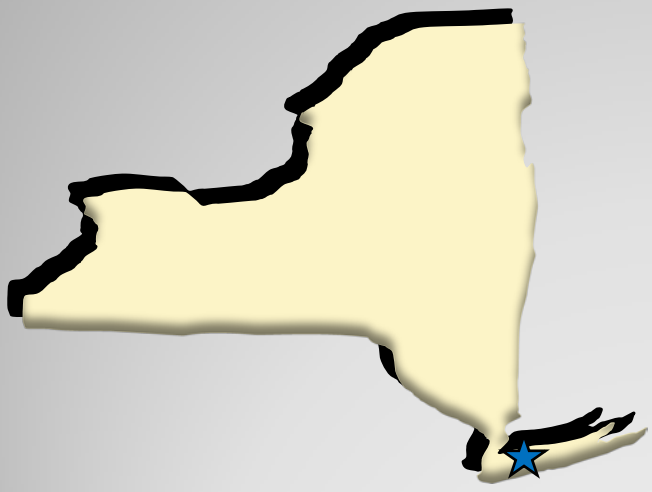
FINAL SITE CHARACTERIZATION REPORT

Pendaflex Site (1-30-185)
Nassau County, Garden City, New York



Prepared for:

New York State Department of Environmental Conservation
Division of Environmental Remediation

Prepared by:

EA ENGINEERING, P.C. and Its Affiliate
EA SCIENCE and TECHNOLOGY

February 2010

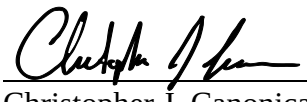
Site Characterization Report
Pendaflex (1-30-185)
Garden City, Nassau County, New York

Prepared for

New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233

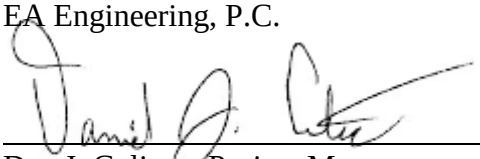
Prepared by

EA Engineering, P.C. and Its Affiliate
EA Science and Technology
6712 Brooklawn Parkway, Suite 104
Syracuse, New York 13211
(315) 431-4610



10 February 2010

Christopher J. Canonica, P.E., Program Manager — Date
EA Engineering, P.C.



10 February 2010

Dan J. Culican, Project Manager — Date
EA Science and Technology

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1. INTRODUCTION

1.1 PROJECT BACKGROUND

The New York State Department of Environmental Conservation (NYSDEC) tasked EA Engineering, P.C., and its affiliate EA Science and Technology (EA) to perform a site characterization at the Pendaflex site (NYSDEC Site No. 1-30-185). This site was identified as a potential Inactive Hazardous Waste disposal site in December 2007. The area consists of a 16-acre commercial property located at 71 Clinton Road in Hempstead, Nassau County, New York (Figure 1).

The site characterization activities were conducted under the NYSDEC State Superfund Standby Contract (Work Assignment No. D004438-34). This assignment is in response to elevated chlorinated volatile organic compounds (CVOCs) impacting the village of Hempstead's Clinton Road well field, which provides drinking water to a community of over 86,000 residents. EA completed the field investigation program during July 2009.

1.2 SITE CHARACTERIZATION OBJECTIVES

The objective of this site characterization is to determine if former historical operations conducted at the Pendaflex site have impacted environmental media and are acting as a contributing source to known dissolved-phase volatile organic compound (VOC) groundwater impacts documented at the Hempstead Clinton Road supply wells (Figure 2). The Old Roosevelt Field (ORF), a known source of a dissolved-phase VOC groundwater plume in the area, is located north-northeast (upgradient) of the supply wells and the Pendaflex site.

1.3 REPORT ORGANIZATION

This Site Characterization Report will discuss the procedures and findings of the field investigation program; summarize the laboratory analytical data; define applicable standards, criteria, and guidance (SCGs) thresholds for the site to determine if those SCGs have been exceeded; and provide a summary of the findings and conclusions for the site.

This Site Characterization Report is separated into four sections. Section 1 provides a summary of the objectives of this site characterization and a summary of historical information reviewed prior to the initiation of the field investigation program. Section 2 provides a summary of the procedures and techniques used to complete the field investigation program. Section 3 presents a discussion of the applicable SCGs for the site, the results of the field investigation program, and the nature and extent of contaminants of concern (COCs) identified during the field investigation program. Section 4 presents a summary of findings for the site characterization and recommendations based on the available data collected.

Additional field investigation documentation, sampling forms, monitoring data, and other auxiliary documentation are provided in the following appendixes:

- **Appendix A**—Historic Reports and Figures – Provided on CD
- **Appendix B**—Daily Field Reports
- **Appendix C**—Geophysical Survey Report
- **Appendix D**—Soil Boring Sampling Logs
- **Appendix E**—Soil Vapor Sampling Forms
- **Appendix F**—Groundwater Sampling Forms
- **Appendix G**—Laboratory Analytical Data – Form Is – Provided on CD.
- **Appendix H**—Data Usability Summary Report (DUSR) – Provided on CD

1.4 SITE HISTORY

According to information provided by the NYSDEC, there is a long history of manufacturing at the Pendaflex site. The site was first developed in 1917 by the Curtiss Aeroplane and Motor Corporation. There have been multiple historic owners and uses for the facility, including use as an experimental laboratory in connection with scientific research for the United States Defense Program.

In 1948, the property was purchased by the Oxford Filing Supply Company, who invented the "Pendaflex" hanging file folder. Currently, the property is owned by the Stewart Clinton Co. LLC, a Long Island developer, which leases space to several organizations including Nassau County BOCES, Federal Express, Level 3 Communications, and The Epilepsy Foundation.

1.4.1 Old Roosevelt Field

The ORF (NYSDEC Site No. 1-30-051) is a listed United States Environmental Protection Agency (USEPA) Region 2 Superfund site. It is located on the eastern side of Clinton Road approximately 0.5 mi northeast of the Pendaflex site and hydraulically upgradient. The Superfund Proposed Plan for the ORF Contaminated Groundwater Area Superfund Site (2007) documents the site as a known source of VOCs in groundwater, more specifically, tetrachloroethene (PCE) and trichloroethene (TCE). A Record of Decision (ROD) was issued for the ORF in September 2007.

The United States Geologic Survey (USGS) have documented TCE, 1,2-dichloroethene (1,2-DCE), and PCE concentrations in groundwater in the area of ORF. Dissolved-phase VOC groundwater plumes have been delineated in the ORF area, which include the Pendaflex site and areas south of the site.

A groundwater elevation contour map developed by Camp, Dresser, and McKee in March 2006 illustrates groundwater flow direction in a south/southwest direction, traveling directly under the Pendaflex site. March 2006 groundwater sampling, conducted by Camp, Dresser, and McKee at the ORF contaminated groundwater site, revealed concentrations of VOCs (PCE and TCE) in groundwater at depths ranging from approximately 32 ft above mean sea level (AMSL) to approximately -327 ft AMSL in monitoring wells located on the ORF and immediately to the south of the ORF. The highest concentrations of VOCs were detected in monitoring wells

screened at depths below -150 ft AMSL. Groundwater monitoring wells sampled during the March 2006 event located downgradient of the Pendaflex site detected concentrations of VOCs at depths ranging from approximately 23 ft AMSL to -481 ft AMSL. The nearest upgradient groundwater monitoring wells associated with the ORF groundwater monitoring well field (GWP-11 and GWX-9966), are located approximately 0.25 mi to the north of the Pendaflex site. The nearest downgradient groundwater monitoring well associated with the ORF is located approximately 400 ft southwest of the southern property boundary of the Pendaflex site. This groundwater monitoring well (GWX-10035) is screened between 23.88 and 28.88 ft AMSL, and reported low-level concentrations of TCE (1.2 µg/L) in March 2006.

It should be noted that the USEPA installed and sampled two new monitoring wells within the Pendaflex property boundary in the summer of 2009 as part of the post-ROD work for the ORF. More specifically, one well was installed in the northeast corner of the Pendaflex property and the second was installed in the southwest corner of the property. The wells are screened at intervals between 245 and 515 ft below ground surface (bgs), which is too deep to help with the objectives of this groundwater investigation at the Pendaflex site.

1.4.2 Previous Site Investigations

From 1995 to 2003, a series of site investigations and remedial actions have taken place at the Pendaflex site, including two Phase I and two Phase II Environmental Site Assessments (ESAs) conducted by Norfolk Environmental (1995 and 1996) and Freudential & Elkowitz Consulting Group, Inc. (F&E) in 2001. Remediation activities performed by Cody Ehlers Group (CEG) were performed in 2003 to satisfy Nassau County Department of Health (NCDOH) and USEPA regarding specific areas of concern at the site. These assessments and remedial actions are summarized in the following sections. These reports are included in Appendix A.

1.4.2.1 Phase I Environmental Site Assessment, September 1995

Norfolk Environmental performed a Phase I ESA of the Pendaflex property in September 1995, which consisted of a physical inspection; observation of surrounding properties within the vicinity of the Pendaflex site for land use and recognized environmental conditions; interviews with site occupants and governmental agencies; and reviews of regulatory information, historical ownership, and previous uses regarding the site. The Phase I ESA concluded that there were no visual signs of contamination on the property or any records of historic spills at the site. However, several areas of concern were identified for further investigation including the following:

- *Former Drum Storage Area:* Over 50 drums of various wastes including flammable solids, waste oils, and other waste liquids were removed from the site in 1986 following NCDOH citation for illegal storage. No confirmatory soil sampling was completed beneath the on-site storage area. These drums were stored along the southern portion of the property.

- *Underground Storage Tanks (USTs):* A 20,000 gal UST was replaced in 1982 without documentation regarding its condition or confirmatory soil sampling. Additionally,

records indicated that other USTs, including a 10,000 gal fuel oil UST, existed historically at the property.

- *Former Septic System:* A former septic system was located along the southern portion of the property which reportedly received waste water generated at the facility prior to the installation of sanitary sewers in the area.

- *Recharge Basin:* A recharge basin was constructed in 1959 to receive discharge from a catch basin on-site. During the Phase I, a second pipe was observed to be discharging into the recharge basin.

- *Potential Sources of Groundwater Contamination:* The Phase I report noted the "Old Roosevelt Field Contamination Plume", reported to contain chlorinated solvents such as TCE and PCE, located immediately to the north of the site as a potential impact to groundwater quality on-site. The report concluded that while the Pendaflex facility likely utilized similar chemicals throughout its history, there was no indication that the property served as an additional source area.

1.4.2.2 Phase II Environmental Site Assessment, February 1996

As a result of the areas of concern identified during the Phase I ESA, a Phase II ESA was performed to analyze on-site soil and groundwater. Based on the results of the soil and groundwater investigation completed at the site, three areas were identified with probable environmental impacts including an active 20,000 gal UST, the former septic system on the southern central portion of the property, and the former motor testing area on-site. The Phase II report documented that petroleum compounds were detected in the area of the 20,000 gal UST: VOCs (primarily benzene, toluene, ethlybenzene, and total xylenes [BTEX]) and metals were detected in soils and sediment within the former septic system, located in the southern central portion of the property; VOCs (BTEX) were also detected in the former motor testing area in the central portion of the property.

The Phase II ESA report also indicated that low levels of TCE and PCE were detected in groundwater samples collected on-site. PCE and TCE detections were reported at both upgradient and downgradient locations on the property. Since there were no PCE or TCE concentrations detected in the on-site soil samples, the report suggests the presence of these compounds in groundwater could be attributed to the documented ORF plume.

1.4.2.3 Phase I and Phase II Environmental Site Assessments, December 2001

At the request of Nassau County BOCES, an additional Phase I ESA and subsequent Phase II investigation were performed on the subject property by F&E. The Phase I ESA identified potential impacts at the property mainly including those previously identified in the 1995 Phase I report.

The Phase II investigation focused on supplemental soil and groundwater sampling including the installation of 22 soil borings, from which 2 soil samples and 21 groundwater samples were collected. Results of the Phase II investigation documented concentrations of VOCs and semivolatile organic compounds (SVOCs) within subsurface soil located above the groundwater interface at the location of the former 20,000 gal fuel oil UST. Groundwater samples collected from the southwestern and south central portions of the site contained concentrations of TCE and PCE, consistent with the Phase II ESA conducted in 1996. No detections of PCE or TCE were reported at upgradient groundwater sampling locations. F&E suggested that the absence of TCE and PCE, and the presence of the same compounds in the downgradient locations, indicated that there was a potential source area in the unsaturated soil of the site.

However, EA noted that the groundwater samples collected during F&E's Phase II investigation were from the 32 to 36 ft bgs interval, while the Norfolk's upgradient groundwater sample was collected from the 70 to 72 ft bgs interval.

1.4.2.4 Remediation Report, October 2003

This report summarizes actions completed to rectify UST and underground injection control (UIC) issues raised by the NCDOH and USEPA in response to the Phase I and Phase II ESAs.

In 2003, a limited site investigation was performed to identify potential USTs located on-site. Specifically, a cursory inspection was performed to identify potential piping associated with USTs and several test pits were advanced in the locations for reported historic USTs. No USTs were identified during the investigation activities.

An investigation to determine potential impacts from floor drains and drywells located on-site was performed in 2003. UIC issues were addressed by performing pipe tracing and dye testing to track discharge locations of piping associated with floor drains in the boiler room. Piping was observed to discharge into a drywell located on-site, which further discharges to a connected series of leaching pools onsite.

Additionally, a remedial action took place to remove contaminated sediment and soil from beneath the blowdown units within the former boiler room impacted with mercury. Approximately, 1 yd^3 of soil was removed from each blow-down pit. Contaminated soils were excavated and disposed of off-site.

Several drywells located on-site impacted with VOCs were also remediated by removing water and sediment from within the basins for off-site disposal. Following remedial activities, 43 on-site drywells and leaching pools remained on-site.

The remedial activities completed at the site concluded that all UST and UIC issues were addressed and that no further action was required to further mitigate on-site environmental issues. However, on-site groundwater contamination was not investigated during this remedial action.

1.5 TOPOGRAPHY

The subject site is located on the USGS Freeport, New York 7.5-minute topographic quadrangle map, dated 2000. Elevation at the site is approximately 80 ft AMSL. No natural surface water features are noted on the topographic map. The site grading is essentially flat, although the eastern portion of the property contains a recharge basin. With the exception of an undeveloped wooded portion of the property in the area of the recharge basin, the subject property is either paved or occupied by buildings. There are small grassy areas around the Pendaflex office buildings.

1.6 GEOLOGY

A review of the geologic map of New York, Lower Hudson Sheet published by the University of the State of New York, the State Education Department, dated 1970, indicates this area is made of coastal plain deposits which may be up to 2,000-ft thick. The site appears to be located on the Monmouth and Matawan groups within the Magothy formation, which consists of silty clay, glauconitic sandy clay, sand, and gravel units.

A concise and accurate description of the geology, physiography, and drainage of Nassau County is found in the Soil Survey of Nassau County, New York (United States Department of Agriculture). Relevant excerpts of this study are included below.

Nassau County is part of the Coastal Plain physiographic province. The county is characterized by undulating or rolling landscapes in the northern part and a flat plain with a gently southward tilt in the southern part. A lobe of rolling topography protrudes farther to the south along the eastern edge of the county. Extensive tidal areas and marshes are just south of the plain, and a barrier beach and dunes form the southern outline of the county.

Elevation in the county ranges from sea level to about 340 ft above sea level near the eastern edge of the county, just south of New York State Route 25. The landforms at the higher elevations were deposited as a terminal moraine. These areas have irregular topography that is crossed by deep glacial drainage channels near the north shore. These channels empty into deep bays on the north shore. The steepest relief is along drainage channels or on the side slopes adjacent to the bays. An outwash plain, which is to the south of the terminal moraine, has a maximum elevation of about 180 ft just northeast of Hicksville and slopes gradually to the south some 8-10 mi, finally reaching tidal area at sea level.

Nassau County is underlain by bedrock, but most of it is at a depth of several hundred feet. The closest surficial bedrock is to the west in the boroughs of Bronx and Queens in New York City, and areas to the northwest in Westchester County near Long Island Sound. From these areas of surface exposure, the rock surface dips to the southeast to form a solid basement below Nassau County. Most of the bedrock consists of Cretaceous sedimentary layers. Some of the older rocks in the area are the 200 million year old Triassic red beds and lava flows off New Jersey and Connecticut, and Cambrian metamorphic rocks in the New York City area that are 450 million years old.

During the late Cretaceous Period, the sediments from the eroding Appalachian Highlands were carried by streams and rivers to low-lying coastal areas. The sand, silt, and clay of the Raritan and Magothy formations, which form the foundation of Long Island, were deposited as deltas in areas of shallow water. The Raritan formation is below sea level and the Magothy formation is at the surface of several sites along the north shore. During the Tertiary Period, the area of Long Island was uplifted above sea level and the Cretaceous sediments were eroded and dissected by streams and rivers. The valley now occupied by Long Island Sound was cut by a major river and smaller tributary streams formed valleys which are now the north shore bays.

During the Pleistocene Epoch of the Quaternary Period, several major glacial advances into the northern United States occurred. This epoch is divided into four major glacial stages. From oldest to youngest, they are: Nebraskan, Kansan, Illinoian, and Wisconsinan. During the Illinoian advance, the ice sheet reached a position just north of the Long Island area. Outwash sand and gravel, of the Jameco gravel formation, was deposited by meltwater streams. Following the Illinoian stage, sea level rose close to its present level and a clay (Gardiner clay) containing marine fossils was deposited in the shallow coastal waters surrounding Long Island.

During the Wisconsinan glacial advance, the ice reached a position represented on most of Long Island by the Ronkonkoma terminal moraine. In the latter part of this stage, the ice sheet receded from a point east of Lake Success and established a new position along the north shore marked by the Harbor Hill terminal moraine. West of Lake Success, this lobe of ice overrode the Ronkonkoma moraine and pushed as far south as Staten Island. This caused the terminal moraine/deposits in Nassau County to form a wide band of irregular topography occupying the northern half of the county; while in adjacent Suffolk County, the terminal moraine deposits were far enough apart to be two distinct land forms separated by a flat plain. During the Wisconsinan advance, sea level dropped about 350 ft below its current elevation to expose a broad, flat coastal plain.

As the climate again warmed about 11,000 years ago, the Wisconsinan period ended and the Holocene, or present, period began. The ice sheet receded to its present polar limits and the sea rose to its present level. Currents and wave action modified the outwash plain to create the present day shoreline.

1.7 HYDROGEOLOGY

Groundwater on Long Island is derived from precipitation. The volume of water that percolates down to the water table and recharges the groundwater is the residual of the total precipitation not returned to the atmosphere by evapotranspiration or lost by runoff. Due to the permeable nature of the soils and the generally gentle slope of the land surface, infiltration is high.

The aquifers of concern at the Pendaflex site are the Magothy aquifer and the Upper Glacial aquifers, which form a single, unconfined aquifer, although with different properties. They are the most productive and heavy utilized groundwater resource on Long Island. The depth to the water table ranges from 25 to 50 ft bgs.

Based on USEPA documented measurements in multi-port wells in the area, groundwater flow is to the south-southwest. Pressure measurements in the ports indicate the vertical groundwater flow is downward.

2. SITE INVESTIGATION ACTIVITIES

Field investigation activities were conducted in accordance with EA's Generic Field Activities Plan (EA, 2007[1]) and as outlined in the Field Activities Plan (EA, 2009[2]), with the exception of the deviations specifically identified in the following sections. In accordance with the site specific Health and Safety Plan, health and safety officer responsibilities were assigned to one of the team members throughout the field program to ensure that personnel were protected from both physical and chemical health hazards. Appropriate protective clothing was worn by field personnel while performing all intrusive activities for protection against contamination, and to prevent cross-contamination between sample locations and matrices.

EA's approach to implementing the site characterization included field sampling activities designed to evaluate the presence or absence of COCs at the site, and to determine the concentrations of potential COCs through laboratory analysis.

The field investigation program was performed in July 2009 and included the following activities:

- ***Geophysical Survey*—**Use of geophysical survey consisting of ground penetrating radar and electromagnetic surveys at the site to locate and identify underground utilities, cables, and other anomalies that may be located at the proposed environmental soil boring locations.

- ***Soil Vapor Sampling and Analysis*—**Installation of four soil vapor points with subsequent sampling and analysis.

- ***Subsurface Soil Sampling and Analysis*—**Soil sampling, screening, collection, and analysis of five subsurface soil samples from the southern portion of the site.

- ***Groundwater Profile Sampling*—**Collection of depth-discrete groundwater samples utilizing direct-push hydropunch technologies; sampling performed at 14 locations along the south boundary of the site, upgradient, and downgradient of the Pendaflex facility at 15 ft depth intervals between 25 and 100 ft bgs.

- ***Site Survey*—**Survey of site sampling locations utilizing a Global Positioning System device for the preparation of a site base map.

Copies of daily field reports are provided in Appendix B. A summary of the site characterization sampling and analytical program including quality assurance sampling and analytical methodologies performed is provided in Table 1.

1 2007. EA Engineering, P.C. and Its Affiliate EA Science and Technology. *Generic Field Activities Plan for Work Assignments.* September.
2 2009. EA Engineering, P.C. and Its Affiliate EA Science and Technology. *Field Activities Plan, Pendaflex Site (1-30-185), Garden City, Nassau County, New York.* June.

2.1 GEOPHYSICAL SURVEY

Before beginning the subsurface field investigation activities, a private property geophysical survey was performed by Nova Geophysical Services of Forest Hills, New York. The survey was completed on 13 July 2009 to clear locations for the installation of soil borings, soil vapor points, and groundwater profile sampling points.

Ground penetrating radar and electromagnetic surveys were performed at the site to locate and identify underground utilities, cables, and other anomalies that may have been located at the proposed soil boring locations. Nova cleared and marked all identified anomalies and proposed boring locations at the site. Results of the geophysical survey are included in Appendix C.

2.2 SOIL VAPOR SAMPLING

Soil vapor samples were collected at four locations (Figure 3) along the southern property line of the site to evaluate VOCs in subsurface soil vapor and to assess the potential for vapor intrusion at structures located in the vicinity of the site.

2.2.1 Soil Vapor Point Installation

On 13 July 2009, EA oversaw the installation of the four soil vapor sampling points. Aztech Technologies, Inc. (Aztech) of Ballston Spa, New York utilized a track-mounted Geoprobe® to install the borings to the predetermined depth of 10 ft bgs. Once the sampling depth was reached, a 6-in. stainless steel sampling screen was attached to a dedicated section of 0.125-in. inner diameter × 0.25-in. outer diameter Teflon-lined tubing and placed in the open borehole. The borehole was then backfilled with sand to a minimum of 6 in. above the screened interval. Granular bentonite pellets were then used to backfill to the ground surface, hydrated concurrently with placement. A typical construction diagram for soil vapor points is provided as Figure 4.

2.2.2 Soil Vapor Sampling

The soil vapor points were allowed to set for a minimum of 24 hours prior to sampling. Helium tracer gas testing was conducted at two of the four sampling locations to verify that the bentonite seal was effective and that ambient air was not drawn into the Summa® canisters. Soil vapor sampling and helium testing were performed in accordance with the New York State Department of Health (NYSDOH) *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, October 2006. Soil vapor samples were collected using 6 liter Summa® canisters, regulated to collect for a 2-hour sampling interval.

Soil vapor samples were shipped to Alpha Analytical (Alpha) in Westborough, Massachusetts, which is a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified laboratory. Alpha analyzed the soil vapor samples for VOCs using USEPA Method TO-15. Upon completion of the sampling, the sample tubing was pulled out of the ground and disposed of off-site. The boring holes located in paved areas were resurfaced with cold-patch. Soil vapor boring logs are provided in Appendix D, while soil vapor sampling logs are provided in Appendix E.

2.3 SUBSURFACE SOIL SAMPLING

On 13-15 July 2009, EA oversaw the installation of five soil borings for the collection of subsurface soil samples (Figure 5). A total of five soil borings were installed by Aztech using a track-mounted Geoprobe® and direct-push technologies. Soil borings were installed to assess subsurface conditions downgradient of former manufacturing facilities located on-site. These locations were pre-determined by the NYSDEC. Soil samples were recovered using a 5-ft macro-core and a dedicated acetate sleeve, and were sampled continuously until reaching the soil-groundwater interface (approximately 22-25 ft bgs). Soil samples were screened at 1 ft intervals using a photoionization detector (PID). Each soil sample was described and logged identifying its geologic characteristics, features, PID readings, and properties. The Unified Soil Classification System was used to characterize the soil samples. Soil boring logs are provided in Appendix D.

Soil samples were collected from locations that exhibited elevated PID readings, or where visual staining or odors were detected. Locations that did not exhibit elevated PID readings, staining, or odors were sampled at the soil-groundwater interface. During sample collection at SB-02, a creosol coated railroad tie was encountered in the subsurface, causing elevated PID readings. The soil sample for this boring was collected from the interval beneath the railroad tie.

Subsurface soil samples were packed on ice and submitted under standard chain of custody to Hampton Clarke-Veritech Labs of Fairfield, Jersey, for analysis for VOCs by USEPA Method 8260B, SVOCs by USEPA Method 8270C, target analyte list (TAL) metals and mercury by USEPA Method 6010B/7470A, and pesticides/polychlorinated biphenyls (PCBs) by USEPA Method 8081A/8082 in accordance with the NYSDEC Analytical Services Protocol (ASP). Hampton Clarke-Veritech is an approved NYSDOH ELAP-certified laboratory.

2.4 GROUNDWATER PROFILE SAMPLING

On 13-17 and 20-24 July 2009, discrete-depth groundwater samples were collected at five locations along the southern property line of the site, at three selected upgradient locations north of the former manufacturing facilities, and at six downgradient locations located to the south of the site and south of Commercial Avenue to evaluate VOCs in groundwater at multiple depth intervals. The groundwater profile sampling was performed at a total of 14 locations. Groundwater samples were collected at depths ranging from 25 to 100 ft bgs (Figure 6). Groundwater samples were typically collected at 15-ft intervals from within a 4-ft screen interval.

2.4.1 Groundwater Profile Sampling Installation and Sampling

Groundwater profile sampling points were completed at 14 locations by Aztech using a track-mounted Geoprobe® and direct-push technologies. EA oversaw the advancement of drive rods equipped with a hydropunch sampling device to the desired sampling depth interval of 100 ft bgs. Once the desired sampling depth interval was reached, the drive rods were retracted to expose a 4-ft section of 1-in. diameter stainless steel screen from which groundwater samples were collected. Depending upon depth to water, a peristaltic pump and associated tubing or a length of tubing equipped with a check valve at the bottom was then inserted into the rods to draw groundwater

into the tubing. At some locations, where flowing sands were drawn into the screened interval, a Waterra® inertial pump was utilized to collect the groundwater samples. After purging one calculated volume of water from the sample interval, the groundwater sample was collected. The screened interval was then raised to the next discrete-depth sampling interval in the same bore hole and sampled following the same procedures. This process was completed until reaching the final groundwater sample depth (25-40 ft bgs, dependent upon depth to groundwater). Groundwater sampling forms are included in Appendix F.

The depth-discrete groundwater samples were packed in a cooler with ice and shipped under standard chain of custody to Hampton Clake-Veritech for VOC analysis by USEPA Method 8260B. In addition, selected samples from the 25 ft bgs interval were also submitted for analysis by USEPA Method 8270C for SVOCs, USEPA Method 6010B/7470A for TAL metals and mercury, and USEPA Method 8081A/8082 for pesticides/PCBs. Due to laboratory error, some samples were analyzed for VOC analysis by USEPA Method 624 instead of Method 8260B. Each method utilizes the same holding times, instrumentation, and reporting limits. Slight differences exist between the analytical clocks and number of compounds spiked and reported in the quality control samples; however, analytical results achieved for samples are essentially the same. Analytical data were reviewed and results were summarized in a DUSR by an independent data validator as described in Sections 2.8 and 3.5

2.5 SITE SURVEY

Soil borings, soil vapor points, and groundwater profile sampling locations were surveyed using a Global Positioning System device upon completion of the geophysical survey by EA on 13 July 2009. Horizontal coordinates for each location were integrated onto a site base map. The horizontal positions were tied in to the North American Datum 1983 and Universal Transverse Mercator Zone 18N coordinate system.

2.6 DATA VALIDATION

Upon receipt of the analytical data packages from Hampton Clarke-Veritech and Alpha Laboratories, EA reviewed the packages for completeness and noted any corrective actions. The full data packages and electronic data deliverables were submitted to Environmental Data Services, Inc. (EDS) for validation. EDS prepared a DUSR which is discussed in Section 3.5.

3. FIELD INVESTGATION RESULTS

This section presents the results of the field sampling activities conducted during the site investigation program. Laboratory analytical data were reported using Category B deliverables and the standard electronic data deliverables; copies of the Form I analytical data sheets are provided in Appendix G. The analytical data collected during the site investigation program were validated by EDS, an independent third party.

SCGs are promulgated requirements and non-promulgated guidance which govern activities that may affect the environment and are widely used at different stages of investigation and remediation of a site. The SCGs applicable for the analytical data set of this site characterization are 6 New York Code of Rules and Regulations (NYCRR) Subpart 375-6 Soil Cleanup Objectives (unrestricted-use), and Division of Water Technical and Operational Guidance Series 1.1.1 Ambient Water Quality Standards (AWQS) for Class GA waters. No applicable SCGs exist for soil vapor as of the date of this report.

3.1 GEOLOGY AND HYDROLOGY

NYSDEC Superfund sites within close proximity to the Pendaflex site, confirmed that groundwater was encountered at approximately 25-30 ft bgs. Data collected during field activities at the Pendaflex site revealed similar hydrological characteristics.

The majority of the on-site subsurface geology, to a depth of approximately 30 ft bgs, was classified as silty sand and medium coarse to coarse sand with gravel. Groundwater was encountered with the subsurface soil borings at depths ranging from 20 ft bgs (SB-01) to 24.5 ft bgs (SB-05).

3.2 SOIL VAPOR SAMPLING RESULTS

A total of four soil vapor samples and one soil vapor duplicate sample were collected from the southern property line of the site to evaluate VOCs in subsurface soil vapor and to assess the potential for vapor intrusion at structures located in the vicinity of the site. Numerous VOCs were detected within the soil vapor samples collected from the site. Elevated concentrations of PCE, TCE, and *cis*-1,2-dichloroethene (*cis*-1,2-DCE) were reported in soil vapor point SV-02 and the duplicate sample collected at that location. PCE was detected in each of the soil vapor samples at concentrations ranging from 2.54 µg/m^3 (SV-01) to 27,100 µg/m^3 (SV-02); TCE was detected at three of the four soil vapor sample locations at concentrations ranging from 12.8 µg/m^3 (SV-03) to 3,080 µg/m^3 (SV-02).

Soil vapor point SV-02 reported that highest concentrations of CVOCs including PCE, TCE, *cis*-1,2-DCE, and 1,1,1-trichloroethane (1,1,1-TCA); however, this soil vapor point reported the least number of detected VOCs. While soil vapor points SV-01, SV-03, and SV-04 reported concentrations of CVOCs, they were two to four orders of magnitude less than soil vapor point

SV-02 concentrations. In addition, these soil vapor points reported a greater number of VOCs, several of which are petroleum-related chemicals.

Soil vapor point SV-02 was located in the same general area where CVOCs (PCE and TCE) were detected in a groundwater sample from SP-1 (30-32 ft bgs) during the Phase II ESA completed by Norfolk Environmental (1996), and CVOCs were detected again in a supplemental groundwater sample from S-13 (32-36 ft bgs) collected during a Phase II ESA completed by F&E (2001). Soil vapor point SV-02 was also located in the vicinity of the former cess/leaching pools identified in the Remediation Report submitted by CEG in 2003. It was confirmed by CEG that the four active leaching pools, (CP/LP-1 through CP/LP-4) are connected to the distribution pool located outside of the former boiler room and connected to the former boiler blow down pits and that sediment samples collected from these cess/leaching pools during the Phase II ESA in 2001 identified concentrations of PCE and TCE.

A summary of the VOCs in soil vapor samples collected at the site is shown in Table 2. Figure 7 illustrates the soil vapor CVOC analytical results including PCE, TCE, *cis*-1,2-DCE, 1,1,1-TCA, carbon tetrachloride, 1,1-dichloroethene (1,1-DCE), and vinyl chloride.

3.3 SUBSURFACE SOIL SAMPLING RESULTS

Subsurface soil samples were collected from five soil boring locations on-site. Subsurface samples were collected from intervals where elevated PID readings were detected, where visual staining and odors or noted, or based on the general depth relative to the soil groundwater interface. Samples were submitted for analysis of VOCs, SVOCs, TAL metals, pesticides, and PCBs.

No VOCs, TAL metals, or pesticides were detected above the 6 NYCRR Subpart 375-6 Soil Cleanup Objectives (unrestricted-use) within the subsurface soil samples submitted for analysis. A summary of the detected VOCs, TAL metals, and pesticides within the subsurface soil samples collected at the site are presented in Tables 3, 4, and 5, respectively.

Three SVOCs were detected above the 6 NYCRR Subpart 375-6 Soil Cleanup Objectives (unrestricted-use) within the subsurface soil samples submitted for analysis. Benzo[b]fluoranthene (1.80 mg/kg), chrysene (1.20 mg/kg), and indeno[1,2,3-cd]pyrene (0.62 mg/kg) were detected above their corresponding SCGs within subsurface soil sample SB-02 (15-20 ft bgs). Soil boring location SB-02 was located in the southern central portion of the property, adjacent to soil vapor point SV-02, and in the general area of the cess/leaching pools. A summary of the detected SVOCs within the subsurface soil samples collected at the site are presented in Table 6. Figure 8 illustrates the subsurface soil SVOC analytical results.

No PCBs were detected above the laboratory method detection limits within the subsurface soil samples submitted for analysis.

3.4 GROUNDWATER PROFILE SAMPLING RESULTS

Groundwater profile samples were collected from 14 locations along the southern property boundary of the site and at select upgradient and downgradient locations. The samples were collected to evaluate VOCs in groundwater at multiple depth intervals across the site. Groundwater samples were collected and analyzed at each location for VOCs from discrete depths ranging from 25 to 100 ft bgs. In addition, groundwater samples were collected from five locations along the southern property boundary of the site and analyzed for SVOCs, TAL metals, pesticides, and PCBs. These samples were collected from the soil/groundwater interface (25 – 30 ft bgs).

A number of VOCs were detected in groundwater samples collected across the site. Three groundwater sampling locations reported concentrations of VOCs above SCGs. Groundwater samples collected from GP-02, GP-09, and GP-10 reported concentrations of VOCs above applicable SCGs including chloroform, PCE, TCE, and 1,1-DCE. Groundwater samples collected from GP-02 reported PCE above its SCG at approximately 40 ft bgs (17 µg/L). The groundwater samples collected from GP-09 reported concentrations of PCE and TCE above SCGs at multiple depth intervals including PCE at concentrations of 31 µg/L at approximately 70 ft bgs and 100 µg/L at approximately 100 ft bgs, TCE concentrations of 8.5 µg/L at approximately 70 ft bgs and 56 µg/L at approximately 100 ft bgs, and 1,1-DCE at 13 µg/L at approximately 100 ft bgs. The groundwater sample collected from GP-10 at approximately 85 ft bgs was above SCGs for chloroform (7.5 µg/L). Groundwater profiling point GP-02 is located in the south central portion of the site, in the vicinity of the cess/leaching pools. Based on groundwater flow direction, groundwater profiling point GP-09 is assumed to be hydraulically crossgradient from GP-02 and is the furthest east groundwater profiling point along Commercial Avenue to the south of the site.

Based on the discreet groundwater sampling analytical results at multiple depth intervals, groundwater quality exhibited two distinguishable characteristics within the vertical profile of groundwater across the site. Shallow groundwater samples (25-40 ft bgs) collected from GP-02, GP-03, and GP-04, located in the south central and south western portions of the site along the property boundary, reported concentrations of PCE ranging from 1.4 µg/L to 17 µg/L. The shallow groundwater sample (25 ft bgs) collected from GP-11, located along Commercial Avenue to the south of the site and downgradient of GP-02, also reported a low-level concentration of PCE (2.5 µg/L). PCE was only detected in groundwater profiling samples collected from 25 to 40 ft bgs with the exception of GP-01 and GP-09, which are located crossgradient to GP-02.

Deeper groundwater samples (70-100 ft bgs) collected from GP-07, GP-09, and GP-13 reported concentrations of TCE ranging from 1.3 µg/L to 56 µg/L. Groundwater profiling point GP-07 was collected at an upgradient location on the site, while GP-09 and GP-13 were collected at locations along Commercial Avenue to the south of the site. TCE was only detected in groundwater profiling samples collected at or below 70 ft bgs. In addition to TCE, PCE was also detected at groundwater profiling point GP-09 at identical depth intervals.

Historical groundwater samples from the both 1996 and 2001 Phase II ESAs conducted by others reported similar groundwater concentrations for both PCE and TCE at the site.
Figure 9 illustrates the CVOC detections at multiple discrete sampling depths at the site. A summary of the VOCs detected within the groundwater samples collected at the site is provided in Table 7.

Several TAL metals were detected above their applicable SCGs within the groundwater samples collected from the 25-30 ft bgs discrete interval. Aluminum was detected above its AWQS value of 100 µg/L at each sample location, at concentrations ranging from 260 µg/L at GP-02 to 6,100 µg/L at GP-03. Iron was detected above its AWQS value of 300 µg/L at each sample location, at concentrations ranging from 1,100 µg/L at GP-01 to 14,000 µg/L at GP-03. Manganese was detected above its AWQS value of 300 µg/L at GP-03 (1,400 µg/L) and GP-04 (510 µg/L). Sodium was detected above its AWQS value of 20,000 µg/L at four sample locations, with concentrations ranging from 64,000 µg/L (GP-01) to 200,000 µg/L (GP-05). A summary of the TAL metals detected within the groundwater samples collected at the site is shown in Table 8.

No SVOCs, pesticides, or PCBs were detected above the laboratory method detection limits within the groundwater samples submitted for analysis.

3.5 DATA USABILITY SUMMARY

EDS validated analytical data packages submitted to EA by Alpha Analytical and Hampton-Clarke Veritech. Analytical data packages are submitted as sample delivery groups (SDGs) based on the number of samples within each shipment received at the laboratory for analysis. The SDGs were reviewed for completeness and compliance as defined by the requirements for NYSDEC ASP Category B deliverables.

EDS completed data validation for five SDGs and submitted five DUSRs for the SDGs reviewed. Overall, the data were acceptable for their intended use; several samples were qualified for various reasons and are identified in the associated tables. There were rejections of data from all samples in SDGs AC45774, AC45975, and AC45984. Three VOCs were rejected from all soil and groundwater samples in these SDGs due to low initial calibration RRF values. Specific compounds rejected from the soil and groundwater samples included acrolein, t-Butyl alcohol, and 1,4-dioxane. These three compounds were non-detect in all of the samples analyzed.

DUSRs for the analytical data packages are provided in Appendix H.

4. SUMMARY OF FINDINGS AND RECOMMENDATIONS

This section provides a summary of the conditions at the Pendaflex site, as determined by the completion of the NYSDEC approved site characterization activities.

4.1 SUMMARY OF IMPACTS AT THE PENDAFLEX SITE

The following sections briefly summarize the findings of environmental impacts at the Pendaflex site. The impacts associated with the evaluated environmental media are based on analytical results and their comparison with the appropriate SCGs. COCs observed during the site characterization activities consist of CVOCs, namely PCE, TCE, SVOCs, and TAL metals.

4.1.1 Subsurface Soil

Subsurface soil samples were collected from five locations along the south property boundary of the site. SVOCs including benzo[a]fluoranthene, chrysene, and indeno[1,2,3-cd]pyrene were detected at levels slightly above their corresponding SCGs within the subsurface soil sample collected at SB-02 located in the southern central portion of the property, and in the general area of the cess/leaching pools. In addition, low-level concentrations of PCE, below SCGs, were detected within the subsurface soil sample collected at SB-02. No TAL metals, pesticides, or PCBs were detected at levels above their corresponding SCGs in any of the subsurface soil samples.

4.1.2 Groundwater Quality

Analytical results from the groundwater sampling program completed during this site characterization indicated that concentrations of CVOCs including PCE and TCE are present in groundwater above the applicable SCGs.

PCE was detected at concentrations above its SCGs at groundwater profiling points GP-02 and GP-09, with the highest concentrations being reported in groundwater samples collected from GP-09, which is the furthest east sample location, located off-site along Commercial Avenue. TCE and 1,1,1-DCE were also detected above their respective SCGs at groundwater profiling point GP-09 at the 70 and 100 ft discrete sampling intervals. Onsite shallow groundwater only reported low-level concentrations of PCE (25-40 ft. bgs), none exceeding SCGs. At groundwater profiling points where TCE was detected, GP-07 (upgradient), GP-09 (crossgradient), and GP-11 (downgradient), each of which were located off-site, low-level concentrations were reported from groundwater samples collected below 70 ft bgs.

GP-09 is located southeast of the Pendaflex site. Based on groundwater flow direction in the area, which has been observed at nearby NYSDEC Superfund sites to be to the southwest, it is unlikely that this contamination is a result of a release at the Pendaflex site. While PCE was detected above its SCG at one location on the southern portion of the property (GP-02) and one location

immediately downgradient of the site (GP-09), no source area could be determined from the selected sampling locations during these site characterization activities.

4.1.3 Soil Vapor Assessment

CVOCs have been identified within soil vapor in areas along the southern property boundary of the Pendaflex site. PCE concentrations were detected within each sample location; while TCE concentrations were detected at soil vapor points SV-01, SV-02, and SV-04; *cis*-1,2-DCE at soil vapor point SV-02; and 1,1,1-TCA at soil vapor point SV-03. PCE (27,100 µg/m^3) and TCE (3,080 µg/m^3) were detected at their highest respective concentrations at soil vapor point SV-02. This location is south of the former boiler house and in the vicinity of the on-site leaching system.

4.2 CONCLUSIONS AND RECOMMENDATIONS

The following conclusions and recommendations are based on the site data collected during this site characterization and previous investigation work conducted at the site by others.

- Slightly elevated SVOCs were also detected at subsurface soil boring SB-02 which may be related to waste discharges through the on-site distribution box and into the on-site leaching system located in the south central portion of the property or because subsurface soil boring SB-02 was located near a historical railroad track. SVOC concentrations observed in subsurface soil sample at SB-02 do not appear to be impacting groundwater based on non-detection of SVOCs at groundwater profiling point GP-02.

- PCE was detected at a concentration below its corresponding SCG at subsurface soil boring SB-02. Based on the subsurface soil analytical data collected during this site characterization, no potential VOC source area was identified. PCE has been identified in shallow soil in one location (SB-02, 15-20 ft bgs), at a concentration below the 6 NYCRR Part 375 Soil Cleanup Objectives – Unrestricted Use. No other subsurface soil samples reported concentrations of VOCs above the laboratory method detection limits. Based on the low concentration, this detection does not pose an immediate or potential exposure risk to either human health or the environment.

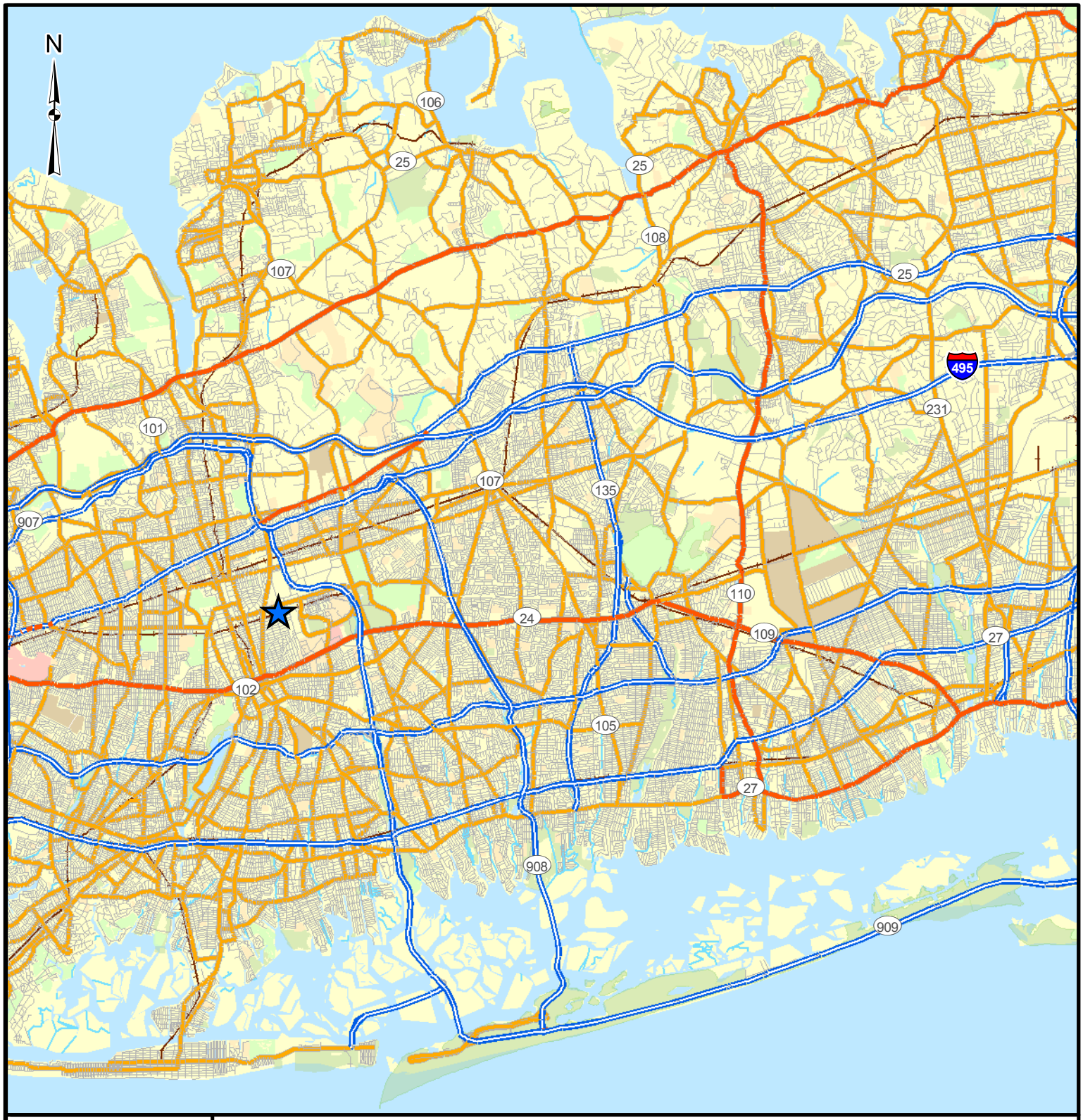
- CVOCs have been identified in on-site groundwater at locations within and immediately surrounding the leaching system located on the south central portion of the Pendaflex site. Only PCE exceeded the SCG for groundwater at groundwater profiling point GP-02 (30-40 ft bgs). It appears that within this area of the site, low-level CVOCs are present in the upper shallow groundwater (i.e., 30-40 ft bgs).

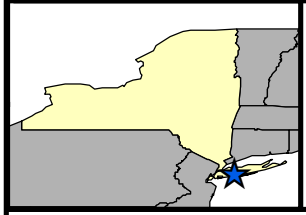
- CVOCs were also detected in off-site groundwater at locations both hydraulically upgradient and downgradient of the Pendaflex site. Groundwater profiling point GP-09 was the only offsite groundwater sampling location where CVOCs (PCE and TCE) were detected above SCGs. This groundwater profiling point was the furthest east along Commercial Avenue, located hydraulically crossgradient and south of the site. In addition, off-site groundwater concentrations of CVOCs were primarily detected in the

deeper sampling intervals of the groundwater profiling points (i.e., 70-100 ft bgs).

- Potential exists for off-site migration of soil vapor based upon the elevated levels of CVOCs observed within soil vapor along the southern property boundary of the site. The identification of CVOCs in soil vapor along the southern property boundary of the site is likely the result of volatilization of these compounds in shallow groundwater beneath the site. The concentrations of CVOCs observed in the soil vapor along the southern property boundary of the Pendaflex site, specifically SV-02, are significantly elevated. Additional soil vapor sampling is recommended around SV-02 to evaluate the potential for offsite migration and vapor intrusion in the commercial and residential structures located within the vicinity of the site.

Based on the analytical data collected during this site characterization and previous investigations completed at the site, no on-site source area has been definitively delineated to date. Each area of concern identified during previous investigations was remediated to the extent practicable and were deemed acceptable by regulatory agencies. No findings under this site characterization revealed any new potential areas of concern at the Pendaflex site that would be contributing to localized groundwater contamination in the area.





Legend

SiteLocation

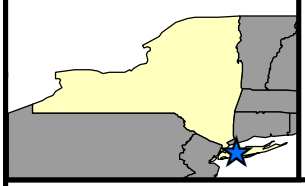
0 1 2 4 6 Miles

Source: ESRI Street Maps USA

PENDAFLEX (1-30-185)
SITE CHARACTERIZATION REPORT
GARDEN CITY, NEW YORK

FIGURE 1
SITE LOCATION MAP

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
DJC	MJS	DCC	DJC	AS SHOWN	NOVEMBER 2009	14368.35	GIS/PROJECTS/ FIGURE1.MXD



Legend

Site Boundary

Miles

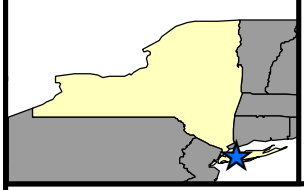
0 0.125 0.25 0.5

Source: NYS Office of Cyber Security and Critical Infrastructure Coordination (CSCIC)

PENDAFLEX (1-30-185)
SITE CHARACTERIZATION REPORT
GARDEN CITY, NEW YORK

FIGURE 2
SITE LOCATION

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
DJC	MJS	DCC	DCC	AS SHOWN	NOVEMBER 2009	14368.35	GIS/PROJECTS/ FIGURE2.MXD



Legend

Site Boundary

Soil Vapor Point

Feet

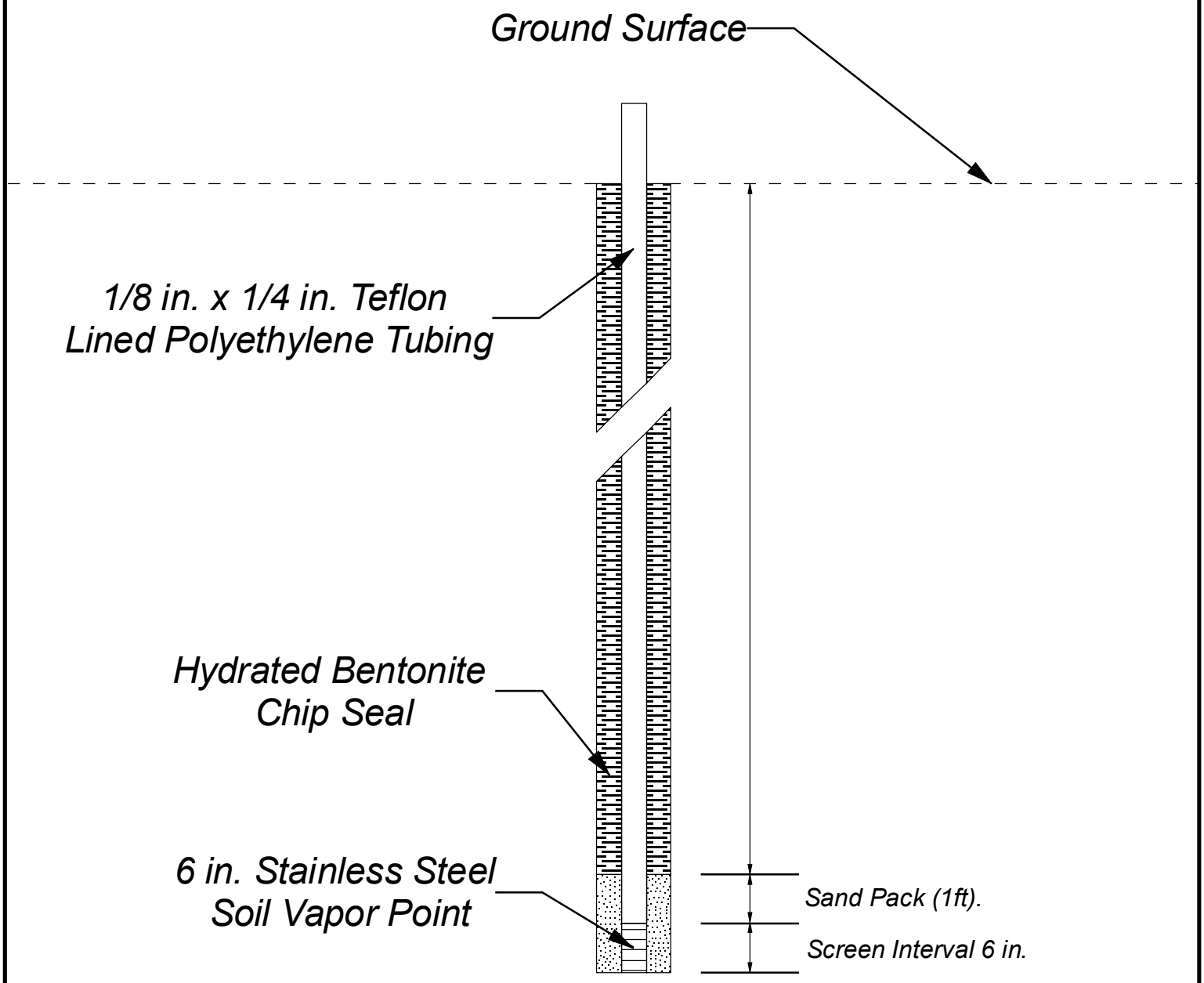
0 50 100 200

Source: NYS Office of Cyber Security and Critical Infrastructure Coordination (CSCIC)

PENDAFLEX (1-30-185)
SITE CHARACTERIZATION REPORT
GARDEN CITY, NEW YORK

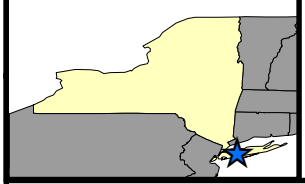
FIGURE 3
SOIL VAPOR SAMPLING LOCATIONS

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
RSC	MJS	MJS	RSC	AS SHOWN	NOVEMBER 2009	14368.35	GIS/PROJECTS/ FIGURE3.MXD



Soil Vapor Sampler Set at 10 ft bgs

EA®		PENDAFLEX (1-30-185) SITE CHARACTERIZATION REPORT GARDEN CITY, NEW YORK				FIGURE 4 TYPICAL TEMPORARY SOIL VAPOR POINT CONSTRUCTION DIAGRAM	
PROJECT MGR: DJC	DESIGNED BY: MJS	CREATED BY: DCC	CHECKED BY: DJC	NOT TO SCALE	DATE: NOVEMBER 2009	PROJECT NO: 14368.35	FILE NO: GIS/PROJECTS/ FIGURE4.MXD



Legend

Site Boundary

Soil Boring

Feet

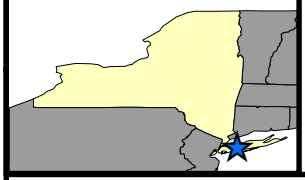
0 50 100 200

Source: NYS Office of Cyber Security and Critical Infrastructure Coordination (CSCIC)

PENDAFLEX (1-30-185)
SITE CHARACTERIZATION REPORT
GARDEN CITY, NEW YORK

FIGURE 5
SUBSURFACE SOIL SAMPLING LOCATIONS

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
DJC	MJS	DCC	DJC	AS SHOWN	NOVEMBER 2009	1436835	GIS/PROJECTS/ FIGURE5.MXD



Legend

Hydropunch Sample Location

Site Boundary

Feet

0 50 100 200

Source: NYS Office of Cyber Security and Critical Infrastructure Coordination (CSCIC)

PENDAFLEX (1-30-185)
SITE CHARACTERIZATION REPORT
GARDEN CITY, NEW YORK

FIGURE 6
HYDROPUNCH SAMPLING LOCATIONS

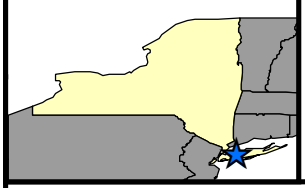
PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
DJC	MJS	DCC	DJC	AS SHOWN	NOVEMBER 2009	1436835	GIS/PROJECTS/ FIGURE6.MXD

SV-02	SV-02 µg/m³	SV-DUP µg/m³
Carbon tetrachloride	ND	ND
Cis-1,2-Dichloroethene	598.0	555.0
1,1-Dichloroethene	ND	ND
Tetrachloroethene	27,100	22,900
1,1,1-Trichloroethane	ND	ND
Trichloroethene	3,080	2,710
Vinyl chloride	ND	ND

SV-01	µg/m³
Carbon tetrachloride	ND
Cis-1,2-Dichloroethene	ND
1,1-Dichloroethene	ND
Tetrachloroethene	2.540
1,1,1-Trichloroethane	ND
Trichloroethene	559.0
Vinyl chloride	ND

SV-04	µg/m³
Carbon tetrachloride	ND
Cis-1,2-Dichloroethene	ND
1,1-Dichloroethene	ND
Tetrachloroethene	124.0
1,1,1-Trichloroethane	ND
Trichloroethene	ND
Vinyl chloride	ND

SV-03	µg/m³
Carbon tetrachloride	ND
Cis-1,2-Dichloroethene	ND
1,1-Dichloroethene	ND
Tetrachloroethene	211.0
1,1,1-Trichloroethane	1.580
Trichloroethene	12.80
Vinyl chloride	ND



Legend

Site Boundary

Soil Vapor Point

µg/m³ Micrograms per cubic meter (parts per billion)

ND Not detected

Feet

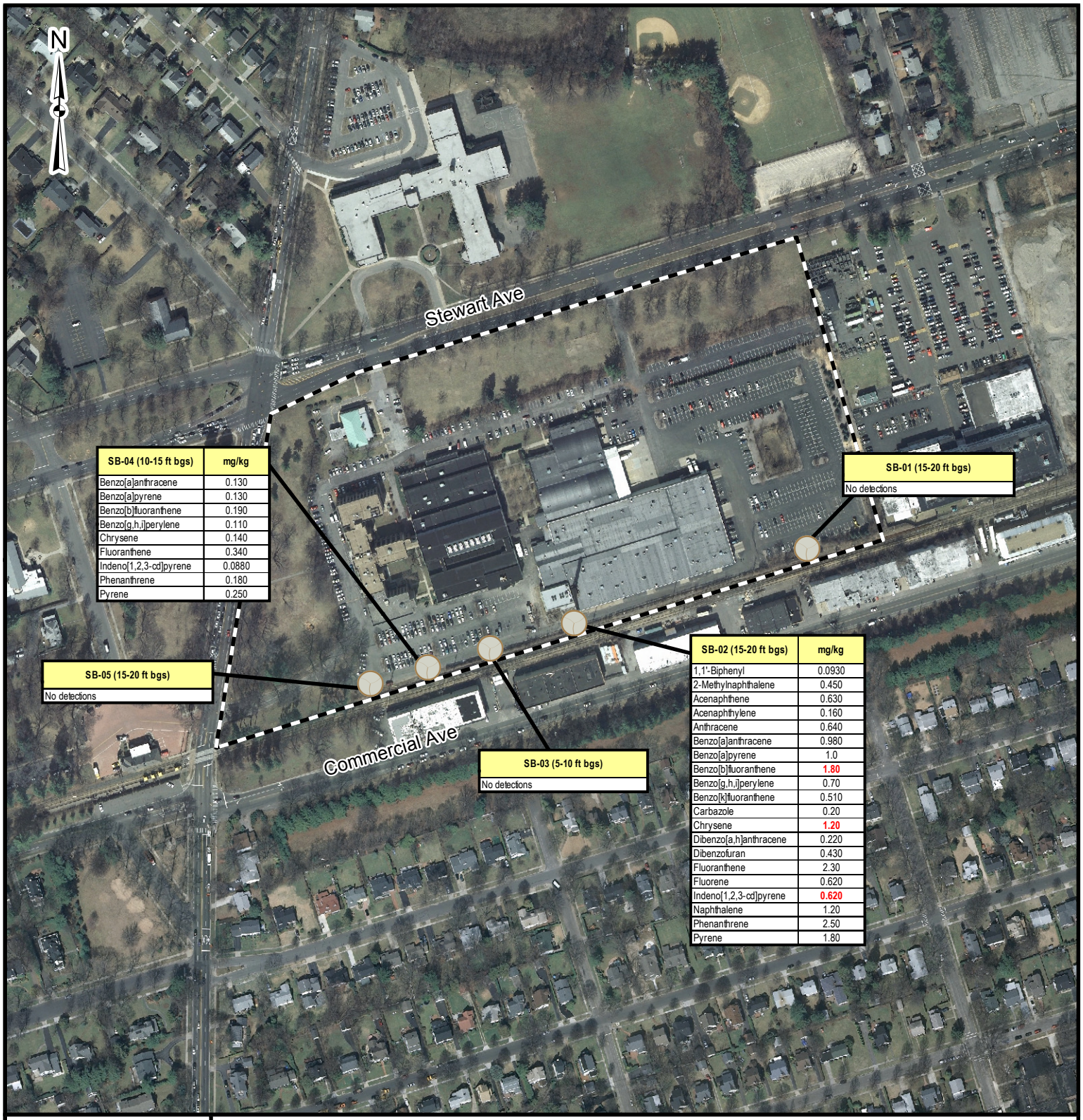
0 100 200 400 600 800

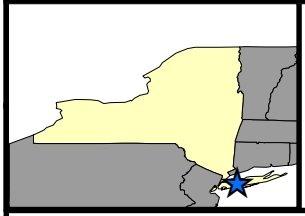
Source: NYS Office of Cyber Security and Critical Infrastructure Coordination (CSCIC)

PENDAFLEX (1-30-185)
SITE CHARACTERIZATION REPORT
GARDEN CITY, NEW YORK

FIGURE 7
Chlorinated Volatile Organic Compounds
In Soil Vapor Samples

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
DJC	MJS	DCC	DJC	AS SHOWN	NOVEMBER 2009	14368.35	GIS/PROJECTS/ FIGURE7.MXD





Legend

Site Boundary

Subsurface Soil Boring

mg/kg Milligrams per kilogram (parts per million)

BOLD Analyte detected above 6 NYCRR Part 375 Unrestricted Use Cleanup Objective

Feet

0 100 200 400 600 800

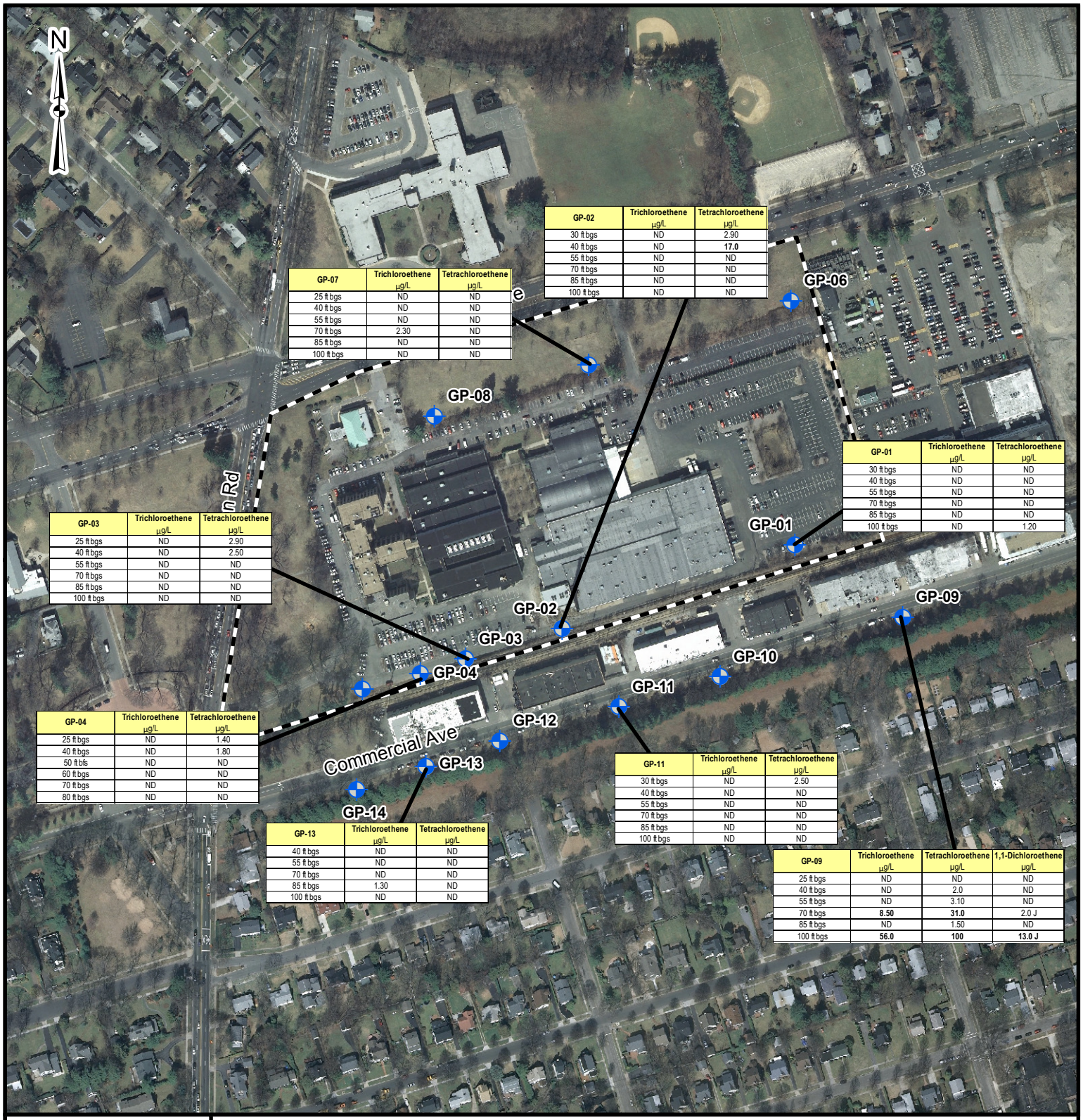
Duplicate sample collected at SB-01 (15-20 ft bgs) illustrated no detections

Source: NYS Office of Cyber Security and Critical Infrastructure Coordination (CSCIC)

PENDAFLEX (1-30-185)
SITE CHARACTERIZATION REPORT
GARDEN CITY, NEW YORK

FIGURE 8
Semivolatile Organic Compounds
In Subsurface Soil Samples

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
DJC	MJS	DCC	DJC	AS SHOWN	NOVEMBER 2009	14368.35	GIS/PROJECTS/ FIGURE8.MXD



GP-02	Trichloroethene µg/L	Tetrachloroethene µg/L
30 ft bgs	ND	2.90
40 ft bgs	ND	**17.0**
55 ft bgs	ND	ND
70 ft bgs	ND	ND
85 ft bgs	ND	ND
100 ft bgs	ND	ND

GP-07	Trichloroethene µg/L	Tetrachloroethene µg/L
25 ft bgs	ND	ND
40 ft bgs	ND	ND
55 ft bgs	ND	ND
70 ft bgs	2.30	ND
85 ft bgs	ND	ND
100 ft bgs	ND	ND

GP-01	Trichloroethene µg/L	Tetrachloroethene µg/L
30 ft bgs	ND	ND
40 ft bgs	ND	ND
55 ft bgs	ND	ND
70 ft bgs	ND	ND
85 ft bgs	ND	ND
100 ft bgs	ND	1.20

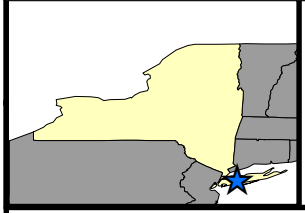
GP-03	Trichloroethene µg/L	Tetrachloroethene µg/L
25 ft bgs	ND	2.90
40 ft bgs	ND	2.50
55 ft bgs	ND	ND
70 ft bgs	ND	ND
85 ft bgs	ND	ND
100 ft bgs	ND	ND

GP-04	Trichloroethene µg/L	Tetrachloroethene µg/L
25 ft bgs	ND	1.40
40 ft bgs	ND	1.80
50 ft bfs	ND	ND
60 ft bgs	ND	ND
70 ft bgs	ND	ND
80 ft bgs	ND	ND

GP-11	Trichloroethene µg/L	Tetrachloroethene µg/L
30 ft bgs	ND	2.50
40 ft bgs	ND	ND
55 ft bgs	ND	ND
70 ft bgs	ND	ND
85 ft bgs	ND	ND
100 ft bgs	ND	ND

GP-13	Trichloroethene µg/L	Tetrachloroethene µg/L
40 ft bgs	ND	ND
55 ft bgs	ND	ND
70 ft bgs	ND	ND
85 ft bgs	1.30	ND
100 ft bgs	ND	ND

GP-09	Trichloroethene µg/L	Tetrachloroethene µg/L	1,1-Dichloroethene µg/L
25 ft bgs	ND	ND	ND
40 ft bgs	ND	2.0	ND
55 ft bgs	ND	3.10	ND
70 ft bgs	**8.50**	**31.0**	2.0 J
85 ft bgs	ND	1.50	ND
100 ft bgs	**56.0**	**100**	**13.0 J**



Legend

Hydropunch Sample Location

Site Boundary

µg/L Micrograms per liter (parts per billion)
BOLD Detection is above AWQS
J Value is an estimate

Feet
0 100 200 400 600 800

Note: Figure illustrates detections of chlorinated VOCs detected with at least one exceedance to NYS Ambient Water Quality Standards

Source: NYS Office of Cyber Security and Critical Infrastructure Coordination (CSCIC)

PENDAFLEX (1-30-185)
SITE CHARACTERIZATION REPORT
GARDEN CITY, NEW YORK

FIGURE 9
CHLORINATED VOLATILE ORGANIC COMPOUNDS IN GROUNDWATER SAMPLES

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
DJC	MJS	DCC	DJC	AS SHOWN	NOVEMBER 2009	1436835	GIS/PROJECTS/ FIGURE9.MXD

TABLE 1 SITE CHARACTERIZATION ANALYTICAL PROGRAM

Sample Matrix	VOC USEPA Method 8260B/TO-15	SVOC USEPA Method 8270C	TAL Metals USEPA Method 6010	Pesticides/PCBs USEPA Method 8081/8082
GROUNDWATER SAMPLING PROGRAM				
No. of Samples	81	5	5	5
Field Duplicate	4	1	1	1
Trip Blank[(a)]	4	---	---	---
Rinsate Blank[(b)]	4	1	1	1
MS/MSD	8	2	2	2
Total No. of Analyses	101	9	9	9
SUBSURFACE SOIL SAMPLING PROGRAM				
No. of Samples	5	5	5	5
Field Duplicate	1	1	1	1
Rinsate Blank	1	1	1	1
MS/MSD	2	2	2	2
Total No. of Analyses	9	9	9	9
SOIL VAPOR SAMPLING PROGRAM				
No. of Samples	4			
Field Duplicate	1			
Rinsate Blank	---			
MS/MSD	---			
Total No. of Analyses	5			

(a) Trip Blanks are required for volatile organic compound sampling of aqueous media at a rate of one per sample shipment.
(b) One rinsate blank collected per day of sampling with a field device that requires field documentation.

NOTE: VOC = Volatile organic compound.
SVOC = Semivolatile organic compound.
TAL = Target analyte list.
PCB = Polychlorinated biphenyls.
USEPA = U.S. Environmental Protection Agency.
MS/MSD = Matrix spike/matrix spike duplicate.
Laboratory quality control samples were collected at a rate of 1 per 20 samples, per matrix.

TABLE 2 DETECTED VOLATILE ORGANIC COMPOUNDS SOIL VAPOR ANALYTICAL DATA

Test Parameter USEPA Method TO-15	Sample ID Lab ID Sample Type Sample Date	1-30-185-SV01 L0909636-01 Soil Vapor 7/14/2009		1-30-185-SV02 L0909636-02 Soil Vapor 7/14/2009		1-30-185-SV03 L0909636-03 Soil Vapor 7/14/2009		1-30-185-SV04 L0909636-04 Soil Vapor 7/14/2009		1-30-185-SV-DUP[(a)] L0909636-05 Duplicate/QA/QC 7/14/2009	
1,1,1-Trichloroethane	µg/m^3		U		U	1.58			U		U
1,2,4-Trimethylbenzene	µg/m^3	33.2			U	29.4		42.6			U
1,3,5-Trimethybenzene	µg/m^3	9.2	U		U	8.02		11.8			U
1,3-Butadiene	µg/m^3	3.27			U	1.28		1.61			U
1,4-Dichlorobenzene	µg/m^3				U	1.41		3.41			U
2,2,4-Trimethylpentane	µg/m^3		U		U	1.46		7.75			U
2-Butanone	µg/m^3	6.88			U	6.15		4.85			U
4-Ethyltoluene	µg/m^3	7.95			U	7.31		11.8			U
Acetone	µg/m^3	90		155		36.3		32.7		156	J
Benzene	µg/m^3	2.57	U		U	2.9		3.61			U
Carbon disulfide	µg/m^3	4.08			U	4.41		2.33			U
Chloromethane	µg/m^3	0.858			U		U		U		U
cis-1,2-Dichloroethene	µg/m^3		U	598			U		U	555	
Cyclohexane	µg/m^3	0.75			U	0.698		0.82			U
Dichlorodifluoromethane	µg/m^3	2.43			U	1.66		3.09			U
Ethanol	µg/m^3		U		U	6.03		5.83			U
Ethylbenzene	µg/m^3	30		112		146		24.9		95.7	
Freon-114	µg/m^3		U		U		U	2.3			U
Heptane	µg/m^3	2.48			U	6.12		5.5			U
Isopropanol	µg/m^3	2.31			U	2.64		3.1			U
Methylene chloride	µg/m^3	1.89	U		U		U		U		U
n-Hexane	µg/m^3	3.7			U	6.18		5.53		57	
o-Xylene	µg/m^3	27.5		71.2		52.9		34.9			U
p/m-Xylene	µg/m^3	96		252		296		94.6		208	
Propylene	µg/m^3	39.2		59.1		19.5		17.4		82	
Styrene	µg/m^3	14.7			U	12.2		21.1			U
Tetrachloroethene	µg/m^3	2.54		27,100		211		124		22,900	
Tetrahydrofuran	µg/m^3	1.36			U	1.03		2			U
Toluene	µg/m^3	43.8		93.1		83.4		61.8		90.4	
Trichloroethene	µg/m^3	559		3,080		12.8			U	2,710	
Trichlorofluoromethane	µg/m^3	1.72			U	1.5		2.26			U

(a) Duplicate sample collected at 1-30-185-SV02.

NOTE: USEPA = United States Enivronmental Protection Agency
QA/QC = Quality Assurance/Quality Control
µg/m^3 = mircograms per cubic meter
U = Value not detected above laboratory method detection limit
J = Value is an estimate
Data provided by Alpha Analytical. Data validation completed by Environmental Data Services, Inc.

TABLE 3 DETECTED VOLATILE ORGANIC COMPOUNDS SOIL ANALYTICAL DATA

Parameters List USEPA Method 8260B	Sample ID	1-30-185-SB01 (15-20)		1-30-185-SB02 (15-20)		1-30-185-SB03 (5-10)		1-30-185-SB04 (10-15)		1-30-185-SB05 (15-20)		1-30-185-Rinsate 01		1-30-185-SB-DUP01[a]		6 NYCRR Part 375 Unrestricted Use Cleanup Objectives (ppm)
	Sample Interval	15-20 ft bgs		15-20 ft bgs		5-10 ft bgs		10-15 ft bgs		15-20 ft bgs		---		---		
	Lab ID	AC45774-001		AC45774-002		AC45774-003		AC45774-004		AC45774-005		AC45774-017		AC45774-015		
	Sample Type	Soil		Soil		Soil		Soil		Soil		QA/QC Rinsate		QA/QC Duplicate		
	Sample Date	7/14/2009		7/14/2009		7/15/2009		7/14/2009		7/13/2009		7/14/2009		7/14/2009		
4-Isopropyltoluene	mg/kg	(<0.0010)	U	0.012		(<0.0010)	U	(<0.0010)	U	(<0.0010)	U	(<1.0)	U	(<0.0010)	U	---
1,2,4-Trimethylbenzene	mg/kg	(<0.0010)	U	0.0012		(<0.0010)	U	(<0.0010)	U	(<0.0010)	U	(<1.0)	U	(<0.0010)	U	3.6
Tetrachloroethene	mg/kg	(<0.00510)	U	0.21		(<0.00510)	U	(<0.00510)	U	(<0.00510)	U	(<1.0)	U	(<0.00520)	U	1.3

(a) Duplicate sample was collected at SB01 (15-20)

NOTE: USEPA = United States Enivronmental Protection Agency
ft bgs = Feet below ground surface
QA/QC = Quality Assurance/Quality Control
NYCRR = New York Codes Rules and Regulations
mg/kg = milligrams per kilogram = parts per million (ppm)
U = Non-detect, detection below the method detection limit
1-30-185-Rinsate 01 results in parts per billion (ppb)
Data provided by Hampton Clarke-Veritech. Only analytes that were detected in at least one sample are shown. Data validation completed by Environmental Data Services, Inc.

TABLE 4 DETECTED TARGET ANALYTE LIST METALS COMPOUNDS SOIL ANALYTICAL DATA

Parameters List USEPA Method 6010/7471	Sample ID	1-30-185-SB01 (15-20)		1-30-185-SB02 (15-20)		1-30-185-SB03 (5-10)		1-30-185-SB04 (10-15)		1-30-185-SB05 (15-20)		1-30-185-Rinsate 01		1-30-185-SB-DUP01[a]		6 NYCRR Part 375 Unrestricted Use Cleanup Objectives (ppm)
	Sample Interval	15-20 ft bgs		15-20 ft bgs		5-10 ft bgs		10-15 ft bgs		15-20 ft bgs		---		---		
	Lab ID	AC45774-001		AC45774-002		AC45774-003		AC45774-004		AC45774-005		AC45774-017		AC45774-015		
	Sample Type	Soil		Soil		Soil		Soil		Soil		QA/QC Rinsate		QA/QC Duplicate		
	Sample Date	7/14/2009		7/14/2009		7/15/2009		7/14/2009		7/13/2009		7/14/2009		7/14/2009		
Aluminum	(mg/kg)	1,900	J	3,600	J	1,100	J	1,800	J	1,400	J	(<180)	U	1,600	J	---
Arsenic	(mg/kg)	(<2.10)	U	5.2		(<2.10)	U	2.2		(<2.10)	U	(<7.50)	U	(<2.10)	U	*13*
Barium	(mg/kg)	(<10)	U	17		(<10)	U	19		(<10)	U	(<50)	U	(<11.0)	U	*350*
Chromium	(mg/kg)	(<5.20)	U	12		(<5.20)	U	8		(<5.20)	U	(<50)	U	(<5.30)	U	*31*
Cobalt	(mg/kg)	(<2.60)	U	(<2.70)	U	(<2.60)	U	3.9		(<2.60)	U	(<20)	U	(<2.60)	U	---
Copper	(mg/kg)	(<5.20)	U	44		(<5.20)	U	9.8		(<5.20)	U	(<50)	U	(<5.30)	U	*50*
Iron	(mg/kg)	3,300	J	13,000	J	4,000	J	6,300	J	4,100	J	(<280)	U	3,400	J	---
Lead	(mg/kg)	(<7.30)	U	29		(<7.20)	U	(<7.20)	U	(<7.20)	U	7.5		(<7.40)	U	*63*
Magnesium	(mg/kg)	(<520)	U	(<540)	U	(<520)	U	600		(<520)	U	(<2,000)	U	(<530)	U	---
Manganese	(mg/kg)	29	J	180	J	110	J	200	J	27	J	(<40)	U	36.0	J	*1,600*
Nickel	(mg/kg)	(<5.20)	U	9.2		(<5.20)	U	6.4		(<5.20)	U	(<50)	U	(<5.30)	U	*30*
Zinc	(mg/kg)	(<10)	U	100	J	(<10)	U	(<10)	U	(<10)	U	(<50)	U	(<11.0)	U	*109*

(a) Duplicate sample was collected at SB01 (15-20)

NOTE: USEPA = United States Enivronmental Protection Agency
ft bgs = Feet below ground surface
QA/QC = Quality Assurance/Quality Control
NYCRR = New York Codes Rules and Regulations
mg/kg = milligrams per kilogram = parts per million (ppm).
J = Concentration is an estimated value.
U = Non-detect, detection below the method detection limit
1-30-185-Rinsate 01 results in µg/L (parts per billion)
Data provided by Hampton Clarke-Veritech. Only analytes that were detected in at least one sample are shown. Data validation completed by Environmental Data Services, Inc.

TABLE 5 DETECTED PESTICIDES SOIL ANALYTICAL DATA

Parameters List USEPA Method 8081A	Sample ID	1-30-185-SB01 (15-20)		1-30-185-SB02 (15-20)		1-30-185-SB03 (5-10)		1-30-185-SB04 (10-15)		1-30-185-SB05 (15-20)		1-30-185-Rinsate 01		1-30-185-SB-DUP01[a]		6 NYCRR Part 375 Unrestricted Use Cleanup Objectives (ppm)
	Sample Interval	15-20 ft bgs		15-20 ft bgs		5-10 ft bgs		10-15 ft bgs		15-20 ft bgs		---		---		
	Lab ID	AC45774-001		AC45774-002		AC45774-003		AC45774-004		AC45774-005		AC45774-017		AC45774-015		
	Sample Type	Soil		Soil		Soil		Soil		Soil		QA/QC Rinsate		QA/QC Duplicate		
	Sample Date	7/14/2009		7/14/2009		7/15/2009		7/14/2009		7/13/2009		7/14/2009		7/14/2009		
p,p'-DDT	(mg/kg)	(<0.00260)	U	0.0081		(<0.00260)	U	(<0.00260)	U	(<0.00260)	U	(<0.0110)	U	(<0.00260)	U	---

(a) Duplicate sample was collected at SB01 (15-20)

NOTE: USEPA = United States Enivronmental Protection Agency
ft bgs = Feet below ground surface
QA/QC = Quality Assurance/Quality Control
NYCRR = New York Codes Rules and Regulations
mg/kg = milligrams per kilogram = parts per million (ppm).
U = Non-detect, detection below the method detection limit
1-30-185-Rinsate 01 results in µg/L (micrograms per liter, parts per billion)
Data provided by Hampton Clarke-Veritech. Only analytes that were detected in at least one sample are shown. Data validation completed by Environmental Data Services, Inc.

TABLE 6 DETECTED SEMIVOLATILE ORGANIC COMPOUNDS SOIL ANALYTICAL DATA

Parameters List USEPA Method 8270C	Sample ID	1-30-185-SB01 (15-20)		1-30-185-SB02 (15-20)		1-30-185-SB03 (5-10)		1-30-185-SB04 (10-15)		1-30-185-SB05 (15-20)		1-30-185-Rinsate 01		1-30-185-SB-DUP01[a]		6 NYCRR Part 375 Unrestricted Use Cleanup Objectives (ppm)
	Sample Interval	15-20 ft bgs		15-20 ft bgs		5-10 ft bgs		10-15 ft bgs		15-20 ft bgs		---		---		
	Lab ID	AC45774-001		AC45774-002		AC45774-003		AC45774-004		AC45774-005		AC45774-017		AC45774-015		
	Sample Type	Soil		Soil		Soil		Soil		Soil		QA/QC Rinsate		QA/QC Duplicate		
	Sample Date	7/14/2009		7/14/2009		7/15/2009		7/14/2009		7/13/2009		7/14/2009		7/14/2009		
1,1'-Biphenyl	(mg/kg)	(<0.0690)	U	0.093		(<0.0690)	U	(<0.0690)	U	(<0.0690)	U	(<2.0)	U	(<0.070)	U	---
2-Methylnaphthalene	(mg/kg)	(<0.0690)	U	0.45		(<0.0690)	U	(<0.0690)	U	(<0.0690)	U	(<2.0)	U	(<0.070)	U	---
Acenaphthene	(mg/kg)	(<0.0690)	U	0.63		(<0.0690)	U	(<0.0690)	U	(<0.0690)	U	(<2.0)	U	(<0.070)	U	20
Acenaphthylene	(mg/kg)	(<0.0690)	U	0.16		(<0.0690)	U	(<0.0690)	U	(<0.0690)	U	(<2.0)	U	(<0.070)	U	100
Anthracene	(mg/kg)	(<0.0690)	U	0.64		(<0.0690)	U	(<0.0690)	U	(<0.0690)	U	(<2.0)	U	(<0.070)	U	100
Benzo[a]anthracene	(mg/kg)	(<0.0690)	U	0.98		(<0.0690)	U	0.13		(<0.0690)	U	(<2.0)	U	(<0.070)	U	1
Benzo[a]pyrene	(mg/kg)	(<0.0690)	U	1.0		(<0.0690)	U	0.13		(<0.0690)	U	(<2.0)	U	(<0.070)	U	1
Benzo[b]fluoranthene	(mg/kg)	(<0.0690)	U	**1.8**		(<0.0690)	U	0.19		(<0.0690)	U	(<2.0)	U	(<0.070)	U	1
Benzo[g,h,i]perylene	(mg/kg)	(<0.0690)	U	0.7		(<0.0690)	U	0.11		(<0.0690)	U	(<2.0)	U	(<0.070)	U	100
Benzo[k]fluoranthene	(mg/kg)	(<0.0690)	U	0.51		(<0.0690)	U	(<0.0690)	U	(<0.0690)	U	(<2.0)	U	(<0.070)	U	0.8
Carbazole	(mg/kg)	(<0.0690)	U	0.2		(<0.0690)	U	(<0.0690)	U	(<0.0690)	U	(<2.0)	U	(<0.070)	U	---
Chrysene	(mg/kg)	(<0.0690)	U	**1.2**		(<0.0690)	U	0.14		(<0.0690)	U	(<2.0)	U	(<0.070)	U	1
Dibenzo[a,h]anthracene	(mg/kg)	(<0.0690)	U	0.22		(<0.0690)	U	(<0.0690)	U	(<0.0690)	U	(<2.0)	U	(<0.070)	U	0.33
Dibenzofuran	(mg/kg)	(<0.0690)	U	0.43		(<0.0690)	U	(<0.0690)	U	(<0.0690)	U	(<2.0)	U	(<0.070)	U	---
Fluoranthene	(mg/kg)	(<0.0690)	U	2.3		(<0.0690)	U	0.34		(<0.0690)	U	(<2.0)	U	(<0.070)	U	100
Fluorene	(mg/kg)	(<0.0690)	U	0.62		(<0.0690)	U	(<0.0690)	U	(<0.0690)	U	(<2.0)	U	(<0.070)	U	30
Indeno[1,2,3-cd]pyrene	(mg/kg)	(<0.0690)	U	**0.62**		(<0.0690)	U	0.088		(<0.0690)	U	(<2.0)	U	(<0.070)	U	0.5
Naphthalene	(mg/kg)	(<0.0690)	U	1.2		(<0.0690)	U	(<0.0690)	U	(<0.0690)	U	(<2.0)	U	(<0.070)	U	12
Phenanthrene	(mg/kg)	(<0.0690)	U	2.5		(<0.0690)	U	0.18		(<0.0690)	U	(<2.0)	U	(<0.070)	U	100
Pyrene	(mg/kg)	(<0.0690)	U	1.8		(<0.0690)	U	0.25		(<0.0690)	U	(<2.0)	U	(<0.070)	U	100

(a) Duplicate sample was collected at SB01 (15-20)

NOTE: USEPA = United States Enivronmental Protection Agency
ft bgs = Feet below ground surface
QA/QC = Quality Assurance/Quality Control
NYCRR = New York Codes Rules and Regulations
mg/kg = milligrams per kilogram = parts per million (ppm).
U = Non-detect, detection below the method detection limit
1-30-185-Rinsate 01 results in parts per billion (ppb)
Data provided by Hampton Clarke-Veritech. Only analytes that were detected in at least one sample are shown. Data validation completed by Environmental Data Services, Inc.
Concentration values in shaded cells indicate that analyte was detecetd above the 6 NYCRR Part 375 - Unrestricted Use soil cleanup objective.

TABLE 7 DETECTED VOLATILE ORGANIC COMPOUNDS GROUNDWATER ANALYTICAL DATA

Parameters List USEPA Method 8260B	Sample ID	1-30-185-GP01 (30)		1-30-185-GP01 (40)		1-30-185-GP01 (55)		1-30-185-GP01 (70)		1-30-185-GP01 (85)		1-30-185-GP01 (100)		NYSDEC Ambient Water Quality Standard Class GA (ppb)
	Lab ID	AC45774-008		AC45975-018		AC45975-017		AC45975-016		AC45975-015		AC45975-014		
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date	7/14/2009		7/14/2009		7/15/2009		7/14/2009		7/13/2009		7/14/2009		
1,1-Dichloroethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
1,1-Dichloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
2-Hexanone	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Acetone	(µg/L)	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	50 (g)
Bromodichloromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Chloroform	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	7 (s)
Methyl-t-butyl ether	(µg/L)	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	0.530		10 (g)
Tetrachloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	1.20		5 (s)
Toluene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichlorofluoromethane	(µg/L)	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	2.10		5(s)

Parameters List USEPA Method 8260B	Sample ID	1-30-185-GP02 (30)		1-30-185-GP02 (40)		1-30-185-GP02 (55)		1-30-185-GP02 (70)		1-30-185-GP02 (85)		1-30-185-GP02 (100)		NYSDEC Ambient Water Quality Standard Class GA (ppb)
	Lab ID	AC45774-011		AC45975-023		AC45975-022		AC45975-021		AC45975-020		AC45975-019		
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date	7/14/2009		7/21/2009		7/21/2009		7/21/2009		7/21/2009		7/21/2009		
1,1-Dichloroethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
1,1-Dichloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
2-Hexanone	(µg/L)	(<1.0)	U	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	U	50 (g)
Acetone	(µg/L)	(<5.0)	UJ	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	50 (g)
Bromodichloromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Chloroform	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	7 (s)
Methyl-t-butyl ether	(µg/L)	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	0.50		10 (g)
Tetrachloroethene	(µg/L)	2.90		**17.0**		(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Toluene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichlorofluoromethane	(µg/L)	(<1.0)	UJ	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	UJ	5(s)

Parameters List USEPA Method 8260B	Sample ID	1-30-185-GP03 (25)		1-30-185-GP03 (40)		1-30-185-GP03 (55)		1-30-185-GP03 (70)		1-30-185-GP03 (85)		1-30-185-GP03 (100)		NYSDEC Ambient Water Quality Standard Class GA (ppb)
	Lab ID	AC45774-012		AC45975-028		AC45975-027		AC45975-026		AC45975-025		AC45975-024		
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date	7/14/2009		7/21/2009		7/21/2009		7/21/2009		7/21/2009		7/21/2009		
1,1-Dichloroethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
1,1-Dichloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
2-Hexanone	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	UJ	(<1.0)	UJ	50 (g)
Acetone	(µg/L)	(<5.0)	U	(<5.0)	U	(<5.0)	U	25.0		(<5.0)	U	(<5.0)	U	50 (g)
Bromodichloromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Chloroform	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	3.60		4.70		(<1.0)	U	7 (s)
Methyl-t-butyl ether	(µg/L)	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	10 (g)
Tetrachloroethene	(µg/L)	2.90		2.50		(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Toluene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichlorofluoromethane	(µg/L)	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	U	(<1.0)	U	5(s)

Parameters List USEPA Method 8260B	Sample ID	1-30-185-GP04 (25)		1-30-185-GP04 (40)		1-30-185-GP04 (55)		1-30-185-GP04 (70)		1-30-185-GP04 (85)		1-30-185-GP04 (100)		NYSDEC Ambient Water Quality Standard Class GA (ppb)
	Lab ID	AC45774-013		AC45975-036		AC45975-035		AC45975-034		AC45975-033		AC45975-032		
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date	7/14/2009		7/22/2009		7/22/2009		7/22/2009		7/22/2009		7/22/2009		
1,1-Dichloroethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
1,1-Dichloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	UJ	(<1.0)	U	(<1.0)	U	5 (s)
2-Hexanone	(µg/L)	(<1.0)	U	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	U	50 (g)
Acetone	(µg/L)	(<5.0)	U	(<5.0)	U	(<5.0)	U	16.0		(<5.0)	U	(<5.0)	U	50 (g)
Bromodichloromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Chloroform	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	2.30		(<1.0)	U	(<1.0)	U	7 (s)
Methyl-t-butyl ether	(µg/L)	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	10 (g)
Tetrachloroethene	(µg/L)	1.40		1.80		(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Toluene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichlorofluoromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5(s)

NOTE: USEPA = United States Enivronmental Protection Agency
NYSDEC = New York State Department of Environmental Conservation
ppb = Parts per billion
µg/L = micrograms per Liter = parts per billion (ppb).
J = Value is an estimate.
U = Non-detect, detection below the method detection limit
(s) = Standard
(g) = Guidance Value
Data provided by Hampton Clarke-Veritech. Only analytes that were detected in at least one sample are shown. Data validation completed by Environmental Data Services, Inc.
Concentration values in shaded cells indicate that analyte was detecetd above the NYS Ambient Water Quality Standards for Class GA Waters.

TABLE 7 DETECTED VOLATILE ORGANIC COMPOUNDS GROUNDWATER ANALYTICAL DATA

Parameters List USEPA Method 8260B	Sample ID	1-30-185-GP05 (25)		1-30-185-GP05 (40)		1-30-185-GP05 (55)		1-30-185-GP05 (70)		1-30-185-GP05 (85)		1-30-185-GP05 (100)		NYSDEC Ambient Water Quality Standard Class GA (ppb)
	Lab ID	AC45774-014		AC45774-022		AC45774-021		AC45774-020		AC45774-019		AC45774-018		
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date	7/14/2009		7/15/2009		7/15/2009		7/15/2009		7/15/2009		7/15/2009		
1,1-Dichloroethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
1,1-Dichloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
2-Hexanone	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Acetone	(µg/L)	(<5.0)	U	21.0		26.0		26.0		(<5.0)	U	(<5.0)	U	50 (g)
Bromodichloromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Chloroform	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	7 (s)
Methyl-t-butyl ether	(µg/L)	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	10 (g)
Tetrachloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Toluene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichlorofluoromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5(s)

Parameters List USEPA Method 8260B	Sample ID	1-30-185-GP06 (25)		1-30-185-GP06 (40)		1-30-185-GP06 (55)		1-30-185-GP06 (70)		1-30-185-GP06 (85)		1-30-185-GP06 (100)		NYSDEC Ambient Water Quality Standard Class GA (ppb)
	Lab ID	AC45975-013		AC45975-010		AC45975-009		AC45975-008		AC45975-007		AC45975-006		
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date	7/14/2009		7/20/2009		7/20/2009		7/20/2009		7/20/2009		7/20/2009		
1,1-Dichloroethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
1,1-Dichloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
2-Hexanone	(µg/L)	(<1.0)	U	(<1.0)	UJ	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Acetone	(µg/L)	(<5.0)	U	(<5.0)	U	(<5.0)	U	26.0		(<5.0)	U	(<5.0)	U	50 (g)
Bromodichloromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Chloroform	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	7 (s)
Methyl-t-butyl ether	(µg/L)	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	10 (g)
Tetrachloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Toluene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichlorofluoromethane	(µg/L)	(<1.0)	UJ	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	UJ	(<1.0)	UJ	5(s)

Parameters List USEPA Method 8260B	Sample ID	1-30-185-GP07 (25)		1-30-185-GP07 (40)		1-30-185-GP07 (55)		1-30-185-GP07 (70)		1-30-185-GP07 (85)		1-30-185-GP07 (100)		NYSDEC Ambient Water Quality Standard Class GA (ppb)
	Lab ID	AC45774-006		AC45774-005		AC45827-004		AC45827-003		AC45827-002		AC45827-001		
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date	7/16/2009		7/16/2009		7/16/2009		7/16/2009		7/16/2009		7/16/2009		
1,1-Dichloroethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
1,1-Dichloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
2-Hexanone	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Acetone	(µg/L)	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	50 (g)
Bromodichloromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Chloroform	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	7 (s)
Methyl-t-butyl ether	(µg/L)	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	10 (g)
Tetrachloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Toluene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	2.30		(<1.0)	U	(<1.0)	U	5 (s)
Trichlorofluoromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5(s)

Parameters List USEPA Method 8260B	Sample ID			1-30-185-GP08 (40)		1-30-185-GP08 (55)		1-30-185-GP08 (70)		1-30-185-GP08 (85)		1-30-185-GP08 (100)		NYSDEC Ambient Water Quality Standard Class GA (ppb)
	Lab ID			AC45975-005		AC45975-004		AC45975-003		AC45975-002		AC45975-001		
	Sample Type			Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date			7/20/2009		7/20/2009		7/20/2009		7/20/2009		7/20/2009		
1,1-Dichloroethane	(µg/L)			(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
1,1-Dichloroethene	(µg/L)			(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
2-Hexanone	(µg/L)			(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Acetone	(µg/L)			(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	50 (g)
Bromodichloromethane	(µg/L)			(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Chloroform	(µg/L)			(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	7 (s)
Methyl-t-butyl ether	(µg/L)			(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	10 (g)
Tetrachloroethene	(µg/L)			(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Toluene	(µg/L)			(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichloroethene	(µg/L)			(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichlorofluoromethane	(µg/L)			(<1.0)	UJ	(<1.0)	U	(<1.0)	U	(<1.0)	UJ	(<1.0)	UJ	5(s)

TABLE 7 DETECTED VOLATILE ORGANIC COMPOUNDS GROUNDWATER ANALYTICAL DATA

Parameters List USEPA Method 8260B	Sample ID	1-30-185-GP09 (25)		1-30-185-GP09 (40)		1-30-185-GP09 (55)		1-30-185-GP09 (70)		1-30-185-GP09 (85)		1-30-185-GP09 (100)		NYSDEC Ambient Water Quality Standard Class GA (ppb)
	Lab ID	AC45984-009		AC45984-006		AC45984-005		AC45984-004		AC45984-003		AC45984-002		
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date	7/23/2009		7/23/2009		7/23/2009		7/23/2009		7/23/2009		7/23/2009		
1,1-Dichloroethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	1.10		5 (s)
1,1-Dichloroethene	(µg/L)	(<1.0)	UJ	(<1.0)	U	(<1.0)	UJ	2.0	J	(<1.0)	UJ	**13.0**	J	5 (s)
2-Hexanone	(µg/L)	(<1.0)	UJ	(<1.0)	U	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	50 (g)
Acetone	(µg/L)	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	50 (g)
Bromodichloromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Chloroform	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	4.90		(<1.0)	U	7 (s)
Methyl-t-butyl ether	(µg/L)	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	10 (g)
Tetrachloroethene	(µg/L)	(<1.0)	U	2.0		3.10		**31.0**		1.50		**100**		5 (s)
Toluene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	1.0		**8.50**		(<1.0)	U	**56.0**		5 (s)
Trichlorofluoromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5(s)

Parameters List USEPA Method 8260B	Sample ID	1-30-185-GP10 (25)		1-30-185-GP10 (40)		1-30-185-GP10 (55)		1-30-185-GP10 (70)		1-30-185-GP10 (85)		1-30-185-GP10 (100)		NYSDEC Ambient Water Quality Standard Class GA (ppb)
	Lab ID	AC45984-015		AC45984-014		AC45984-013		AC45984-012		AC45984-011		AC45984-010		
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date	7/23/2009		7/23/2009		7/23/2009		7/23/2009		7/23/2009		7/23/2009		
1,1-Dichloroethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
1,1-Dichloroethene	(µg/L)	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	U	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	5 (s)
2-Hexanone	(µg/L)	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	50 (g)
Acetone	(µg/L)	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	50 (g)
Bromodichloromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	1.20		(<1.0)	U	50 (g)
Chloroform	(µg/L)	(<1.0)	U	(<1.0)	U	4.0		6.50		**7.50**		1.90		7 (s)
Methyl-t-butyl ether	(µg/L)	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	10 (g)
Tetrachloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Toluene	(µg/L)	(<1.0)	U	(<1.0)	U	1.10		(<1.0)	U	(<1.0)	U	2.50		5 (s)
Trichloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichlorofluoromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5(s)

Parameters List USEPA Method 8260B	Sample ID	1-30-185-GP11 (25)		1-30-185-GP11 (40)		1-30-185-GP11 (55)		1-30-185-GP11 (70)		1-30-185-GP11 (85)		1-30-185-GP11 (100)		NYSDEC Ambient Water Quality Standard Class GA (ppb)
	Lab ID	AC45984-021		AC45984-020		AC45984-019		AC45984-018		AC45984-017		AC45984-016		
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date	7/23/2009		7/23/2009		7/23/2009		7/23/2009		7/23/2009		7/23/2009		
1,1-Dichloroethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
1,1-Dichloroethene	(µg/L)	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	U	5 (s)
2-Hexanone	(µg/L)	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	50 (g)
Acetone	(µg/L)	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	50 (g)
Bromodichloromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Chloroform	(µg/L)	1.70		(<1.0)	U	2.0		1.0		2.20		(<1.0)	U	7 (s)
Methyl-t-butyl ether	(µg/L)	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	10 (g)
Tetrachloroethene	(µg/L)	2.50		(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Toluene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichlorofluoromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5(s)

Parameters List USEPA Method 8260B	Sample ID	1-30-185-GP12 (25)		1-30-185-GP12 (40)		1-30-185-GP12 (55)		1-30-185-GP12 (70)		1-30-185-GP12 (85)		1-30-185-GP12 (100)		NYSDEC Ambient Water Quality Standard Class GA (ppb)
	Lab ID	AC45984-027		AC45984-026		AC45984-025		AC45984-024		AC45984-023		AC45984-022		
	Sample Type	Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date	7/24/2009		7/24/2009		7/24/2009		7/24/2009		7/24/2009		7/24/2009		
1,1-Dichloroethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
1,1-Dichloroethene	(µg/L)	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	5 (s)
2-Hexanone	(µg/L)	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	50 (g)
Acetone	(µg/L)	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	50 (g)
Bromodichloromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Chloroform	(µg/L)	1.70		(<1.0)	U	(<1.0)	U	(<1.0)	U	2.60		(<1.0)	U	7 (s)
Methyl-t-butyl ether	(µg/L)	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	10 (g)
Tetrachloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Toluene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichlorofluoromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5(s)

TABLE 7 DETECTED VOLATILE ORGANIC COMPOUNDS GROUNDWATER ANALYTICAL DATA

Parameters List USEPA Method 8260B	Sample ID		1-30-185-GP13 (40)		1-30-185-GP13 (55)		1-30-185-GP13 (70)		1-30-185-GP13 (85)		1-30-185-GP13 (100)		NYSDEC Ambient Water Quality Standard Class GA (ppb)
	Lab ID		AC45975-043		AC45975-040		AC45975-039		AC45975-038		AC45975-037		
	Sample Type		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date		7/22/2009		7/22/2009		7/22/2009		7/22/2009		7/22/2009		
1,1-Dichloroethane	(µg/L)		(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
1,1-Dichloroethene	(µg/L)		(<1.0)	U	(<1.0)	U	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	U	5 (s)
2-Hexanone	(µg/L)		(<1.0)	U	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	50 (g)
Acetone	(µg/L)		(<5.0)	U	(<5.0)	U	20	J	(<5.0)	UJ	(<5.0)	U	50 (g)
Bromodichloromethane	(µg/L)		(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Chloroform	(µg/L)		(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	7 (s)
Methyl-t-butyl ether	(µg/L)		(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	0.530		10 (g)
Tetrachloroethene	(µg/L)		(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Toluene	(µg/L)		(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichloroethene	(µg/L)		(<1.0)	U	(<1.0)	U	(<1.0)	U	1.30		(<1.0)	U	5 (s)
Trichlorofluoromethane	(µg/L)		(<1.0)	UJ	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5(s)

Parameters List USEPA Method 8260B	Sample ID		1-30-185-GP14 (40)		1-30-185-GP14 (55)		1-30-185-GP14 (70)		1-30-185-GP14 (85)		1-30-185-GP14 (100)		NYSDEC Ambient Water Quality Standard Class GA (ppb)
	Lab ID		AC45975-048		AC45975-047		AC45975-046		AC45975-045		AC45975-044		
	Sample Type		Groundwater		Groundwater		Groundwater		Groundwater		Groundwater		
	Sample Date		7/21/2009		7/21/2009		7/21/2009		7/21/2009		7/21/2009		
1,1-Dichloroethane	(µg/L)		(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
1,1-Dichloroethene	(µg/L)		(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
2-Hexanone	(µg/L)		(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Acetone	(µg/L)		(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	50 (g)
Bromodichloromethane	(µg/L)		(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Chloroform	(µg/L)		(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	7 (s)
Methyl-t-butyl ether	(µg/L)		(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	10 (g)
Tetrachloroethene	(µg/L)		(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Toluene	(µg/L)		1.0	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichloroethene	(µg/L)		(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichlorofluoromethane	(µg/L)		(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	5(s)

Parameters List USEPA Method 8260B	Sample ID	1-30-185-GP-DUP01		1-30-185-GP-DUP02		1-30-185-GP-DUP 03		1-30-185-GP-DUP 03A		1-30-185-Trip Blank		1-30-185-TB		NYSDEC Ambient Water Quality Standard Class GA (ppb)
	Lab ID	AC45774-016		AC45827-009		AC45975-041		AC45975-042		AC45774-023		AC45827-008		
	Sample Type	QA/QC Duplicate		QA/QC Duplicate		QA/QC Duplicate		QA/QC Duplicate		QA/QC Trip Blank		QA/QC Trip Blank		
	Sample Date	7/14/2009		7/16/2009		7/21/2009		7/21/2009		7/15/2009		7/16/2009		
1,1-Dichloroethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
1,1-Dichloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
2-Hexanone	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Acetone	(µg/L)	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	50 (g)
Bromodichloromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Chloroform	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	7 (s)
Methyl-t-butyl ether	(µg/L)	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	10 (g)
Tetrachloroethene	(µg/L)	3.40		(<1.0)	U	1.80		(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Toluene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichloroethene	(µg/L)	1.10		(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichlorofluoromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	U	(<1.0)	U	5(s)

Parameters List USEPA Method 8260B	Sample ID	1-30-185-Trip Blank		1-30-185- TRIP BLANK		1-30-185 Rinse 02		1-30-185-Rinsate 03		1-30-185-Rinsate 04		1-30-185-Rinsate 05		NYSDEC Ambient Water Quality Standard Class GA (ppb)
	Lab ID	AC45975-051		AC45984-001		AC45827-007		AC45975-031		AC45975-049		AC45975-050		
	Sample Type	QA/QC Trip Blank		QA/QC Trip Blank		QA/QC Rinsate		QA/QC Rinsate		QA/QC Rinsate		QA/QC Rinsate		
	Sample Date	7/22/2009		7/23/2009		7/16/2009		7/21/2009		7/22/2009		7/23/2009		
1,1-Dichloroethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
1,1-Dichloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
2-Hexanone	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Acetone	(µg/L)	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	(<5.0)	U	50 (g)
Bromodichloromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	50 (g)
Chloroform	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	7 (s)
Methyl-t-butyl ether	(µg/L)	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	(<0.50)	U	10 (g)
Tetrachloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Toluene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichloroethene	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	U	5 (s)
Trichlorofluoromethane	(µg/L)	(<1.0)	U	(<1.0)	U	(<1.0)	U	(<1.0)	UJ	(<1.0)	UJ	(<1.0)	UJ	5(s)

NOTE: QA/QC = Quality Assurance/Quality Control

GP-DUP01 Duplicate sample was collected at GP02 (30)

GP-DUP02 Duplicate sample was collected at GP07 (25)

GP-DUP03 Duplicate sample was collected at GP04 (40)

GP-DUP03A (GP-DUP04) Duplicate sample was collected at GP14 (40)

TABLE 8 DETECTED TARGET ANALYTE LIST METALS GROUNDWATER ANALYTICAL DATA

Parameters List USEPA Method 6010/7471	Sample ID	1-30-185-GP01 (30)		1-30-185-GP02 (30)		1-30-185-GP03 (25)		1-30-185-GP04 (25)		1-30-185-GP05 (25)		1-30-185-Rinsate 01		1-30-185-GP-DUP01[a]		NYSDEC Ambient Water Quality Standard Class GA (ppb)
	Lab ID	AC45774-008		AC45774-011		AC45774-012		AC45774-013		AC45774-014		AC45774-017		AC45774-016		
	Sample Type	Soil		Soil		Soil		Soil		Soil		QA/QC Rinsate		QA/QC Duplicate		
	Sample Date	7/14/2009		7/14/2009		7/15/2009		7/14/2009		7/14/2009		7/14/2009		7/14/2009		
Aluminum	(µg/L)	**450**	**J**	**510**	**J**	**6,100**	**J**	**260**	**J**	**430**	**J**	(<180)	U	**20,000**	**J**	100 (s)
Arsenic	(µg/L)	(<7.50)	U	(<7.50)	U	(<7.50)	U	(<7.50)	U	(<7.50)	U	(<7.50)	U	11.0		25 (s)
Barium	(µg/L)	(<50)	U	(<50)	U	280		210		110		(<50)	U	64.0		1,000 (s)
Calcium	(µg/L)	7,700		4,600		53,000		55,000		20,000		(<2,000)	U	5,000		---
Cobalt	(µg/L)	(<20)	U	(<20)	U	(<20)	U	21.0		(<20)	U	(<20)	U	(<20)	U	---
Iron	(µg/L)	**1,100**	**J**	**1,600**	**J**	**14,000**	**J**	**2,200**	**J**	**3,900**	**J**	(<280)	U	**40,000**	**J**	300 (s)
Lead	(µg/L)	(<4.0)	U	(<4.0)	U	(<4.0)	U	(<4.0)	U	(<4.0)	U	7.50		13.0		25 (s)
Magnesium	(µg/L)	(<2,000)	U	(<2,000)	U	5,900		11,000		4,700		(<2,000)	U	(<2,000)	U	35,000 (g)
Manganese	(µg/L)	110	J	66	J	**1,400**	**J**	**510**	**J**	270	J	(<40)	U	230	J	300 (s)
Nickel	(µg/L)	(<50)	U	(<50)	U	54		(<50)	U	(<50)	U	(<50)	U	(<50)	U	100 (s)
Potassium	(µg/L)	(<5,000)	U	(<5,000)	U	7,700		6,800		(<5,000)	U	(<5,000)	U	(<5,000)	U	---
Sodium	(µg/L)	**64,000**		(<5,000)	U	**130,000**		**180,000**		**200,000**		(<5,000)	U	(<5,000)	U	20,000 (s)
Zinc	(µg/L)	110	J	170	J	600	J	(<50)	U	(<50)	U	(<50)	U	250	J	2,000 (g)

(a) Duplicate sample was collected at GP02 (30)

NOTE: USEPA = United States Enivronmental Protection Agency
QA/QC = Quality Assurance/Quality Control
NYSDEC = New York State Department of Environmental Conservation
µg/L = micrograms per Liter = parts per billion (ppb).
J = Result is an estimate
U = Non-detect, detection below the method detection limit
(s) = Standard
(g) = Guidance Value
Data provided by Hampton Clarke-Veritech. Only analytes that were detected in at least one sample are shown. Data validation completed by Environmental Data Services, Inc.
Concentration values in shaded cells indicate that analyte was detecetd above the NYS Ambient Water Quality Standards for Class GA Waters.