000.001	
8/10/2007	11:34:22 AM	4.770	2.356	22.625	82800.001	
8/10/2007	12:04:22 PM	4.635	2.388	22.642	84600.001	
8/10/2007	12:34:22 PM	4.578	2.413	22.640	86400.001	

**APPENDIX D
Slug Test Data Evaluation**

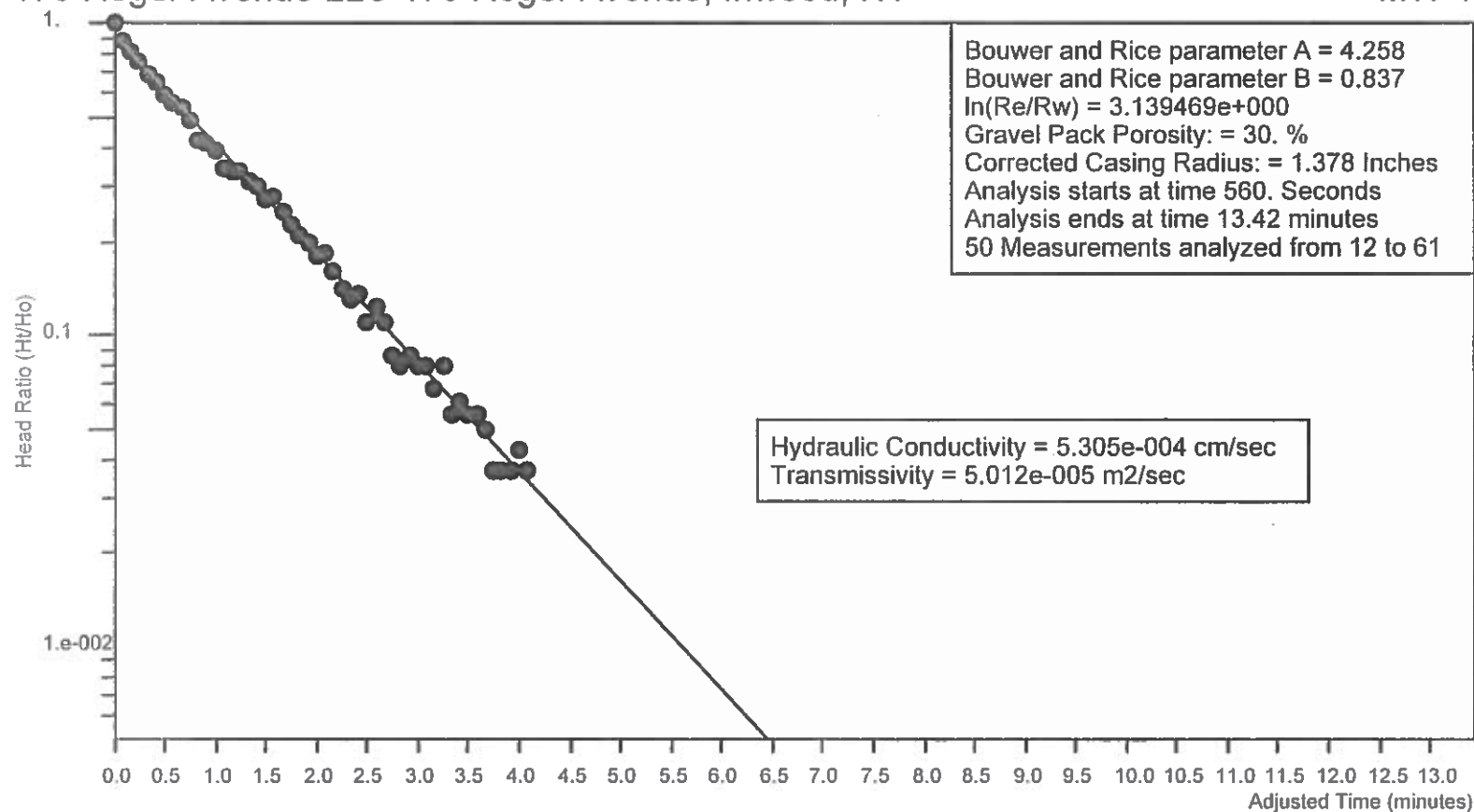


MW-1 Rising Head Slug Test August 9, 2007

175 Roger Avenue LLC 175 Roger Avenue, Inwood, NY

Bouwer and Rice Graph

MW-1



Project Number: 15.75316.0005 for 175 Roger Avenue LLC

Analysis by ATC Associates, Inc

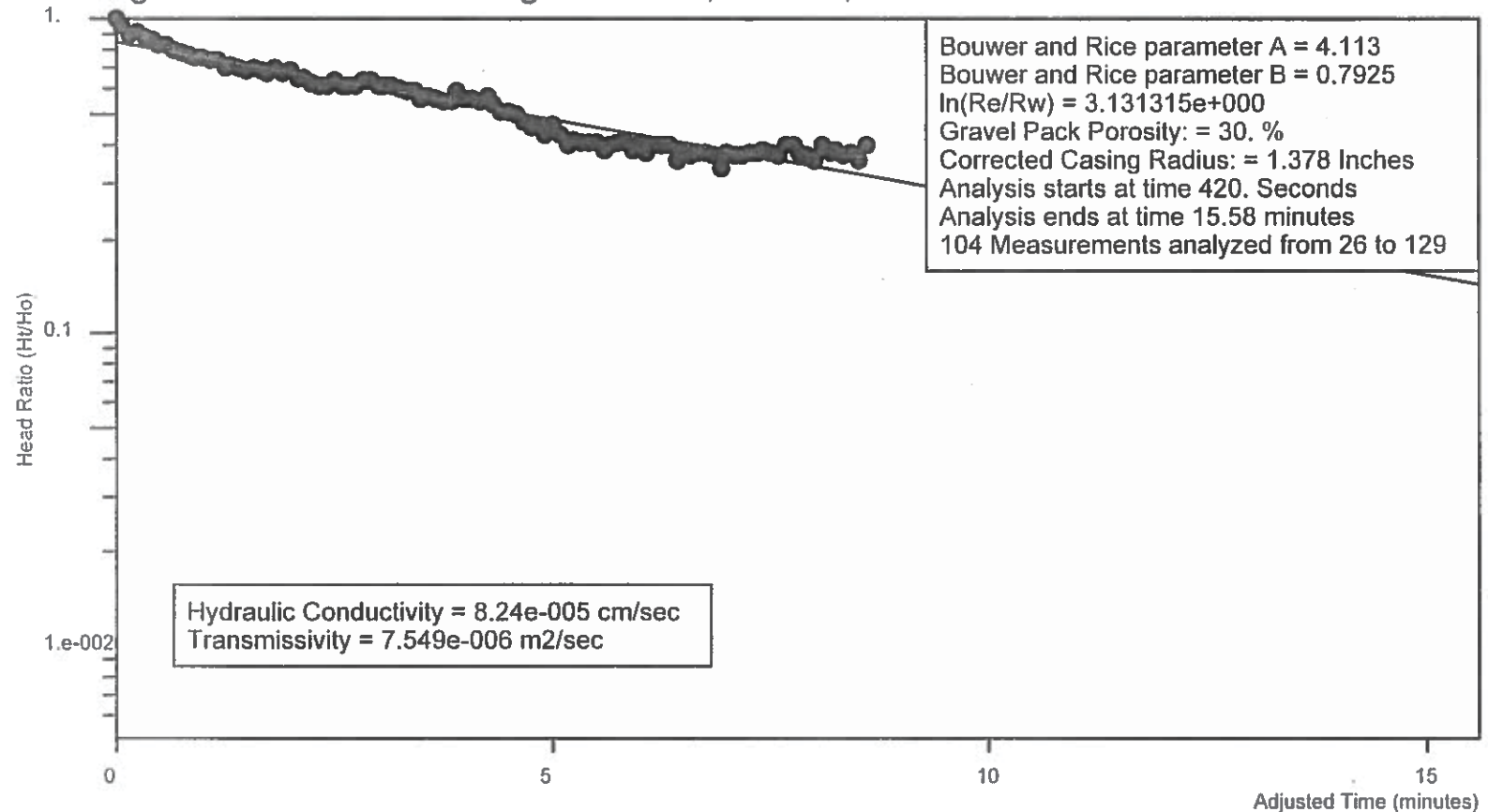
H_o is 0.162 feet at 560. Seconds

MW-3 Rising Head Slug Test August 9, 2007

Bouwer and Rice Graph

175 Roger Avenue LLC 175 Roger Avenue, Inwood, NY

MW-3



Project Number: 15.75316.0005 for 175 Roger Avenue LLC
Analysis by ATC Associates, Inc

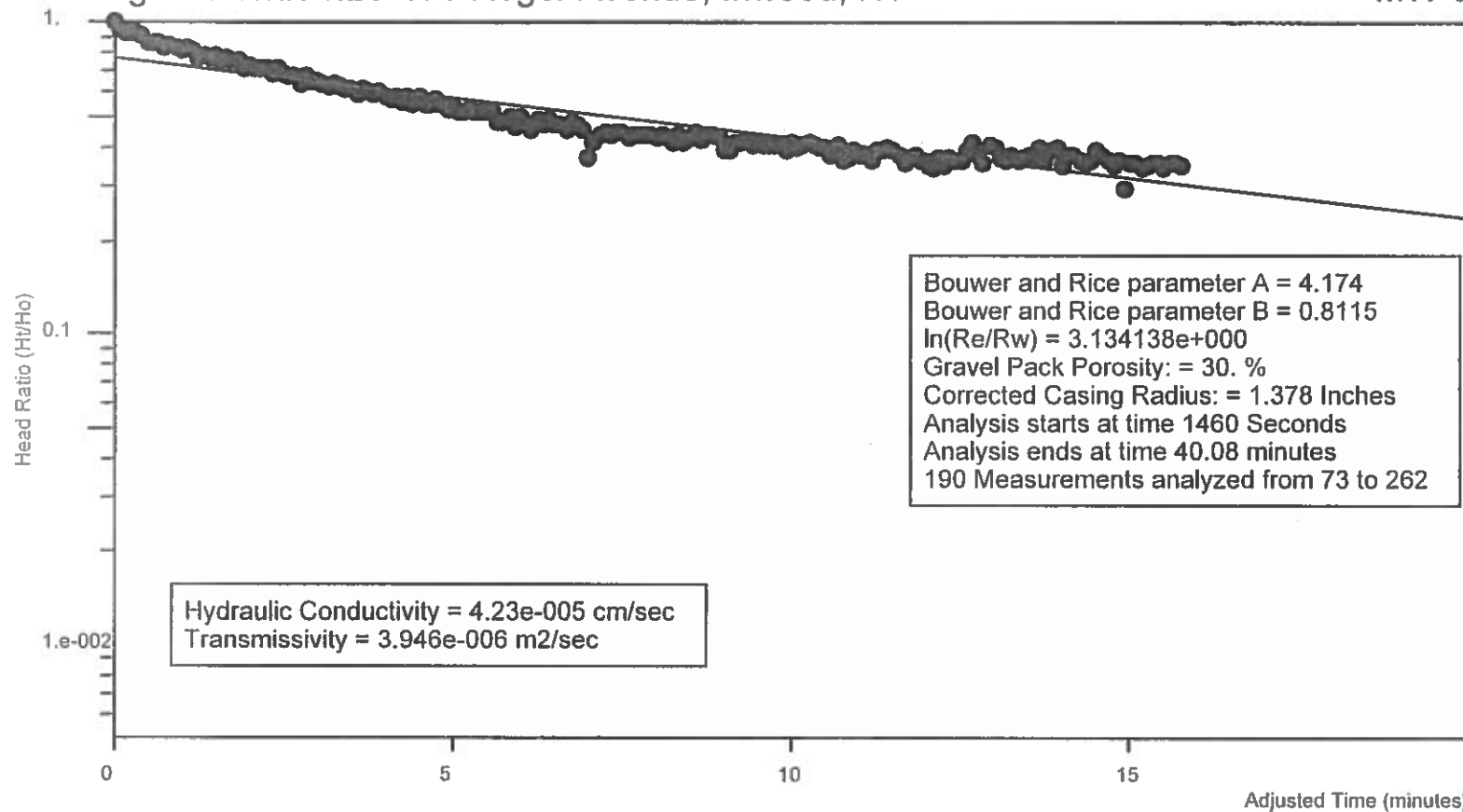
H_o is 0.106 feet at 420. Seconds

MW-9 Rising Head Slug Test August 9, 2007

Bouwer and Rice Graph

175 Roger Avenue LLC 175 Roger Avenue, Inwood, NY

MW-9



Project Number: 15.75316.0005 for 175 Roger Avenue LLC
Analysis by ATC Associates, Inc

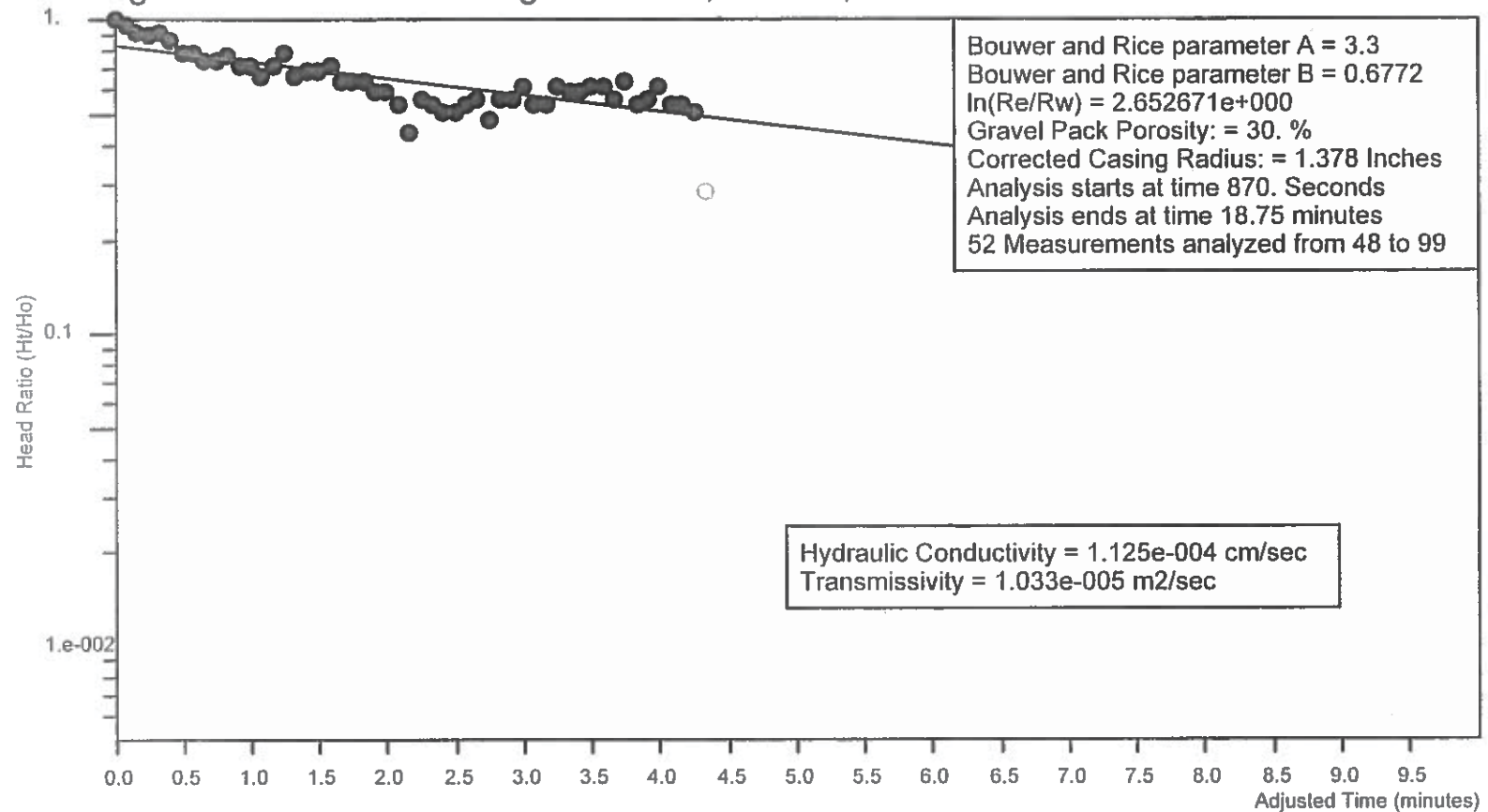
H_o is 0.126 feet at 1460 Seconds

MW-15 Rising Head Slug Test August 9, 2007

175 Roger Avenue LLC 175 Roger Avenue, Inwood, NY

Bouwer and Rice Graph

MW-15



Project Number: 15.75316.0005 for 175 Roger Avenue LLC
Analysis by ATC Associates, Inc

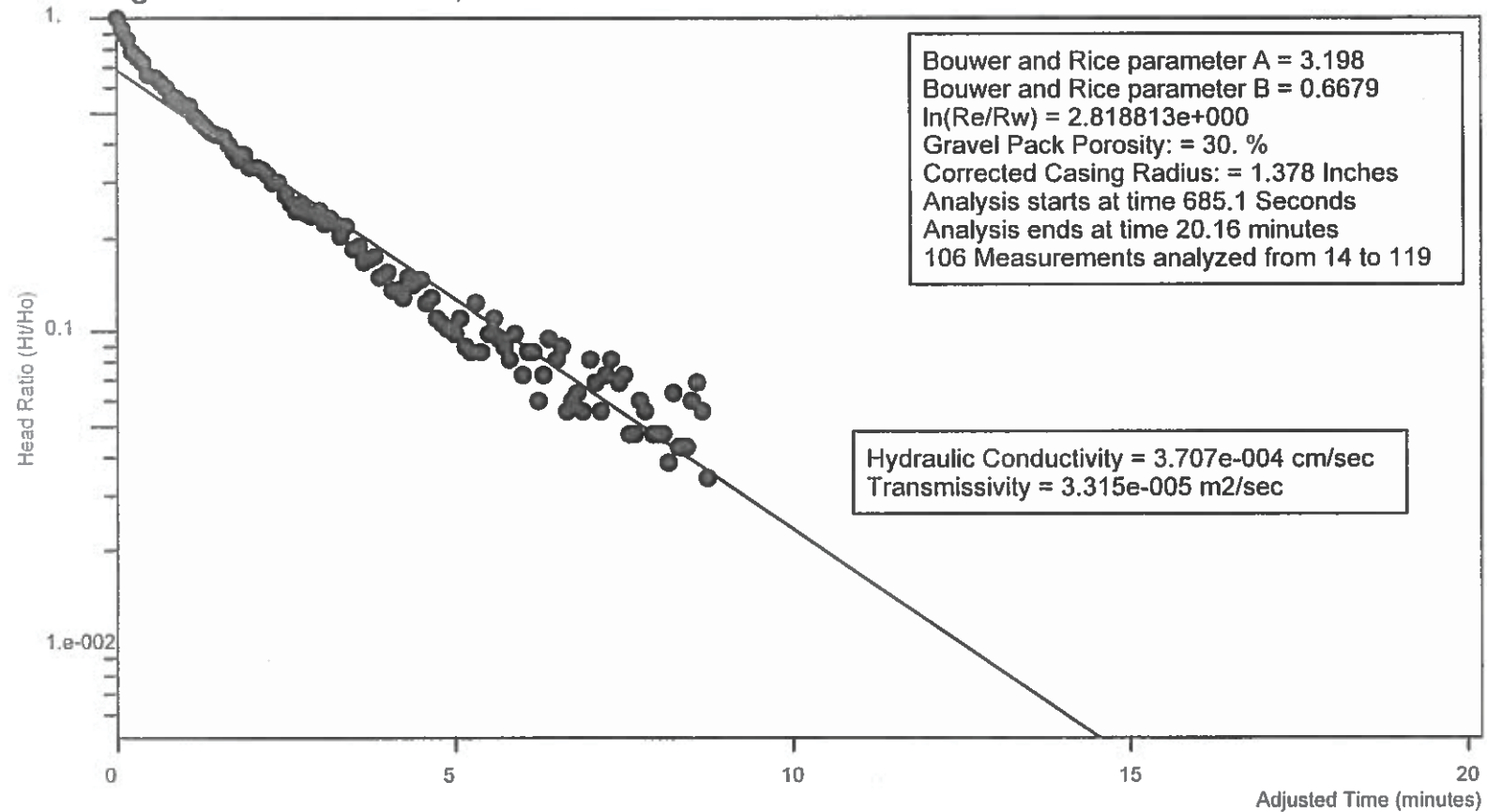
Ho is $3.9e-002$ feet at 870. Seconds

MW-7 Rising Head Slug Test June 26, 2008

175 Roger Avenue Inwood, NY

Bouwer and Rice Graph

MW-7



Project Number: 015.75316.0005 for 175 Roger Avenue LLC
Analysis by ATC Associates, Inc

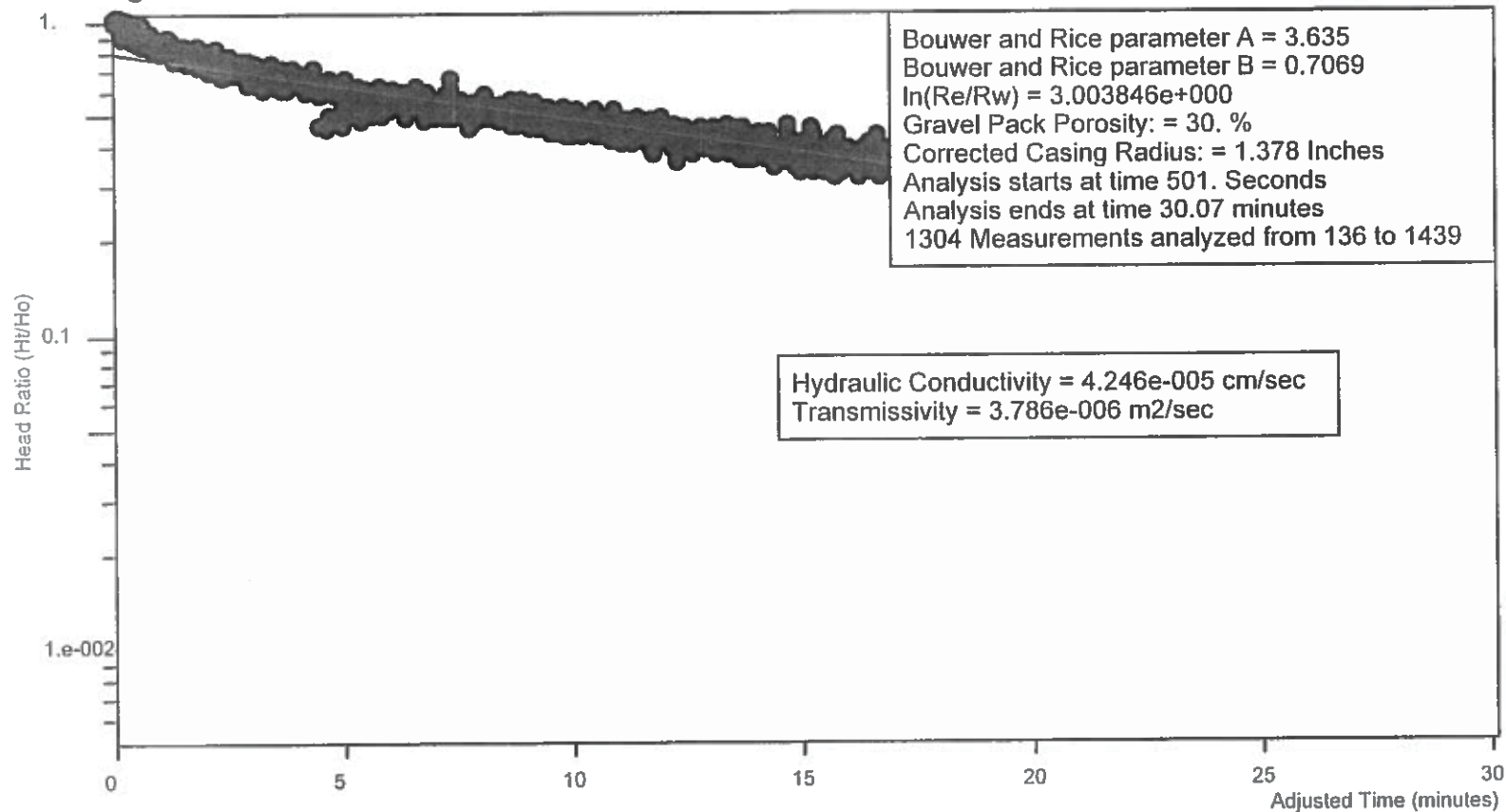
H_o is 0.234 feet at 685.1 Seconds

MW-19 Rising Head Slug Test June 26, 2008

175 Roger Avenue Inwood, NY

Bouwer and Rice Graph

MW-19



Project Number: 015.75316.0005 for 175 Roger Avenue LLC
Analysis by ATC Associates, Inc

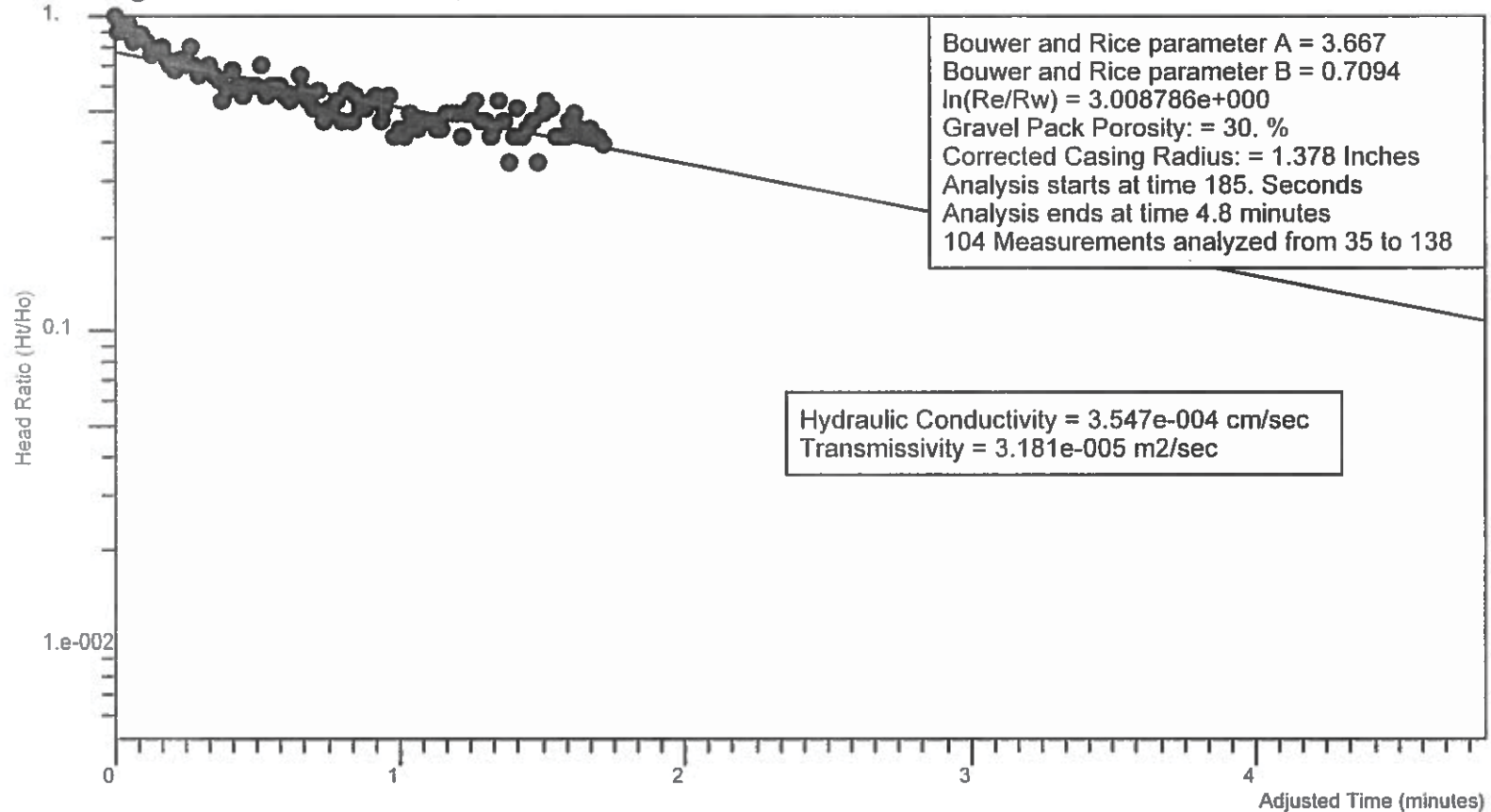
Ho is $7.9e-002$ feet at 501. Seconds

MW-21 Rising Head Slug Test June 26, 2008

175 Roger Avenue Inwood, NY

Bower and Rice Graph

MW-21



Project Number: 015.75316.0005 for 175 Roger Avenue LLC

Analysis by ATC Associates, Inc

H_o is $4.1e-002$ feet at 185. Seconds