New York State Department of Environmental Conservation
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DRAFT

Site Characterization Report

Hauppauge Area-Wide Groundwater Study
Site # 1-52-221
Smithtown, New York

Work Assignment # D004439-20

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1. Introduction

1.1. Objective

The New York State Department of Environmental Conservation (NYSDEC) issued a Site Characterization Work Assignment for an area in the vicinity of the Heartland Industrial Park (Site# 1-52-221), located in the hamlet of Hauppauge and in the Town of Smithtown, Suffolk County, New York (site). Malcolm Pirnie, Inc. (Malcolm Pirnie) has prepared this Site Characterization Report (SCR) to summarize the work performed during the investigation.

The purpose of the Site Characterization was to evaluate the nature and extent of contamination present at the site, to evaluate the extent that contaminants present at the site may pose a risk to human health and the environment, and to use in the determination of which, if any, properties should be listed on the Registry of Inactive Hazardous Waste Disposal Sites (Registry).

1.2. Site Description and Site History

The site is located in the vicinity of the Heartland Industrial Park located in the hamlet of Hauppauge, Town of Smithtown, Suffolk County, New York (Figure 1). The site is bounded to the north by Northern State Parkway and Veteran's Memorial Highway, to the south by the Long Island Expressway, to the west by Vanderbuilt Motor Parkway, and to the east by Old Willet's Path. The site has been historically used for various manufacturing/industrial uses. As the area is an industrial park, the types and locations of businesses have changed numerous times over the years.

There are two known properties in the study area that are currently undergoing remediation. One is listed on Registry at 100 Oser Avenue. Sands Textiles Finishers, Inc. used and disposed of tetrachloroethene at 100 Oser Avenue from 1975 to 1985. In 2002 the NYSDEC issued a decision that called for soil vapor extraction systems to clean-up the source area and soil vapor contamination, and a chemical oxidation process involving the injection of potassium permanganate to remediate groundwater at the site. A soil vapor extraction system was installed and is currently operating at 100 Oser Avenue. The groundwater injections on-site were completed and groundwater monitoring is ongoing. In 2006, the NYSDEC issued a Record of Decision (ROD) that called for chemical oxidation of the groundwater plume as it leaves the site. Additionally, between January and March 2008, more than 150 residential and commercial buildings were evaluated for the potential for soil vapor intrusion (NYSDEC, 2008).

The second known property in the vicinity of the site that is currently undergoing remediation is 145 Marcus Boulevard. Computer Circuits made circuit boards for military and commercial applications at 145 Marcus Boulevard from 1969 to 1977. Elevated concentrations of metals and volatile organic compounds were present in groundwater samples collected from the site. The United States Environmental Protection Agency (USEPA) conducted a Remedial Investigation and Feasibility Study from 2001 to 2007 (USEPA, 2009).

1.3. Standards, Criteria, and Guidance (SCGs)

Title 6 of the NYCRR Part 375 requires that SCGs are identified and that remedial actions conform with SCGs unless "good cause exists why conformity should be dispensed with." Standards and Criteria are cleanup standards, standards of control, and other substantive environmental protection requirements, criteria, or limitations promulgated under federal or state law that specifically address a hazardous substance, pollutant, contaminant, remedial action, or location. Guidance includes non-promulgated criteria and guidelines that are not legal requirements; however, the site's remedial program should be designed with consideration given to guidance that, based on professional judgment, is determined to be applicable to the site.

The principle SCGs for the site are listed below:

General:

- 6 NYCRR Part 375 – Environmental Remediation Programs, including the Inactive Hazardous Waste Disposal Site Remedial Program
- 6 NYCRR Part 371 – Identification and Listing of Hazardous Wastes

Soil:

- 6 NYCRR Part 375 – Soil Cleanup Objectives
- 6 NYCRR Part 376 – Land Disposal Restrictions
- NYSDEC Division of Solid and Hazardous Materials TAGM 3028 "Contained-in" Criteria for Environmental Media (8/97)

Water:

- 6 NYCRR Part 700-705, Water Quality Regulations for Surface Water and Groundwater
- NYSDEC Division of Water TOGS 1.1.1 – Ambient Water Quality Standards and Groundwater Effluent Limitations

Air:

- NYSDEC Division of Air Resources Policy DAR-1 – Guidelines for Control of Toxic Ambient Air Contaminants
- 6 NYCRR Part 212 – General Process Emissions Sources
- NYSDOH October 2006 Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York

2. Physiographic Setting

2.1. Physical Setting

The site includes approximately 2,050 acres located in the central part of Long Island. The site contains an industrial park and neighborhoods to the north of the industrial park. Surficial deposits in the vicinity of the site are mapped as outwash sand and gravel and kame moraine (Figure 2). Outwash sand and gravel deposits typically consist of stratified, well-rounded, coarse to fine gravel with sand. Unlike outwash deposits, kame moraine deposits have variable texture (size and sorting), from boulders to sand, and are deposited at an ice margin during deglaciation (Cadwell et al., 1986). Soils encountered during this investigation were generally fine to medium sand with fine to coarse subrounded gravel associated with the upper glacial aquifer.

Topography varies across the site due to the surficial deposits. The highest elevations exist in the northwestern portion of the site where there is a moraine that trends in a west to east direction. From the moraine, the topography slopes downward to the northeast toward New Mill Pond. There is evidence of kame and kettle topography on the north and eastern portions of the site. The topography of the southern half of the site consists of outwash sand and gravel deposits that slope gently downward to the south.

Below the surficial deposits are coastal plain deposits, which consist of the Monmouth group, Matawan group, and Magothy formation (Figure 3). These groups and formation are generally composed of silty clay, glauconitic sandy clay, sand, and/or gravel (Fisher et al., 1970).

2.2. Groundwater

There are three main water-bearing units on Long Island, New York: the upper glacial aquifer, and the underlying Magothy and Loyd aquifers. Monitoring wells installed during the SC intersect the upper glacial aquifer, which is a shallow, unconsolidated aquifer of variable thickness beneath the site. The wells may be located above a shallow confined part of the upper glacial aquifer (Cartwright, 1997).

Groundwater in the vicinity of the site flows generally to the northeast, toward New Millpond. This groundwater flow direction is based on water levels in monitoring wells that were installed at the site, as discussed in Section 3.4 of this Report. During the SC, the groundwater elevation across the site was between 48 and 53 feet above mean sea level (amsl). In the spring of 2000, the groundwater elevation ranged from 50 to 70 feet amsl in the vicinity of the site (Busciolano, 2002[Plate 1A]).

2.3. Surface Water

Surface water was not encountered during the SC. There are several ponds located approximately one mile northeast of the site that drain into Nissequogue River, which flows north into Smithtown Bay.

3. Summary of Field Activities

Malcolm Pirnie conducted the scope of work outlined in the NYSDEC approved Project Management Work Plan (PMWP) (Malcolm Pirnie, 2008) and Technical Scope of Work (Appendix A of the PMWP) in accordance with the terms of the Standby Agreement between the NYSDEC and Malcolm Pirnie, and in a manner that was consistent with the objectives of 6 NYCRR Part 375. Field sampling activities were conducted in accordance with the NYSDEC approved Project Management Work Plan and Technical Scope of Work, and included:

- Completion of a geophysical survey;
- Direct-push groundwater sampling;
- Direct-push soil sampling;
- Installation of monitoring wells;
- Development of monitoring wells;
- Collection of groundwater samples from monitoring wells;
- Soil vapor sampling;
- Site survey; and
- Development of a base map.

Field notes describing each day's field activities were recorded on Daily Observation Reports, which are provided in Appendix A.

3.1. Geophysical Survey

Aestus, LLC (Aestus) performed a GeoTrax Survey™ investigation at the site from December 9, 2008 to March 31, 2009. Aestus performed 84 high resolution surveys at the site (Figure 4). Each survey was conducted by installing 56 specialized electrode stakes into the ground along a straight line at a specific electrode spacing interval. The electrode stakes were connected via geophysical cables, which were attached to Aestus' data acquisition field instruments. Electrical resistivity data from the subsurface was gathered and partially processed in the field to obtain a draft subsurface image. Full data reduction and processing was performed in Aestus' offices. Further details of the geophysical survey field work, data interpretation, and conclusions from the geophysical survey are summarized in the Draft Aestus Geotrax™ Survey Site Characterization Work Report for the Hauppauge Industrial Park, submitted to the NYSDEC on June 5, 2009. Results of the geophysical survey were used to focus the screening of soil and groundwater at the site.

3.2. Direct-Push Groundwater Sampling

A direct-push drilling rig (Geoprobe®) was used to collect groundwater samples at the site. The locations, depths, and number of samples were based on the findings of the geophysical survey described above. A total of 44 groundwater samples were collected at 20 locations (Figure 5). Groundwater samples were collected via a direct-push groundwater sampling device capable of collecting groundwater samples at discrete depth intervals. Groundwater samples collected at different intervals from the same location were collected from the same boring, starting with deepest sampling interval. The boring was drilled to the deepest target interval, and then a four-foot screen was exposed. The sampling point was purged to allow for discrete samples to be collected. After the groundwater sample was collected, the sampling rods and screen were pulled up the next sampling interval. Purging was completed manually using a foot valve and dedicated, single-use tubing. Purged groundwater was monitored for the following geochemical parameters: temperature, pH, oxidation reduction potential, specific conductivity, turbidity, and dissolved oxygen. Purge logs are provided in Appendix B.

Groundwater samples were submitted to Chemtech (a NYSDOH Environmental Laboratory Approval Program (ELAP) and a NYSDEC Analytical Service Protocol (ASP) certified laboratory) for Target Compound List (TCL) VOC analysis using EPA method 8260B and Target Analyte List (TAL) Metals analysis using USEPA Method 6010B/7470A. A filtered sample was also collected and analyzed for TAL metals when the turbidity was greater than 50 Nephelometric Turbidity Units (ntu). Three of the direct-push groundwater samples were additionally analyzed for:

- Ammonia (as nitrogen) by Standard Method 4500-NH_3;
- Chloride by USEPA Method 300.0;
- Nitrate by USEPA Method 300.0;

3.3. Direct-Push Soil Sampling

A direct-push drilling rig (Geoprobe®) was used to collect subsurface soil samples. The Geoprobe® used a five-foot long, 1.5-inch to 2-inch diameter hollow steel rod lined with a five-foot length of acrylic tube (macrocore). The rod was driven into the subsurface to create a borehole. Upon removal from the ground, subsurface soil samples inside the macrocore tubes were extracted from the rod. By replacing the macrocores and reusing the same borehole, soil samples were collected from ground surface to the water table or refusal, whichever was encountered first.

The locations and depths of samples were based on the findings of the geophysical survey described in Section 3.1. Four borings were drilled with continuous soil sampling from ground surface to the water table (Figure 5). Borings were drilled at six additional locations; however, refusal was encountered before the target depth was reached (Figure

5). Refusal was encountered from 15 feet below ground surface (bgs) at borings CB-06 and CB-12 to 49 feet bgs at boring CB-23. Boring logs are provided in Appendix C.

Each core was classified by the field geologist and visually assessed for indications of contamination. Additionally, each core was screened for VOCs with a photoionization detector (PID). A total of five confirmation soil samples were submitted to Chemtech and analyzed for the following parameters:

- TCL VOCs by USEPA Method 8260B;
- TCL SVOCs by USEPA Method 8270C;
- TAL Metals analysis using USEPA Method 6010B/7471A;
- TCL PCBs by USEPA Method 8082; and
- Organochlorine pesticides by USEPA Method 8081A.

3.4. Monitoring Well Installation and Development

Nine overburden groundwater monitoring wells were installed in February and March 2010 using hollow-stem auger and mud rotary drilling methods. Well construction information is listed on Table 1. Results from the direct-push groundwater sampling along with groundwater data from existing sites in the Hauppauge Industrial Park were used to select drilling and monitoring well locations (Figure 6).

One deep monitoring well (MW-30D) was installed using a combination of 4.25-inch hollow-stem auger rotary drilling methods through the unsaturated soil and drive and wash drilling methods through the saturated soil. Due to running sands coming up the sampling rods at 51 feet bgs, the augers were pulled out of the ground and temporary four-inch steel casing was installed. Split spoon soil samples were collected continuously from ground surface to the total boring depth to obtain information on the characteristics of the overburden material. For each monitoring well installed, soil was screened with a PID as the split spoon samples were opened.

One shallow monitoring well, four intermediate monitoring wells, and one deep monitoring well were installed using 4.25-inch hollow-stem auger rotary drilling methods. Split-spoon soil samples were collected every five feet to the water table at monitoring wells MW-20I, MW-23D, and MW-24I to obtain information on the characteristics of the overburden material. Split-spoon sampling was not feasible in the saturated zone due to running sands that were encountered. Consequently, once the water table was reached, the boreholes were drilled to the target depths. At locations where multiple wells were installed, split-spoon sampling was conducted at the location of the deepest monitoring well.

Two deep monitoring wells (MW-15D and MW-34D) were installed using a combination of 4.25-inch hollow-stem auger rotary drilling methods through the unsaturated soil and mud rotary drilling methods through the saturated soil. Spilt-spoon samples were collected every five feet to the water table and every 10 feet thereafter to the target depth.

Each of the nine monitoring wells that were installed, were constructed using two-inch diameter Schedule 40 PVC and either five-foot or 10-foot sections of 0.01-slot screen. The annular space between the borehole and the PVC screen was filled with clean silica filter pack sand. The filter pack material was filled to at least two feet above the PVC screen. A bentonite slurry filled the 10 feet above the filter pack material, while the remainder of the borehole was filled with a cement-bentonite grout. Each monitoring well was completed with a flush-mount protective casing. Boring/well construction logs are presented in Appendix C.

Upon completion, each monitoring well was developed to remove sediment from the well and filter pack. Monitoring well installation, construction, and development procedures during the Site Characterization were conducted in accordance with the procedures and QA/QC protocols summarized in the generic Quality Assurance Project Plan (Generic QAPP) for Work Assignments (Malcolm Pirnie, 2007), as well as the Technical Scope of Work (Appendix A of the PMWP). Well development purge logs are provided in Appendix B.

3.5. Groundwater Sampling of Monitoring Wells

Groundwater samples were collected from monitoring wells installed during the SC between May 17 and 19, 2010, utilizing either a bladder pump or peristaltic pump in accordance with the USEPA Low-Flow/Low-Purge Sampling Protocol (USEPA, 1998). Prior to groundwater sampling, groundwater levels were measured in each well to specifically evaluate current groundwater flow patterns at the site. Field parameters, including pH, specific conductivity, temperature, turbidity, oxidation-reduction potential (ORP), and dissolved oxygen were measured during well purging using a flow-through cell system. Purge/sampling logs are provided in Appendix B. The groundwater samples were submitted to Chemtech for analysis of TCL VOCs using USEPA method 8260B, and TAL metals using USEPA methods 6010B and 7470A. Specific sampling procedures and protocols, including QA/QC sample requirements and chain-of-custody procedures, were followed as described in the Generic QAPP.

3.6. Soil Vapor Sampling

Per the request of the NYSDEC, six soil vapor sampling points were installed to evaluate the potential for migration and intrusion of volatile organic vapors originating from soil and/or groundwater underlying the site. The locations of the soil vapor points were based on the findings of the geophysical survey described in Section 3.1 with the exception of

SVP-06, which is located on the north side of Eagle Lane between Sparrow Lane and Hawk Lane. Per the request of the NYSDEC, soil vapor point SVP-04 was shifted approximately 25 feet to the east of the location suggested by Aestus. Five of the subsurface soil vapor points were installed with a Geoprobe® by advancing a small diameter borehole to a maximum depth of 10.5 feet bgs. A stainless steel sampling point was connected to Teflon tubing and placed in the borehole. Clean silica sand was poured around and approximately 12-inches above the sampling point. Hydrated bentonite powder was then poured in the borehole creating an approximately one-foot seal above the sand filter pack. Each borehole was then grouted to the surface and finished with flush-mounted concrete protective curb boxes.

Per the request of the NYSDEC, a sixth soil vapor point (SVP-06) was installed to a depth of 45 feet bgs. This soil vapor point was advanced using rotary drilling methods with 2.25-inch ID hollow stem augers. The augers were advanced to 45 feet bgs. A stainless steel sampling point was connected to Teflon tubing and placed in the borehole. Clean silica sand was poured around and approximately 18-inches above the sampling point. A hydrated bentonite powder was then used to seal the sampling point to approximately eight feet from ground surface. Clean silica sand was used to fill the borehole from approximately eight feet bgs to ground surface. A flush-mounted concrete protective curb box was also installed at this location.

Thirty-minute soil vapor samples were collected from each of the six soil vapor points on May 19, 2010. The soil vapor samples were collected and analyzed in accordance with the New York State Department of Health (NYSDOH) *Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, dated October 2006 (NYSDOH, 2006), as specified in the Generic QAPP.

3.7. Investigation-Derived Waste

Investigation-derived wastes (IDW) were handled in accordance with the NYSDEC Proposed Decision Technical and Administrative Guidance Memorandum (TAGM) Disposal of Contaminated Groundwater Generated During Site Investigations and the Final TAGM – Disposal of Drill Cuttings. All IDW materials were containerized in U.N.-approved, 55-gallon steel drums and stored at the staging location. The drums were disposed of off-site at a permitted facility in accordance with local, state, and federal regulations. The non-hazardous manifest/bill of lading forms for the 80 55-gallon steel drums that were removed and disposed of off-site are included in Appendix D.

4. Field Characterization Results

The following sections describe the results of the subsurface investigation during the SC. Laboratory results for the SC are provided in Tables 2 through 4 for groundwater (VOCs, metals, and additional parameters), Tables 5 through 9 for soil (VOCs, SVOCs, metals, PCBs, and pesticides), and Table 10 for soil vapor (VOCs). The analytical results for soil were compared to Unrestricted Use, Residential Use, and Commercial Use 6 NYCRR Part 375 Soil Cleanup Objectives (SCOs). Analytical results for groundwater were compared to NYSDEC Class GA Groundwater Standards or Guidance Values (GA Standard). Figure 7 and Figure 8 show groundwater results for VOCs and metals at the site. Soil vapor results were not compared to any standards or guidance values because, currently, there is only guidance criteria established for sub-slab soil vapor. Figure 9 shows detected soil vapor results for chlorinated VOCs at each of the SVP sampling locations. The laboratory analytical data packages are provided on CD as Appendix E, and the Data Usability Summary Reports (DUSR) are provided as Appendix F.

4.1. Groundwater Survey

Groundwater levels were measured prior to sampling, at monitoring wells installed during the SC and at several existing monitoring wells at the Oser Avenue and Computer Circuits sites. In May 2010, MJ Engineering surveyed the monitoring wells installed during the SC. MJ Engineering also surveyed two monitoring wells at the Computer Circuits site and four monitoring wells from the Oser Avenue site, so that monitoring wells from these three investigations could be tied together. The measuring point elevations for the Computer Circuits site were provided by the USEPA. The measuring point elevations for the Oser Avenue site were provided by URS. There were some discrepancies between the elevations measured by MJ Engineering and the surveyors for the other two sites. To resolve the discrepancies, 0.615 feet was subtracted from the Computer Circuits measuring point elevations and 0.673 feet was added to the Oser Avenue measuring point elevations. Survey elevations are summarized in Table 11. It should be noted that the direction of groundwater based on water levels only in wells surveyed by MJ Engineering would be generally consistent with that shown on Figure 10.

As shown in Table 11, groundwater elevations in May 2010 were between 47 feet amsl and 54 feet amsl at the site. Based on the water levels measured in May 2010, groundwater generally flows northeast. Groundwater elevations measured during the SC are shown on Figure 10.

4.2. Groundwater Results

4.2.1. TCL VOCs

As shown on Figure 7 and summarized in Table 2, groundwater samples collected from five of the 20 direct-push sampling locations and one monitoring well had concentrations of VOCs present that exceeded the GA Standards. Volatile organic compounds were present at concentrations that exceeded the GA Standards at three locations (CB-20, CB-23, and CB-24) within the industrial park portion of the site and two locations within the neighborhood portion of the site (CB-27 and CB-30). Trichloroethene and tetrachloroethene were present at concentrations that exceeded the GA Standards in the intermediate and deep groundwater samples collected at CB-20. The groundwater sample collected from the monitoring well at this location (MW-20I) also had trichloroethene present at a concentration (5.2 µg/l) that slightly exceeded the respective GA Standard of 5 µg/l. The concentration of 1,1,2-trichloroethane in the intermediate and deep groundwater samples (3.7 µg/l and 5.7 µg/l, respectively) collected at direct-push sampling location CB-23 exceeded the respective GA Standard of 1 µg/l. The tetrachloroethene result from the shallow groundwater sample collected at the direct-push sampling location CB-24 (6.4 µg/l) exceeded the respective GA Standard of 5 µg/l.

In the neighborhood portion of the site, VOC results from direct-push sampling locations CB-27 and CB-30 exceeded the GA Standards. Chloroform results from two shallow sampling intervals at boring CB-27 (9.6 µg/l and 15 µg/l) exceeded the respective GA Standard of 7 µg/l. At the direct-push sampling location CB-30, tetrachloroethene results exceeded the GA Standard at two intermediate sampling intervals and trichloroethene results exceeded the GA Standard at two intermediate and a deep sampling interval. The greatest tetrachloroethene result (13 µg/l) and trichloroethene result (19 µg/l) at the direct-push sampling location CB-30 were present at the 111-115 feet bgs sampling interval.

4.2.2. TAL Metals

As shown in Table 3 and on Figure 8, groundwater samples collected from each of the 20 direct-push sampling locations and the nine monitoring wells exceeded the GA Standard for at least two metals. If the turbidity was greater than 50 NTUs a filtered and unfiltered sample was collected. In general, the filtered samples had lower concentrations of metals, with the exception of sodium. Sodium results were similar in both the filtered and unfiltered samples. The most common metals detected in groundwater samples collected at the site that exceeded GA Standards were: chromium, iron, lead, manganese, nickel, and sodium. Antimony, arsenic, copper, and zinc results also exceeded GA Standards in at least two groundwater samples. The two sampling locations with the greatest concentrations of metals were CB-03 and CB-23.

4.2.3. Additional parameters

Three samples were collected from two direct-push sampling locations (CB-05 from 118-122 feet bgs and 126-130 feet bgs, and CB-30 from 96-100 feet bgs) and analyzed for chloride, nitrate, and ammonia to evaluate if some of the conductive anomalies observed in the geophysical survey were due to the influence from septic systems. The locations and depths sampled were chosen based on results from the geophysical survey conducted by Aestus. Results from these three samples are provided in Table 4. The chloride and nitrate results from borings CB-05 and CB-30 are within range of values provided in the 2010 Annual Drinking Water Quality Report by the Suffolk County Water Authority for the Hauppauge distribution area (Suffolk County Water Authority, 2010). The ammonia results from boring CB-05 at sampling intervals 118-122 feet bgs (0.281 mg/l) and 126-130 feet bgs (0.308 mg/l) were two to three times greater than the average result from the 2010 Annual Drinking Water Quality Report (0.11 mg/l), which is based on 262 samples collected from public water supply wells. Results from borings CB-05 and CB-30 indicate that groundwater conductivity as measured by Aestus, may be influenced by septic discharges.

4.3. Subsurface Soil Results

4.3.1. TCL VOCs

As shown in Table 5, VOCs were not detected at concentrations greater than the method detection limit in the 11 soil samples collected.

4.3.2. TCL SVOCs

As shown in Table 6, the only two SVOCs measured in soil samples were bis(2-ethylhexyl)phthalate and phenol. Bis(2-ethylhexyl)phthalate was present in the soil samples collected from 28-30 feet bgs and 39-41 feet bgs from boring CB-30 (0.140 mg/kg and 0.090 mg/kg, respectively). Phenol was also present in the 39-41 feet bgs soil sample (0.037 mg/kg) from boring CB-30.

4.3.3. TAL Metals

The selenium result (4.49 mg/kg) from boring CB-32, collected from 44.5-46.5 feet bgs exceeded the Unrestricted Use SCO of 3.9 mg/kg. No other metals were measured in soil samples at concentrations that exceeded the SCOs (Table 7).

4.3.4. PCBs

Polychlorinated biphenyls were measured in soil samples CB-27 from 26.5-29.5 feet bgs (0.0046 mg/kg) and CB-28 from 26.5-29.5 feet bgs (0.0062 mg/kg) at concentrations less than the Unrestricted Use SCO of 0.1 mg/kg (Table 8).

4.3.5. Pesticides

As shown in Table 9, pesticides were not detected at concentrations greater than the reporting limit in the five soil samples collected.

4.4. Soil Vapor Results

As summarized in Table 10, a total of six soil vapor samples were collected on May 19, 2010 and analyzed for VOCs by the USEPA Compendium Method TO-15. Soil vapor points SVP-01 through SVP-05 are shallow points (screened from 10 to 10.5 feet bgs) located on the south side of Eagle Lane. Soil vapor point SVP-06 is screened from 44.5 to 45 feet bgs and is located on the north side of Eagle Lane between Sparrow Lane and Hawk Lane. The concentrations of VOCs in the soil vapor samples were generally low, commonly not detected or single digit micrograms per cubic meter (ug/m^3) concentrations, with a few exceptions. The 1,1,1-trichloroethane (1,1,1-TCA) soil vapor results at SVP-04 and SVP-06 were 680 $\mu g/m^3$ and 390 $\mu g/m^3$, respectively. Soil vapor results for 1,1-dichloroethane (1,1-DCA) were also elevated at soil vapor points SVP-04 and SVP-06 (17 $\mu g/m^3$ and 76 $\mu g/m^3$, respectively). The soil vapor sample that had the greatest trichloroethene and tetrachloroethene results were from SVP-06 (1 $\mu g/m^3$ and 76 $\mu g/m^3$, respectively). Detected soil vapor results for chlorinated VOCs are shown on Figure 9.

4.5. Data Validation

The analytical data were validated by Data Validation Services according to the NYSDEC Division of Environmental Remediation Data Usability Summary Report (DUSR) guidelines. Copies of the DUSRs are included in Appendix F. In general, most laboratory sample results were usable as reported. Validated analytical results are used and summarized in Tables 2 through 10.

5. Conclusions and Recommendations

The data collected during the SC, supports the following conclusions.

- During the SC, there were no field indications (eg., odors, staining, etc.) of contamination at the locations investigated. There were also no VOCs, SVOCs, PCBs, or pesticides detected at concentrations that exceeded corresponding 6 NYCRR Part 375 Unrestricted Use SCOs in the subsurface soil. The selenium result from boring CB-32 at 44.5-46.5 feet bgs was the only concentration of a metal to exceed an Unrestricted Use SCO in the subsurface soil samples collected.
- In general, chlorinated solvents were detected at greater concentrations in groundwater samples collected from the eastern portion of the site.
- Resistive anomalies observed during the geophysical study did not correspond well to elevated concentrations of chlorinated solvents in groundwater and soil samples.
- Each unfiltered groundwater sample contained iron and manganese at concentrations that exceeded the NYSDEC Class GA Standards. Antimony, arsenic, chromium, copper, iron, lead, manganese, nickel, sodium, and zinc were detected at concentrations that exceeded the GA Standards in at least one unfiltered groundwater sample. In general, the filtered concentrations were less than the unfiltered concentrations, with the exception of sodium. The greatest concentrations of metals in unfiltered samples were from groundwater samples from CB-03 and CB-23. The greatest concentrations of metals in filtered samples were from groundwater samples from CB-23, CB-24, and CB-30.
- Soil vapor concentrations were not compared to any federal or state standards during the SC because currently none exist for soil vapor samples collected from outside of buildings. The greatest concentrations of 1,1,1-TCA and 1,1-DCA in soil vapor samples were detected at SVP-04 and SVP-06. The greatest concentration of tetrachloroethene in a soil vapor sample was measured at SVP-06 (76 $\mu g/m^3$)in the residential portion of the site.

5.1. Recommendations

The NYSDEC has listed both the 100 Oser Avenue site and the Computer Circuits site (located at 145 Marcus Boulevard) on the Inactive Hazardous Waste Registry. Based on the analytical information collected during the SC, this SC did not identify other properties to be listed on the Inactive Hazardous Waste Registry.

Although VOC soil vapor concentrations along Eagle Lane were elevated, these VOCs were not detected at similarly elevated concentrations in groundwater and subsurface soil samples. New York Environmental Conservation Law (ECL) Section 27-1305.2(b), as

implemented through 6NYCRR Part 375, defines a Class 1 or Class 2 Inactive Hazardous Waste Registry Site as listed below.

a. Class 1 – A site at which the disposal of hazardous waste has been confirmed and this hazardous waste or its components or breakdown products constitute a significant threat which is causing, or presents and imminent danger of causing, either irreversible or irreparable damage to the environment requiring immediate action.

b. Class 2 - A site at which the disposal of hazardous waste has been confirmed and this hazardous waste or its components or breakdown products present a significant threat to public health or the environment.

Based on these criteria, and discussions regarding soil vapor results with the NYSDEC, the presence of elevated concentrations of hazardous substances in soil vapor, without the documented/confirmed presence of these substances in the soil or groundwater, does not constitute sufficient evidence of the disposal of hazardous waste on a property or a significant threat to public health or the environment. Accordingly, based on the results of the SC, properties within the site are not recommended for listing in the Registry. However, the NYSDEC and NYSDOH should assess the need to further evaluate the potential for soil vapor intrusion in this area.

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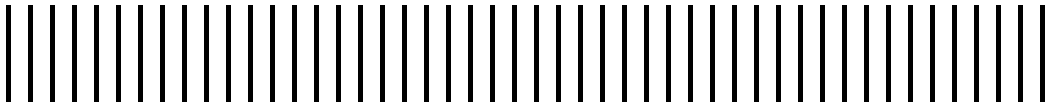
New York State Department of Environmental Conservation

Site Characterization Report

Figures



0266374 / ALB

MALCOLM PIRNIE

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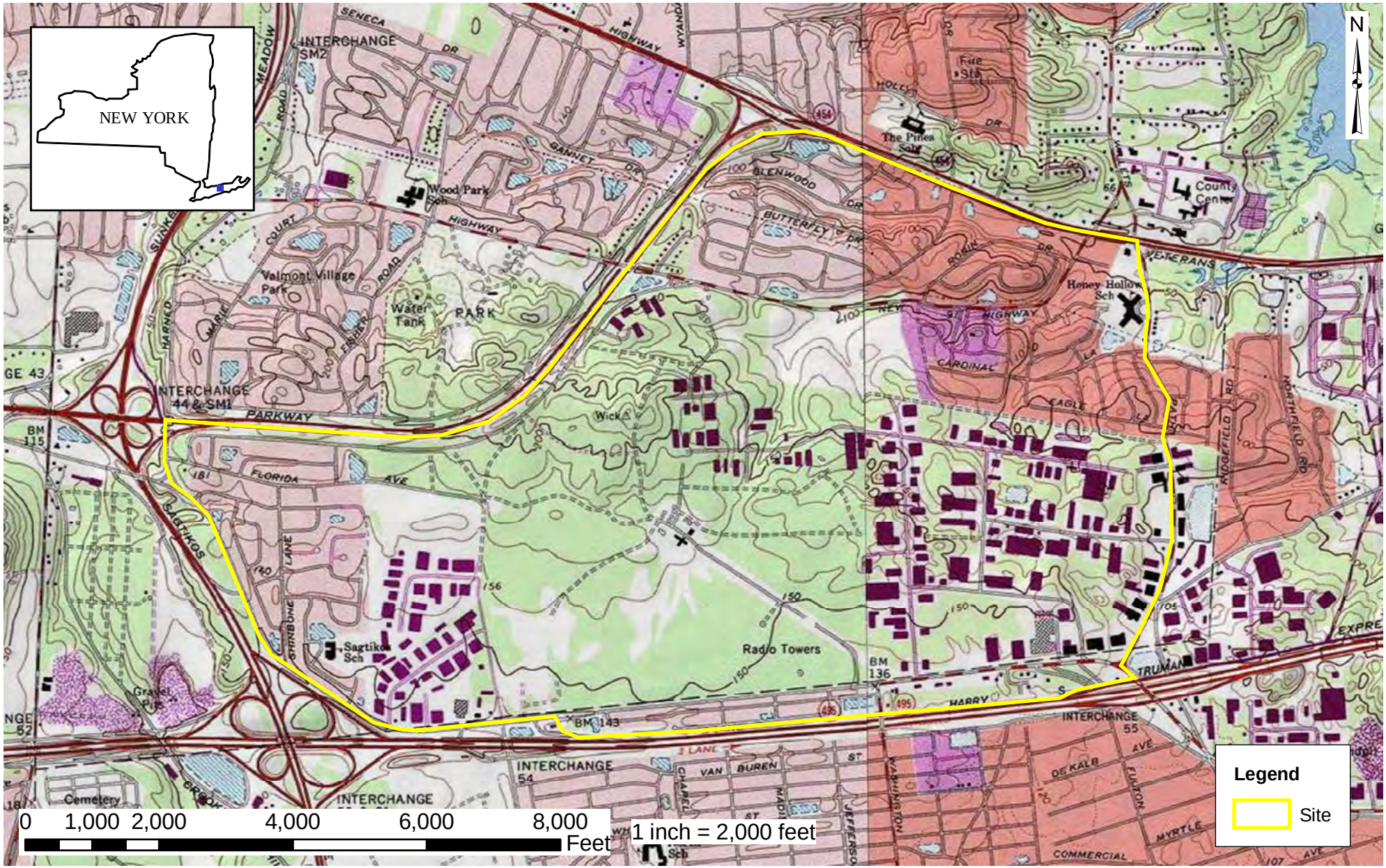

SOURCE: ESRI ArcGIS USTopographic map layer, USGS topographic map 1:24,000 scale, http://resources.esri.com/arcgisdesktop

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HAUPPAUGE AREA-WIDE GROUNDWATER STUDY
SMITHTOWN, SUFFOLK COUNTY, NEW YORK
SITE CHARACTERIZATION REPORT

SITE LOCATION

MALCOLM PIRNIE, INC.

AUGUST 2010
FIGURE 1

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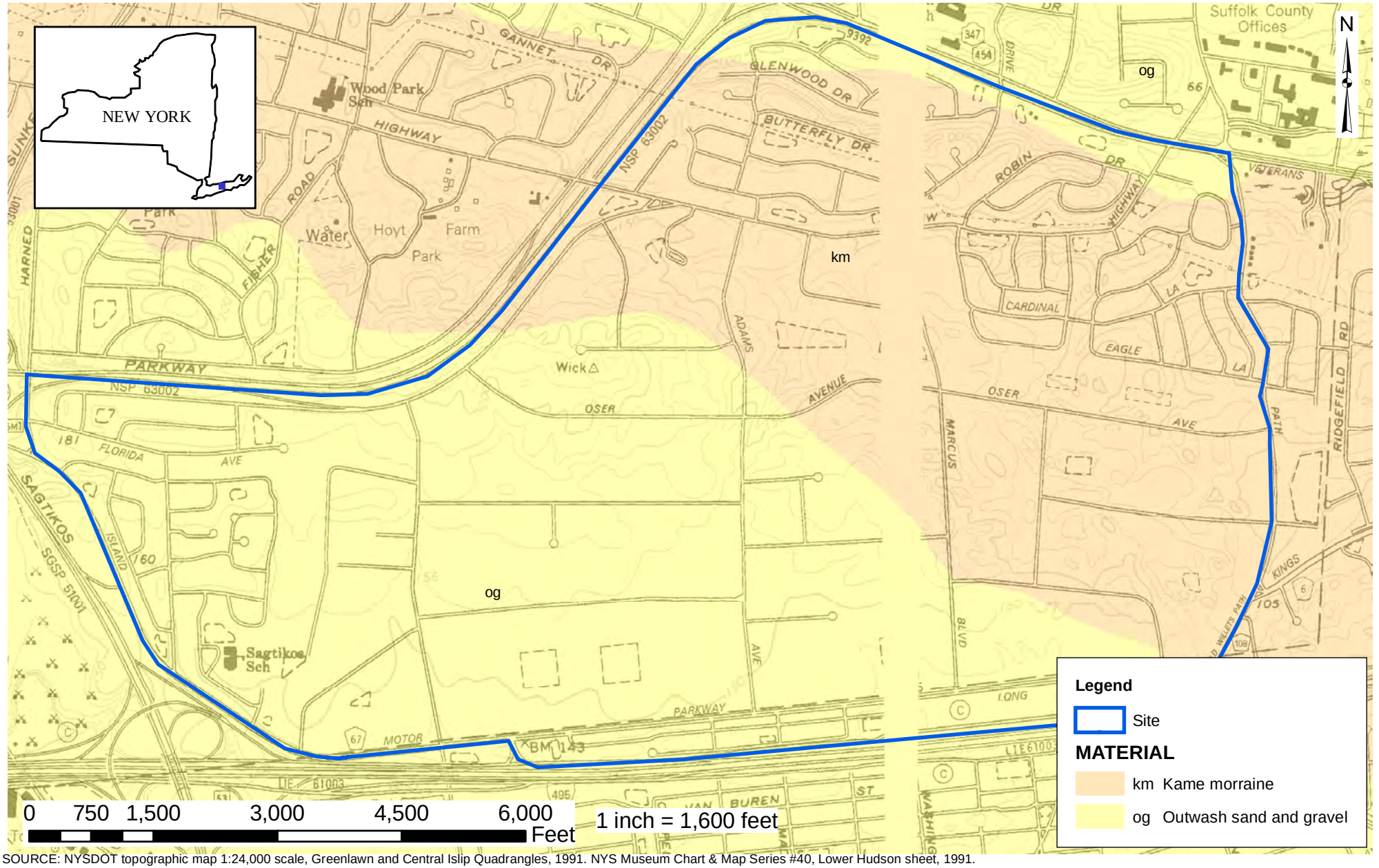

SOURCE: NYSDOT topographic map 1:24,000 scale, Greenlawn and Central Islip Quadrangles, 1991. NYS Museum Chart & Map Series #40, Lower Hudson sheet, 1991.
NOTE: Surficial geology maps were created at a scale of 1:250,000. Use of these data at a larger scale does not provide greater accuracy and may introduce inaccuracies.

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HAUPPAUGE AREA-WIDE GROUNDWATER STUDY
SMITHTOWN, SUFFOLK COUNTY, NEW YORK
SITE CHARACTERIZATION REPORT

SURFICIAL GEOLOGY

MALCOLM PIRNIE, INC.

AUGUST 2010
FIGURE 2

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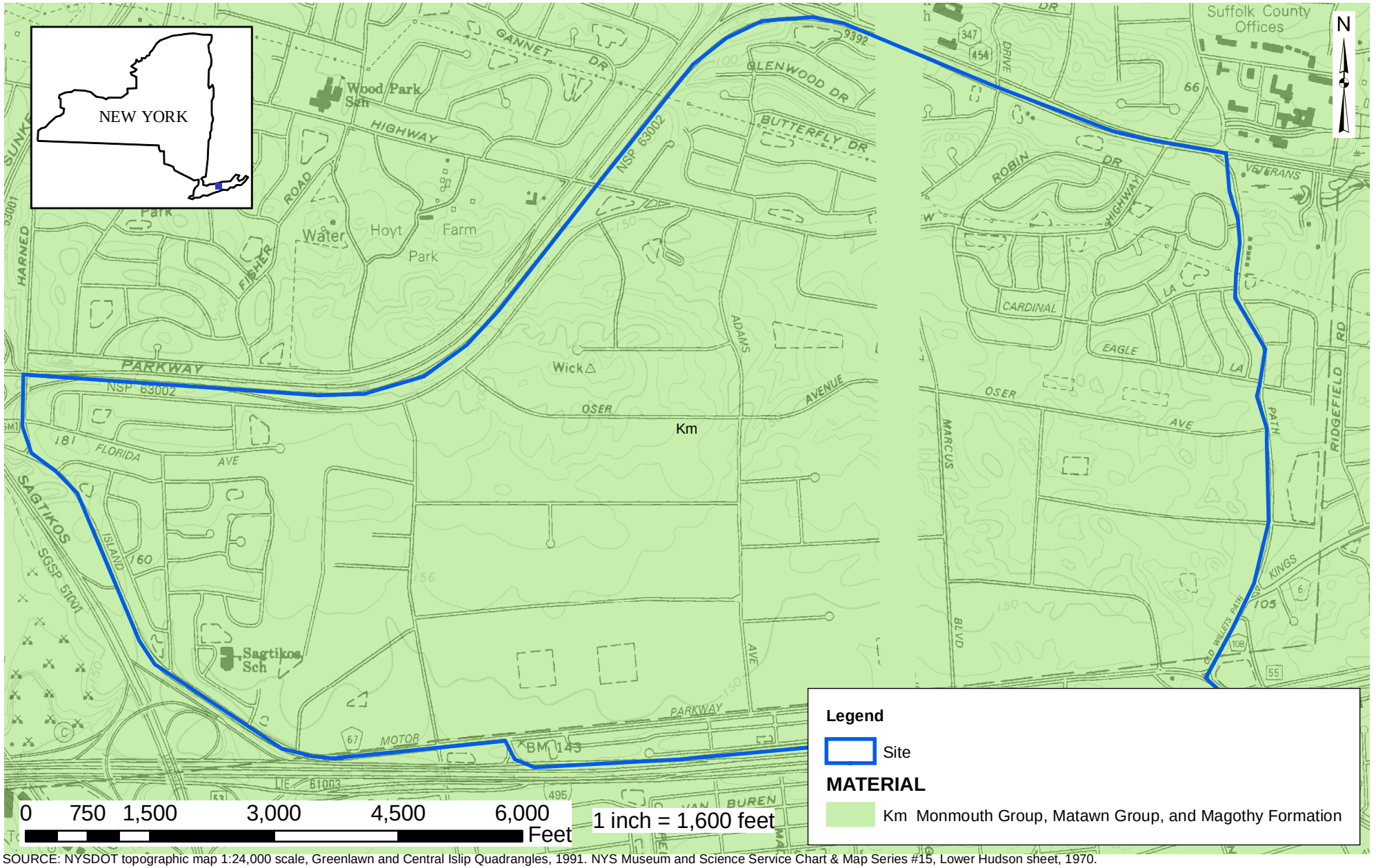

SOURCE: NYSDOT topographic map 1:24,000 scale, Greenlawn and Central Islip Quadrangles, 1991. NYS Museum and Science Service Chart & Map Series #15, Lower Hudson sheet, 1970.
NOTE: Surficial geology maps were created at a scale of 1:250,000. Use of these data at a larger scale does not provide greater accuracy and may introduce inaccuracies.

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HAUPPAUGE AREA-WIDE GROUNDWATER STUDY
SMITHTOWN, SUFFOLK COUNTY, NEW YORK
SITE CHARACTERIZATION REPORT

BEDROCK GEOLOGY

MALCOLM PIRNIE, INC.

AUGUST 2010
FIGURE 3

LEGEND:

Proposed GeoTrax Survey™ Locations and Designations

A

7.0 Meter Electrode Spacing (52 Total)
Survey Line ~ 1,263 Feet Long (385 m)
Image Depth ~ 253 feet (77 m)

N

7.0 Meter Electrode Spacing (8 Total)
On opposite side of street
Survey Line ~ 1,263 Feet Long (385 m)
Image Depth ~ 253 feet (77 m)

W

1.75 Meter Electrode Spacing (24 Total)
Survey Line ~ 315 Feet Long (96.25 m)
Image Depth ~ 63 feet (19.25)

360 — **Building Address**

2 — **Survey Number in Part of Letter Series (i.e. Survey 2 of G series)**

CB-04 — **Suggested Confirmation Boring**

0 ft 500 ft 1000 ft

N

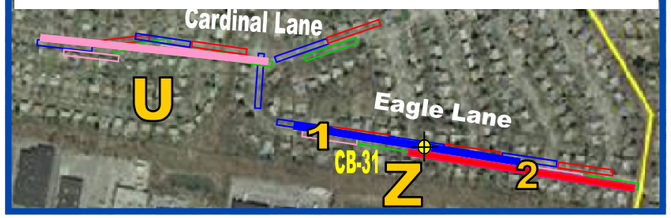
Electrode Location

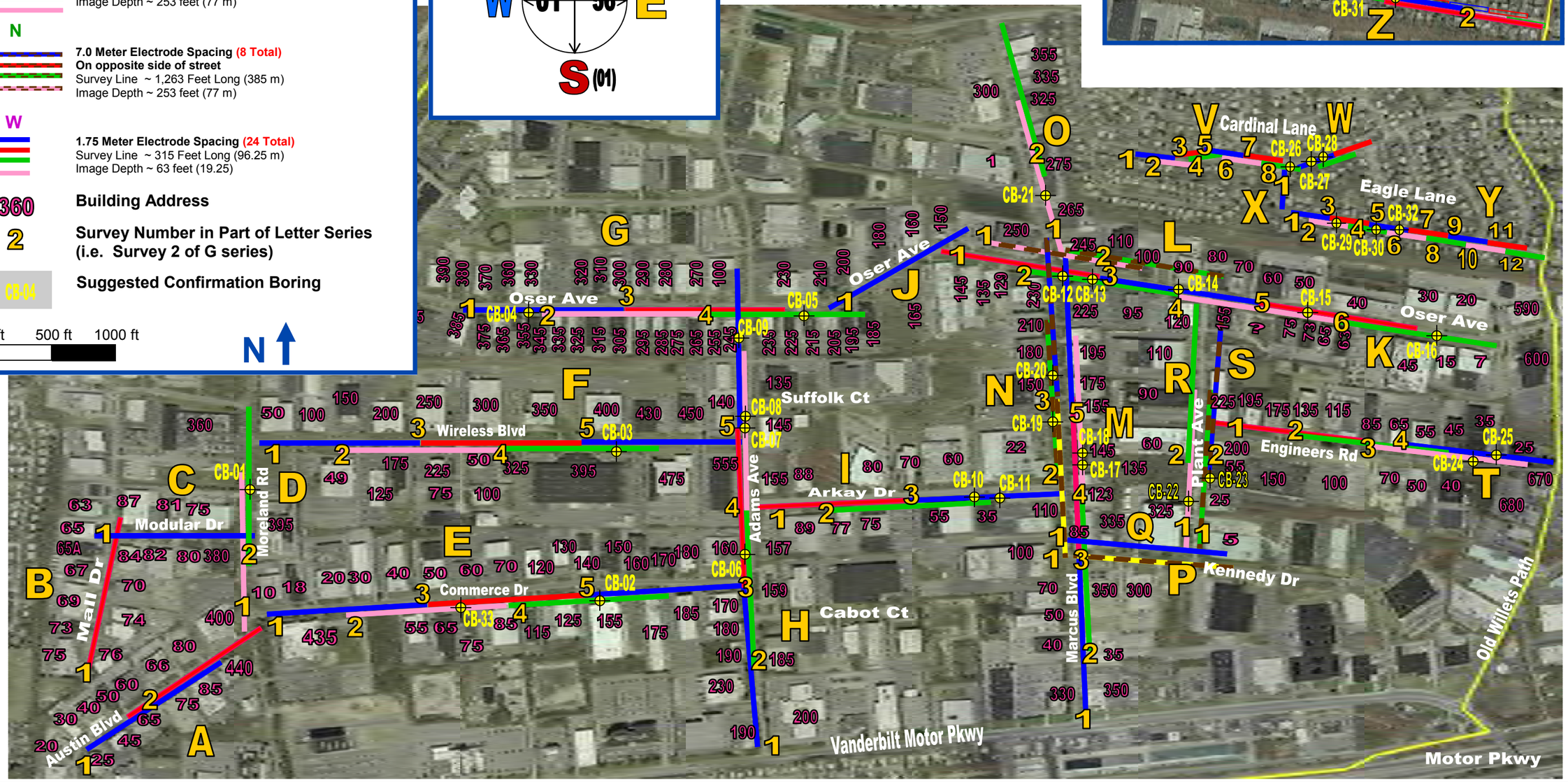
N (56)
W 01 56 E
S (01)

NOTE:

1. Survey transect line and confirmation boring locations are approximate; see Appendix D for accurate confirmation boring locations.

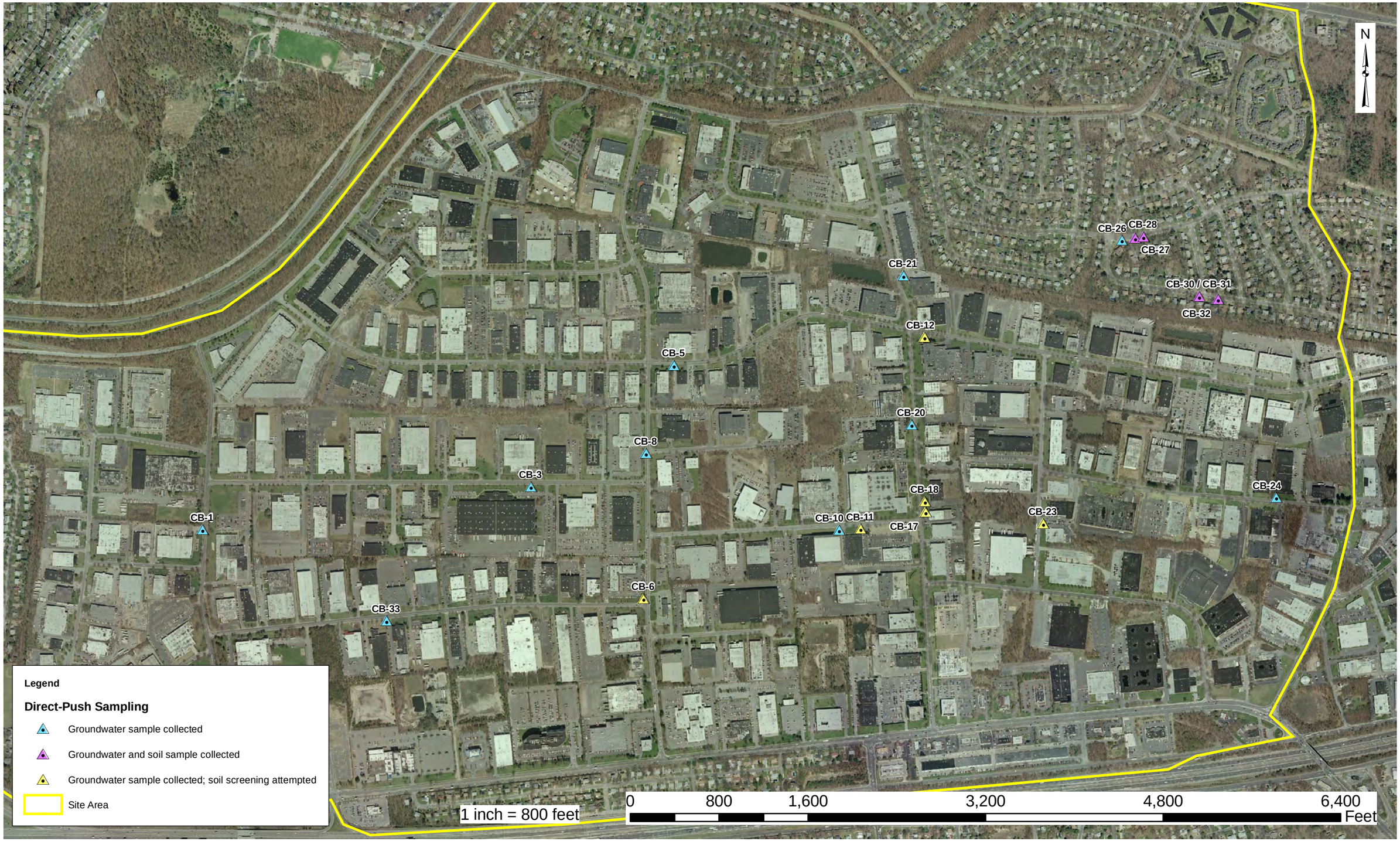
7 m Electrode Spacing Lines Along Cardinal and Eagle Lanes





Reference: Base map provided by Malcolm Pirnie for use by Aestus, LLC

Aestus, LLC 1.888.GEO.TRAX www.aestusllc.com	4177 Route 2 Troy, NY 12180 2605 Dotsero Court Loveland, CO 80538 1624 W. University Ave. Stillwater, OK 74074	Scale: See Scale Bar Drawn By: MAS Approved By: SWM Date: 07-23-09 Project No.: 8-103-07	**Proposed Confirmation Boring Locations (Revised 07-23-09)** **Hauppauge Industrial Park Site** **Hauppauge, New York** **DRAFT** *Prepared for* NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION; MALCOLM PIRNIE	FIGURE 4



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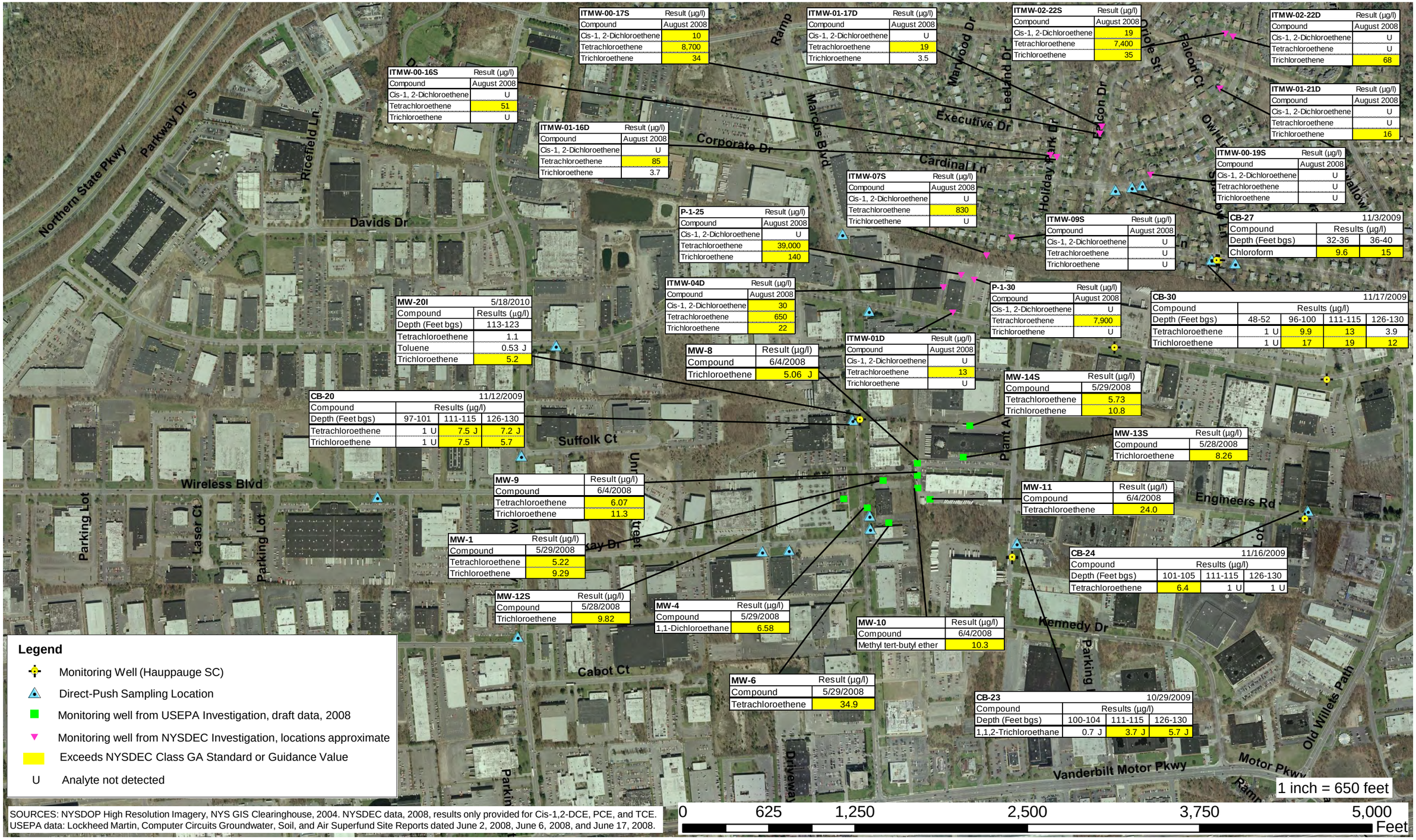
HAUPPAUGE AREA-WIDE GROUNDWATER STUDY
SMITHTOWN, SUFFOLK COUNTY, NEW YORK
SITE CHARACTERIZATION REPORT

DIRECT-PUSH SAMPLING LOCATIONS

MALCOLM PIRNIE, INC.

AUGUST 2010
FIGURE 5



SOURCES: NYSDOP High Resolution Imagery, NYS GIS Clearinghouse, 2004. NYSDEC data, 2008, results only provided for Cis-1,2-DCE, PCE, and TCE. USEPA data: Lockheed Martin, Computer Circuits Groundwater, Soil, and Air Superfund Site Reports dated June 2, 2008, June 6, 2008, and June 17, 2008.

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NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

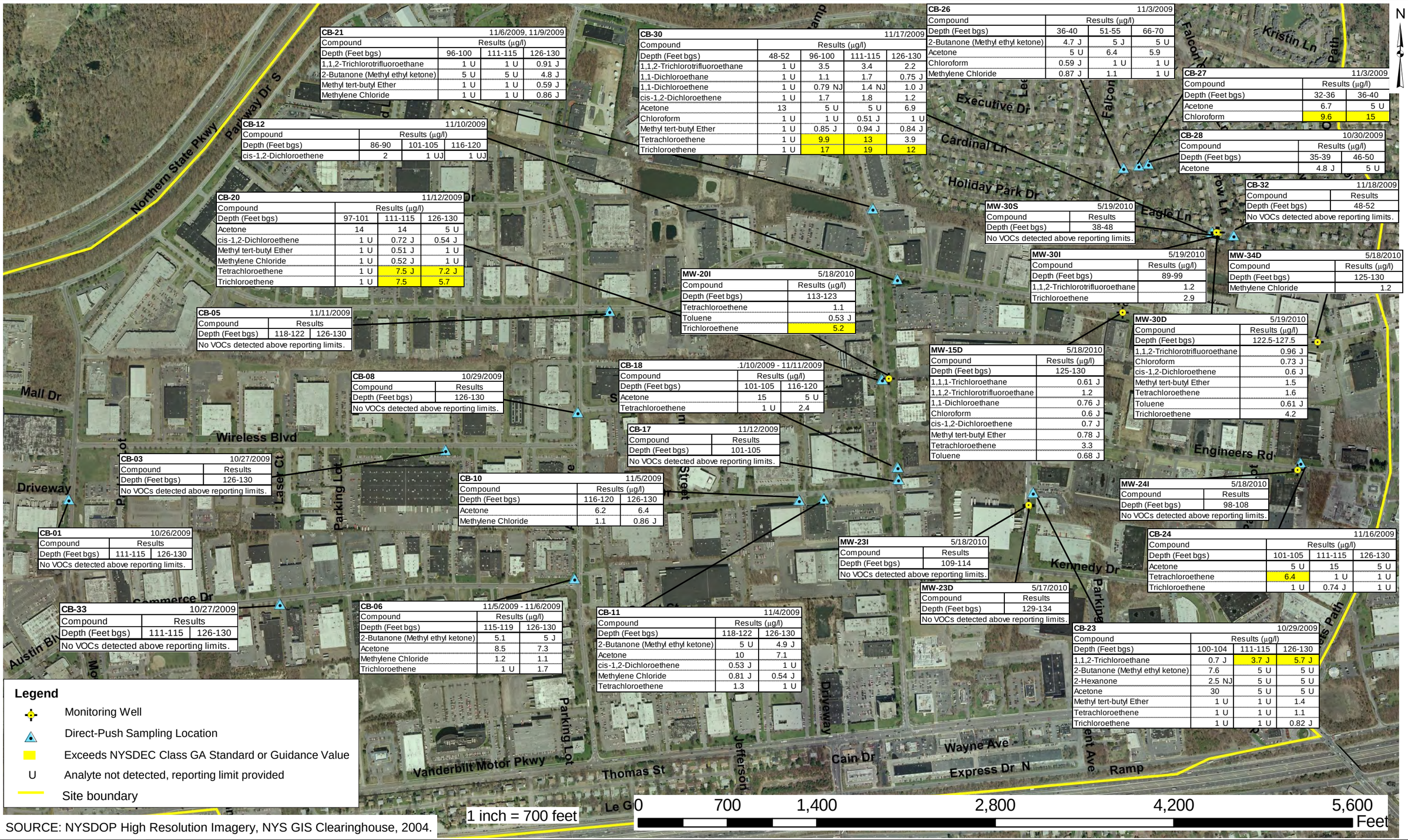
HAUPPAUGE AREA-WIDE GROUNDWATER INVESTIGATION
SMITHTOWN, NEW YORK
SITE CHARACTERIZATION REPORT

SUMMARY OF VOCS IN GROUNDWATER SAMPLES EXCEEDING NYSDEC CLASS GA STANDARDS OR GUIDANCE VALUES, INCLUDING GROUNDWATER SAMPLES FROM PREVIOUS INVESTIGATIONS

SEPTEMBER 2010

FIGURE 6

\\Albanydata\PROJECT\0266374\FILE\Hitbox Figures\GW VOC Hitbox w_DEC_EPA data.pptx



CB-21 11/6/2009, 11/9/2009

Compound	Results (µg/l)		
Depth (Feet bgs)	96-100	111-115	126-130
1,1,2-Trichlorotrifluoroethane	1 U	1 U	0.91 J
2-Butanone (Methyl ethyl ketone)	5 U	5 U	4.8 J
Methyl tert-butyl Ether	1 U	1 U	0.59 J
Methylene Chloride	1 U	1 U	0.86 J

CB-12 11/10/2009

Compound	Results (µg/l)		
Depth (Feet bgs)	86-90	101-105	116-120
cis-1,2-Dichloroethene	2	1 UJ	1 UJ

CB-20 11/12/2009

Compound	Results (µg/l)		
Depth (Feet bgs)	97-101	111-115	126-130
Acetone	14	14	5 U
cis-1,2-Dichloroethene	1 U	0.72 J	0.54 J
Methyl tert-butyl Ether	1 U	0.51 J	1 U
Methylene Chloride	1 U	0.52 J	1 U
Tetrachloroethene	1 U	7.5 J	7.2 J
Trichloroethene	1 U	7.5	5.7

CB-05 11/11/2009

Compound	Results	
Depth (Feet bgs)	118-122	126-130
No VOCs detected above reporting limits.		

CB-08 10/29/2009

Compound	Results
Depth (Feet bgs)	126-130
No VOCs detected above reporting limits.	

CB-03 10/27/2009

Compound	Results
Depth (Feet bgs)	126-130
No VOCs detected above reporting limits.	

CB-01 10/26/2009

Compound	Results	
Depth (Feet bgs)	111-115	126-130
No VOCs detected above reporting limits.		

CB-33 10/27/2009

Compound	Results	
Depth (Feet bgs)	111-115	126-130
No VOCs detected above reporting limits.		

CB-06 11/5/2009 - 11/6/2009

Compound	Results (µg/l)	
Depth (Feet bgs)	115-119	126-130
2-Butanone (Methyl ethyl ketone)	5.1	5 J
Acetone	8.5	7.3
Methylene Chloride	1.2	1.1
Trichloroethene	1 U	1.7

CB-10 11/5/2009

Compound	Results (µg/l)	
Depth (Feet bgs)	116-120	126-130
Acetone	6.2	6.4
Methylene Chloride	1.1	0.86 J

CB-30 11/17/2009

Compound	Results (µg/l)			
Depth (Feet bgs)	48-52	96-100	111-115	126-130
1,1,2-Trichlorotrifluoroethane	1 U	3.5	3.4	2.2
1,1-Dichloroethane	1 U	1.1	1.7	0.75 J
1,1-Dichloroethene	1 U	0.79 NJ	1.4 NJ	1.0 J
cis-1,2-Dichloroethene	1 U	1.7	1.8	1.2
Acetone	13	5 U	5 U	6.9
Chloroform	1 U	1 U	0.51 J	1 U
Methyl tert-butyl Ether	1 U	0.85 J	0.94 J	0.84 J
Tetrachloroethene	1 U	9.9	13	3.9
Trichloroethene	1 U	17	19	12

MW-20I 5/18/2010

Compound	Results (µg/l)
Depth (Feet bgs)	113-123
Tetrachloroethene	1.1
Toluene	0.53 J
Trichloroethene	5.2

CB-18 .1/10/2009 - 11/11/2009

Compound	Results (µg/l)	
Depth (Feet bgs)	101-105	116-120
Acetone	15	5 U
Tetrachloroethene	1 U	2.4

CB-17 11/12/2009

Compound	Results
Depth (Feet bgs)	101-105
No VOCs detected above reporting limits.	

MW-23I 5/18/2010

Compound	Results
Depth (Feet bgs)	109-114
No VOCs detected above reporting limits.	

MW-23D 5/17/2010

Compound	Results
Depth (Feet bgs)	129-134
No VOCs detected above reporting limits.	

CB-11 11/4/2009

Compound	Results (µg/l)	
Depth (Feet bgs)	118-122	126-130
2-Butanone (Methyl ethyl ketone)	5 U	4.9 J
Acetone	10	7.1
cis-1,2-Dichloroethene	0.53 J	1 U
Methylene Chloride	0.81 J	0.54 J
Tetrachloroethene	1.3	1 U

CB-26 11/3/2009

Compound	Results (µg/l)		
Depth (Feet bgs)	36-40	51-55	66-70
2-Butanone (Methyl ethyl ketone)	4.7 J	5 J	5 U
Acetone	5 U	6.4	5.9
Chloroform	0.59 J	1 U	1 U
Methylene Chloride	0.87 J	1.1	1 U

CB-27 11/3/2009

Compound	Results (µg/l)	
Depth (Feet bgs)	32-36	36-40
Acetone	6.7	5 U
Chloroform	9.6	15

CB-28 10/30/2009

Compound	Results (µg/l)	
Depth (Feet bgs)	35-39	46-50
Acetone	4.8 J	5 U

CB-32 11/18/2009

Compound	Results
Depth (Feet bgs)	48-52
No VOCs detected above reporting limits.	

MW-30S 5/19/2010

Compound	Results
Depth (Feet bgs)	38-48
No VOCs detected above reporting limits.	

MW-30I 5/19/2010

Compound	Results (µg/l)
Depth (Feet bgs)	89-99
1,1,2-Trichlorotrifluoroethane	1.2
Trichloroethene	2.9

MW-34D 5/18/2010

Compound	Results (µg/l)
Depth (Feet bgs)	125-130
Methylene Chloride	1.2

MW-15D 5/18/2010

Compound	Results (µg/l)
Depth (Feet bgs)	125-130
1,1,1-Trichloroethane	0.61 J
1,1,2-Trichlorotrifluoroethane	1.2
1,1-Dichloroethane	0.76 J
Chloroform	0.6 J
cis-1,2-Dichloroethene	0.7 J
Methyl tert-butyl Ether	0.78 J
Tetrachloroethene	3.3
Toluene	0.68 J

MW-30D 5/19/2010

Compound	Results (µg/l)
Depth (Feet bgs)	122.5-127.5
1,1,2-Trichlorotrifluoroethane	0.96 J
Chloroform	0.73 J
cis-1,2-Dichloroethene	0.6 J
Methyl tert-butyl Ether	1.5
Tetrachloroethene	1.6
Toluene	0.61 J
Trichloroethene	4.2

MW-24I 5/18/2010

Compound	Results
Depth (Feet bgs)	98-108
No VOCs detected above reporting limits.	

CB-24 11/16/2009

Compound	Results (µg/l)		
Depth (Feet bgs)	101-105	111-115	126-130
Acetone	5 U	15	5 U
Tetrachloroethene	6.4	1 U	1 U
Trichloroethene	1 U	0.74 J	1 U

CB-23 10/29/2009

Compound	Results (µg/l)		
Depth (Feet bgs)	100-104	111-115	126-130
1,1,2-Trichloroethane	0.7 J	3.7 J	5.7 J
2-Butanone (Methyl ethyl ketone)	7.6	5 U	5 U
2-Hexanone	2.5 NJ	5 U	5 U
Acetone	30	5 U	5 U
Methyl tert-butyl Ether	1 U	1 U	1.4
Tetrachloroethene	1 U	1 U	1.1
Trichloroethene	1 U	1 U	0.82 J

SOURCE: NYSDOP High Resolution Imagery, NYS GIS Clearinghouse, 2004.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

HAUPPAUGE AREA-WIDE GROUNDWATER INVESTIGATION
SMITHTOWN, NEW YORK
SITE CHARACTERIZATION REPORT

SUMMARY OF DETECTED VOCS IN GROUNDWATER SAMPLES

SEPTEMBER 2010

FIGURE 7

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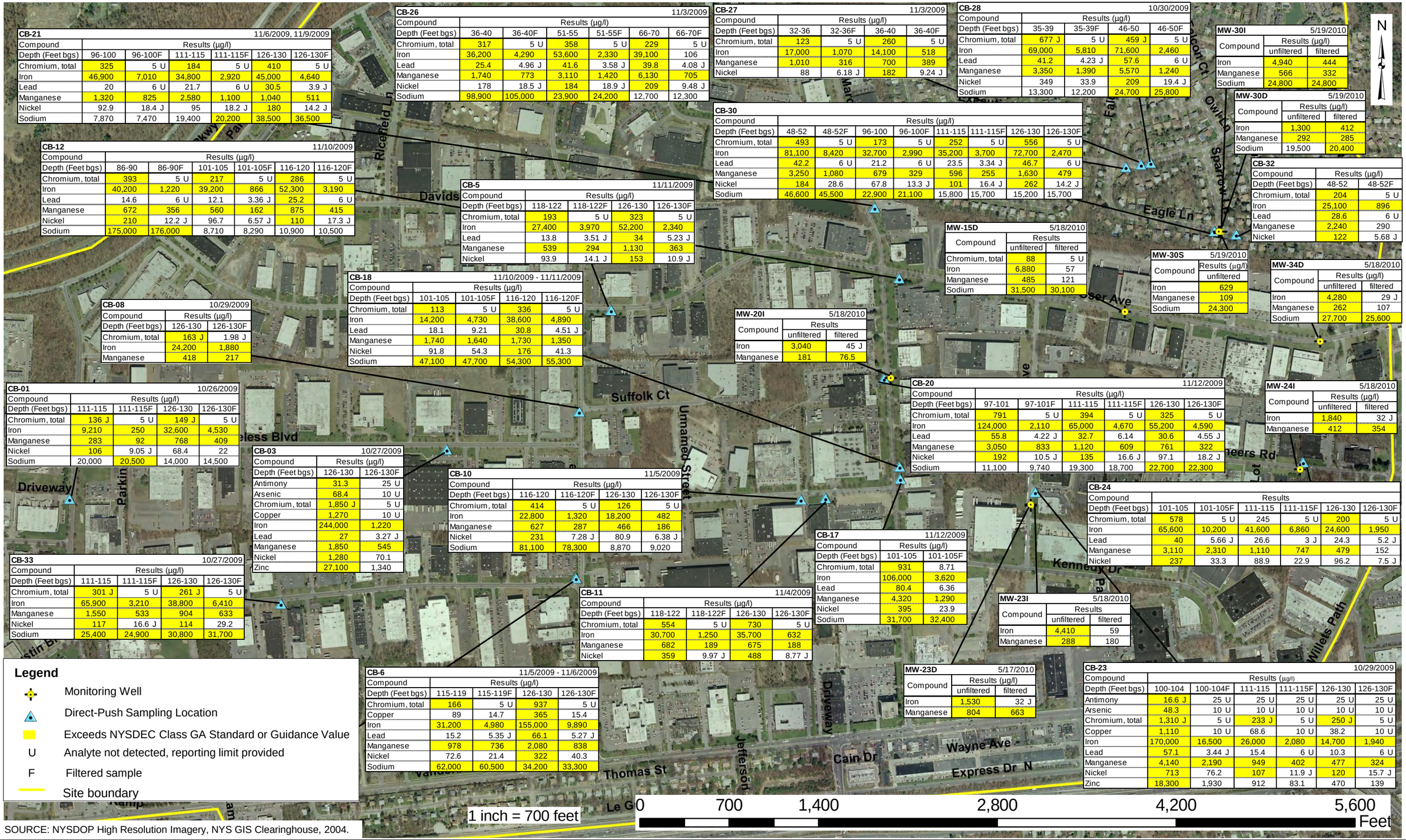

CB-21 11/6/2009, 11/9/2009

Compound	Results (µg/l)					
Depth (Feet bgs)	96-100	96-100F	111-115	111-115F	126-130	126-130F
Chromium, total	325	5 U	184	5 U	410	5 U
Iron	46,900	7,010	34,800	2,920	45,000	4,640
Lead	20	6 U	21.7	6 U	30.5	3.9 J
Manganese	1,320	825	2,580	1,100	1,040	511
Nickel	92.9	18.4 J	95	18.2 J	180	14.2 J
Sodium	7,870	7,470	19,400	20,200	38,500	36,500

CB-12 11/10/2009

Compound	Results (µg/l)					
Depth (Feet bgs)	86-90	86-90F	101-105	101-105F	116-120	116-120F
Chromium, total	393	5 U	217	5 U	286	5 U
Iron	40,200	1,220	39,200	866	52,300	3,190
Lead	14.6	6 U	12.1	3.36 J	25.2	6 U
Manganese	672	356	560	162	875	415
Nickel	210	12.2 J	96.7	6.57 J	110	17.3 J
Sodium	175,000	176,000	8,710	8,290	10,900	10,500

CB-08 10/29/2009

Compound	Results (µg/l)	
Depth (Feet bgs)	126-130	126-130F
Chromium, total	163 J	1.98 J
Iron	24,200	1,880
Manganese	418	217

CB-01 10/26/2009

Compound	Results (µg/l)			
Depth (Feet bgs)	111-115	111-115F	126-130	126-130F
Chromium, total	136 J	5 U	149 J	5 U
Iron	9,210	250	32,600	4,530
Manganese	283	92	768	409
Nickel	106	9.05 J	68.4	22
Sodium	20,000	20,500	14,000	14,500

CB-33 10/27/2009

Compound	Results (µg/l)			
Depth (Feet bgs)	111-115	111-115F	126-130	126-130F
Chromium, total	301 J	5 U	261 J	5 U
Iron	65,900	3,210	38,800	6,410
Manganese	1,550	533	904	633
Nickel	117	16.6 J	114	29.2
Sodium	25,400	24,900	30,800	31,700

CB-03 10/27/2009

Compound	Results (µg/l)	
Depth (Feet bgs)	126-130	126-130F
Antimony	31.3	25 U
Arsenic	68.4	10 U
Chromium, total	1,850 J	5 U
Copper	1,270	10 U
Iron	244,000	1,220
Lead	27	3.27 J
Manganese	1,850	545
Nickel	1,280	70.1
Zinc	27,100	1,340

CB-26 11/3/2009

Compound	Results (µg/l)					
Depth (Feet bgs)	36-40	36-40F	51-55	51-55F	66-70	66-70F
Chromium, total	317	5 U	358	5 U	229	5 U
Iron	36,200	4,290	53,600	2,330	39,100	106
Lead	25.4	4.96 J	41.6	3.58 J	39.8	4.08 J
Manganese	1,740	773	3,110	1,420	6,130	705
Nickel	178	18.5 J	184	18.9 J	209	9.48 J
Sodium	98,900	105,000	23,900	24,200	12,700	12,300

CB-5 11/11/2009

Compound	Results (µg/l)			
Depth (Feet bgs)	118-122	118-122F	126-130	126-130F
Chromium, total	193	5 U	323	5 U
Iron	27,400	3,970	52,200	2,340
Lead	13.8	3.51 J	34	5.23 J
Manganese	539	294	1,130	363
Nickel	93.9	14.1 J	153	10.9 J

CB-18 11/10/2009 - 11/11/2009

Compound	Results (µg/l)			
Depth (Feet bgs)	101-105	101-105F	116-120	116-120F
Chromium, total	113	5 U	336	5 U
Iron	14,200	4,730	38,600	4,890
Lead	18.1	9.21	30.8	4.51 J
Manganese	1,740	1,640	1,730	1,350
Nickel	91.8	54.3	176	41.3
Sodium	47,100	47,700	54,300	55,300

CB-10 11/5/2009

Compound	Results (µg/l)			
Depth (Feet bgs)	116-120	116-120F	126-130	126-130F
Chromium, total	414	5 U	126	5 U
Iron	22,800	1,320	18,200	482
Manganese	627	287	466	186
Nickel	231	7.28 J	80.9	6.38 J
Sodium	81,100	78,300	8,870	9,020

CB-11 11/4/2009

Compound	Results (µg/l)			
Depth (Feet bgs)	118-122	118-122F	126-130	126-130F
Chromium, total	554	5 U	730	5 U
Iron	30,700	1,250	35,700	632
Manganese	682	189	675	188
Nickel	359	9.97 J	488	8.77 J

CB-6 11/5/2009 - 11/6/2009

Compound	Results (µg/l)			
Depth (Feet bgs)	115-119	115-119F	126-130	126-130F
Chromium, total	166	5 U	937	5 U
Copper	89	14.7	365	15.4
Iron	31,200	4,980	155,000	9,890
Lead	15.2	5.35 J	66.1	5.27 J
Manganese	978	736	2,080	838
Nickel	72.6	21.4	322	40.3
Sodium	62,000	60,500	34,200	33,300

CB-27 11/3/2009

Compound	Results (µg/l)			
Depth (Feet bgs)	32-36	32-36F	36-40	36-40F
Chromium, total	123	5 U	260	5 U
Iron	17,000	1,070	14,100	518
Manganese	1,010	316	700	389
Nickel	88	6.18 J	182	9.24 J

CB-30

Compound	Results (µg/l)							
Depth (Feet bgs)	48-52	48-52F	96-100	96-100F	111-115	111-115F	126-130	126-130F
Chromium, total	493	5 U	173	5 U	252	5 U	556	5 U
Iron	81,100	8,420	32,700	2,990	35,200	3,700	72,700	2,470
Lead	42.2	6 U	21.2	6 U	23.5	3.34 J	46.7	6 U
Manganese	3,250	1,080	679	329	596	255	1,630	479
Nickel	184	28.6	67.8	13.3 J	101	16.4 J	262	14.2 J
Sodium	46,600	45,500	22,900	21,100	15,800	15,700	15,200	15,700

MW-20I 5/18/2010

Compound	Results	
	unfiltered	filtered
Iron	3,040	45 J
Manganese	181	76.5

CB-17 11/12/2009

Compound	Results (µg/l)	
Depth (Feet bgs)	101-105	101-105F
Chromium, total	931	8.71
Iron	106,000	3,620
Lead	80.4	6.36
Manganese	4,320	1,290
Nickel	395	23.9
Sodium	31,700	32,400

MW-23D 5/17/2010

Compound	Results (µg/l)	
	unfiltered	filtered
Iron	1,530	32 J
Manganese	804	663

CB-20 11/12/2009

Compound	Results (µg/l)					
Depth (Feet bgs)	97-101	97-101F	111-115	111-115F	126-130	126-130F
Chromium, total	791	5 U	394	5 U	325	5 U
Iron	124,000	2,110	65,000	4,670	55,200	4,590
Lead	55.8	4.22 J	32.7	6.14	30.6	4.55 J
Manganese	3,050	833	1,120	609	761	322
Nickel	192	10.5 J	135	16.6 J	97.1	18.2 J
Sodium	11,100	9,740	19,300	18,700	22,700	22,300

CB-28 10/30/2009

Compound	Results (µg/l)			
Depth (Feet bgs)	35-39	35-39F	46-50	46-50F
Chromium, total	677 J	5 U	459 J	5 U
Iron	69,000	5,810	71,600	2,460
Lead	41.2	4.23 J	57.6	6 U
Manganese	3,350	1,390	5,570	1,240
Nickel	349	33.9	209	19.4 J
Sodium	13,300	12,200	24,700	25,800

MW-15D 5/18/2010

Compound	Results	
	unfiltered	filtered
Chromium, total	88	5 U
Iron	6,880	57
Manganese	485	121
Sodium	31,500	30,100

MW-23I 5/18/2010

Compound	Results	
	unfiltered	filtered
Iron	4,410	59
Manganese	288	180

MW-30I 5/19/2010

Compound	Results (µg/l)	
	unfiltered	filtered
Iron	4,940	444
Manganese	566	332
Sodium	24,800	24,800

MW-30D 5/19/2010

Compound	Results (µg/l)	
	unfiltered	filtered
Iron	1,300	412
Manganese	292	285
Sodium	19,500	20,400

MW-30S 5/19/2010

Compound	Results (µg/l)
	unfiltered
Iron	629
Manganese	109
Sodium	24,300

CB-32

Compound	Results (µg/l)	
Depth (Feet bgs)	48-52	48-52F
Chromium, total	204	5 U
Iron	25,100	896
Lead	28.6	6 U
Manganese	2,240	290
Nickel	122	5.68 J

MW-34D 5/18/2010

Compound	Results (µg/l)	
	unfiltered	filtered
Iron	4,280	29 J
Manganese	262	107
Sodium	27,700	25,600

MW-24I 5/18/2010

Compound	Results (µg/l)	
	unfiltered	filtered
Iron	1,840	32 J
Manganese	412	354

CB-24

Compound	Results					
Depth (Feet bgs)	101-105	101-105F	111-115	111-115F	126-130	126-130F
Chromium, total	578	5 U	245	5 U	200	5 U
Iron	65,600	10,200	41,600	6,860	24,600	1,950
Lead	40	5.66 J	26.6	3 J	24.3	5.2 J
Manganese	3,110	2,310	1,110	747	479	152
Nickel	237	33.3	88.9	22.9	96.2	7.5 J

CB-23 10/29/2009

Compound	Results (µg/l)					
Depth (Feet bgs)	100-104	100-104F	111-115	111-115F	126-130	126-130F
Antimony	16.6 J	25 U	25 U	25 U	25 U	25 U
Arsenic	48.3	10 U	10 U	10 U	10 U	10 U
Chromium, total	1,310 J	5 U	233 J	5 U	250 J	5 U
Copper	1,110	10 U	68.6	10 U	38.2	10 U
Iron	170,000	16,500	26,000	2,080	14,700	1,940
Lead	57.1	3.44 J	15.4	6 U	10.3	6 U
Manganese	4,140	2,190	949	402	477	324
Nickel	713	76.2	107	11.9 J	120	15.7 J
Zinc	18,300	1,930	912	83.1	470	139

Legend

- Monitoring Well
- Direct-Push Sampling Location
- Exceeds NYSDEC Class GA Standard or Guidance Value
- U — Analyte not detected, reporting limit provided
- F — Filtered sample
- Site boundary

SOURCE: NYSDOP High Resolution Imagery, NYS GIS Clearinghouse, 2004.

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MALCOLM PIRNIE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

HAUPPAUGE AREA-WIDE GROUNDWATER INVESTIGATION
SMITHTOWN, NEW YORK
SITE CHARACTERIZATION REPORT

SUMMARY OF METALS IN GROUNDWATER SAMPLES EXCEEDING NYSDEC CLASS GA STANDARDS OR GUIDANCE VALUES

SEPTEMBER 2010

FIGURE 8

SV-01	5/19/2010
Compound	Results (µg/m^3)
Depth (Feet bgs)	10-10.5
Chloroform	3.3
Chloromethane	0.73
1,4-Dichlorobenzene	1.4
Dichlorodifluoromethane (Freon 12)	2.2
Tetrachloroethene	3.9
1,1,1-Trichloroethane	0.69
Trichlorofluoromethane (Freon 11)	1.2
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1.7

SV-02	5/19/2010
Compound	Results (µg/m^3)
Depth (Feet bgs)	10-10.5
Chloroform	2.7
Chloromethane	0.28
Dichlorodifluoromethane (Freon 12)	2.2
Tetrachloroethene	5.3
Trichlorofluoromethane (Freon 11)	0.53

SV-03	5/19/2010
Compound	Results (µg/m^3)
Depth (Feet bgs)	10-10.5
Chloroform	0.9
Chloromethane	1.1
Dichlorodifluoromethane (Freon 12)	2.3
Methylene Chloride	8.2
Tetrachloroethene	4.5
1,1,1-Trichloroethane	9.4
Trichlorofluoromethane (Freon 11)	1.5
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.9

SV-04	5/19/2010
Compound	Results (µg/m^3)
Depth (Feet bgs)	10-10.5
Chloroform	1.9
Dichlorodifluoromethane (Freon 12)	2.5
1,1-Dichloroethane	17
1,1-Dichloroethylene	1.6
Tetrachloroethene	1.8
1,1,1-Trichloroethane	680
Trichlorofluoromethane (Freon 11)	1.6
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	3.1

SV-05	5/19/2010
Compound	Results (µg/m^3)
Depth (Feet bgs)	10-10.5
Chloroform	22
Chloromethane	0.83
Dichlorodifluoromethane (Freon 12)	2.3
Tetrachloroethene	4.7
1,1,1-Trichloroethane	15
Trichlorofluoromethane (Freon 11)	1.4
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	0.87

SV-06	5/19/2010
Compound	Results (µg/m^3)
Depth (Feet bgs)	44.5-45
Chloroform	2.6
Dichlorodifluoromethane (Freon 12)	3.1
1,1-Dichloroethane	76
1,1-Dichloroethylene	2.1
Methylene Chloride	1.6
Tetrachloroethene	21
1,1,1-Trichloroethane	390
Trichloroethene	1
Trichlorofluoromethane (Freon 11)	1.4
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	1.6

Legend

Direct-Push Sampling

- Groundwater sample collected
- Groundwater and soil sample collected
- Groundwater sample collected; soil screening attempted

SuveyMWs

Legend

Direct-Push Sampling

- Groundwater sample collected
- Groundwater and soil sample collected
- Groundwater sample collected; soil screening attempted

SuveyMWs

TYPE

- CompCirc
- Haup
- Oser

Monitoring well

Direct-push groundwater sample

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

A-WIDE GROUNDWATER INVESTIGATION
SMITHTOWN, NEW YORK
E CHARACTERIZATION REPORT

SUMMARY OF DETECTED CHORINATED VOCS
IN SOIL VAPOR SAMPLES

SEPTEMBER 2010

FIGURE 9

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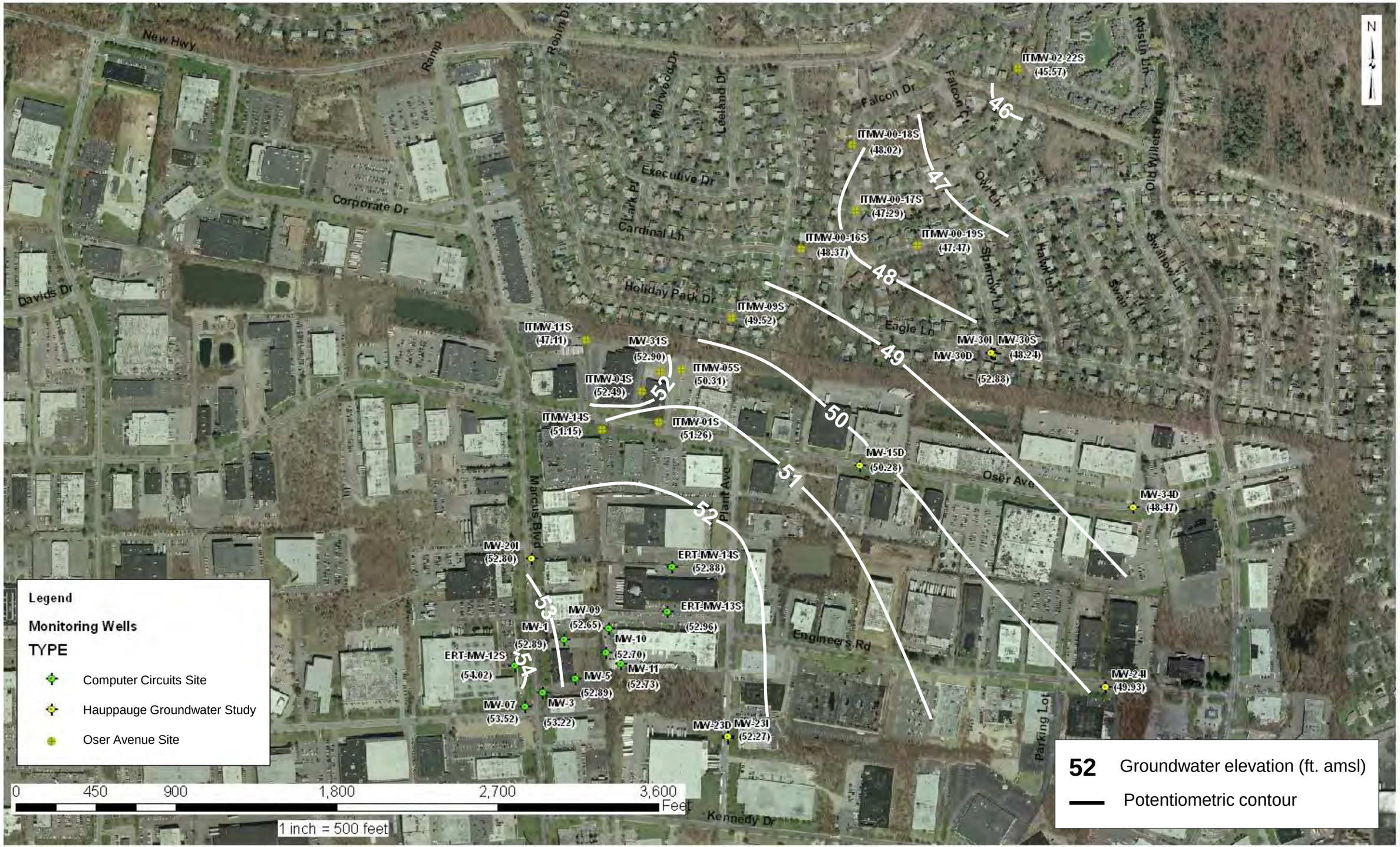

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MALCOLM PIRNIE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
HAUPPAUGE AREA-WIDE GROUNDWATER STUDY
SMITHTOWN, SUFFOLK COUNTY, NEW YORK
SITE CHARACTERIZATION REPORT

POTENTIOMETRIC CONTOUR MAP (MAY 17, 2010)

MALCOLM PIRNIE, INC.

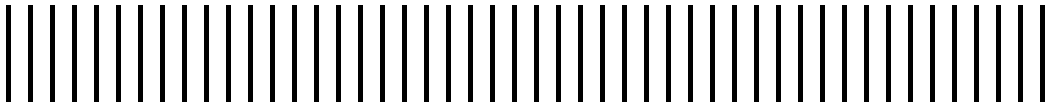
OCTOBER 2010

FIGURE 10

New York State Department of Environmental Conservation

Site Characterization Report

Tables



0266374 / ALB

MALCOLM PIRNIE

Table 1. Monitoring Well Summary
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Monitoring Well	Depth to Water (ft bgs) 5/17/2010	Screened Interval (ft bgs)
MW-15D	50.04	125-130
MW-20I	89.16	113-123
MW-23I	83.33	109-114
MW-23D	83.42	129-134
MW-24I	62.6	98-108
MW-30S	37.65	38-48
MW-30I	37.48	89-99
MW-30D	37.35	122.5-127.5
MW-34D	58.07	125-130

Table 2. Summary of Validated Groundwater Data (VOCs)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	NYSDEC Class GA	CB-01(111-115)	CB-01(126-130)	CB-03(126-130)	CB-05(118-122)	CB-05(126-130)	CB-6(126-130)	CB-6(115-119)	CB-08(126-130)	CB-10(116-120)	CB-10(126-130)
Sampling Date	Standard or	10/26/2009	10/26/2009	10/27/2009	11/11/2009	11/11/2009	11/5/2009	11/6/2009	10/29/2009	11/5/2009	11/5/2009
Matrix	Guidance Value	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
VOCs											
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichlorotrifluoroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	0.04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	50	5 U	5 U	5 U	5 U	5 U	**5 J**	**5.1**	5 U	5 U	5 U
2-Hexanone	50*	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-Pentanone		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50*	5 UJ	5 UJ	5 UJ	5 U	5 U	**7.3**	**8.5**	5 U	**6.2**	**6.4**
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	50*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	0.4**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethyl Benzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m/p-Xylenes	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Methyl Acetate		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl tert-butyl Ether	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylcyclohexane		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U	**1.1**	**1.2**	1 U	**1.1**	**0.86 J**
o-Xylene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	0.4**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	1 U	1 U	1 U	1 U	1 U	**1.7**	1 U	1 U	1 U	1 U
Trichlorofluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Notes:
* - Guidance Value
** - Sum of these analytes cannot exceed 0.4 ug/l
U - Compound was not detected, reporting limit is provided.
J- Concentration is an approximate value.
UJ - Compound was not detected, reporting limit is estimated.
NJ - Detection of compound is tentative and estimated in value.
Highlighted cells exceed NYSDEC Class GA standard or guidance value.

Table 2. Summary of Validated Groundwater Data (VOCs)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	NYSDEC Class GA	CB-11(118-122)	CB-11(126-130)	CB-12(86-90)	CB-12(101-105)	CB-GW-X2: CB-12(101-105)	CB-12(116-120)	CB-17(101-105)	CB-18(116-120)	CB-18(101-105)
Sampling Date	**Standard or**	**11/4/2009**	**11/4/2009**	**11/10/2009**	**11/10/2009**	**11/10/2009**	**11/10/2009**	**11/12/2009**	**11/10/2009**	**11/11/2009**
Matrix	**Guidance Value**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**
Units	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**
VOCs										
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
1,1,2,2-Tetrachloroethane	5	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
1,1,2-Trichloroethane	1	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
1,1,2-Trichlorotrifluoroethane	5	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
1,2,4-Trichlorobenzene	5	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
1,2-Dibromo-3-Chloropropane	0.04	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
1,2-Dibromoethane	5	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
2-Butanone (Methyl ethyl ketone)	50	5 U	**4.9 J**	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 U	5 U
2-Hexanone	50*	5 U	5 U	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 U	5 U
4-Methyl-2-Pentanone		5 U	5 U	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 U	5 U
Acetone	50*	**10**	**7.1**	5 U	5 UJ	5 UJ	5 UJ	5 UJ	5 U	**15**
Benzene	1	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Bromodichloromethane	50*	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Bromoform	50*	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Bromomethane	5	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Carbon Disulfide		1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Chlorobenzene	5	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Chloroethane	5	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Chloromethane		1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
cis-1,2-Dichloroethene	5	**0.53 J**	1 U	**2**	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
cis-1,3-Dichloropropene	0.4**	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Cyclohexane		1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Dibromochloromethane	50	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Ethyl Benzene	5	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Isopropylbenzene	5	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
m/p-Xylenes	5	2 U	2 U	2 U	2 UJ	2 UJ	2 UJ	2 UJ	2 U	2 U
Methyl Acetate		1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Methyl tert-butyl Ether	10	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Methylcyclohexane		1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Methylene Chloride	5	**0.81 J**	**0.54 J**	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
o-Xylene	5	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Styrene	5	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
trans-1,3-Dichloropropene	0.4**	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Tetrachloroethene	5	**1.3**	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	**2.4**	1 U
Toluene	5	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Trichloroethene	5	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Trichlorofluoromethane	5	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 UJ	1 UJ	1 UJ	1 UJ	1 U	1 U

Notes:
* - Guidance Value
** - Sum of these analytes cannot exceed 0.4 ug/l
U - Compound was not detected, reporting limit is provided.
J- Concentration is an approximate value.
UJ - Compound was not detected, reporting limit is estimated.
NJ - Detection of compound is tentative and estimated in value.
Highlighted cells exceed NYSDEC Class GA standard or guidance value.

Table 2. Summary of Validated Groundwater Data (VOCs)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	NYSDEC Class GA	CB-20(97-101)	CB-20(111-115)	CB-20(126-130)	CB-21(96-100)	CB-21(111-115)	CB-21(126-130)	CB-23(100-104)	CB-23(111-115)	CB-23(126-130)	CB-GW-X1: CB-23(126-130)
Sampling Date	Standard or	11/12/2009	11/12/2009	11/12/2009	11/9/2009	11/9/2009	11/6/2009	10/29/2009	10/29/2009	10/29/2009	10/29/2009
Matrix	Guidance Value	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
VOCs											
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1	1 U	1 U	1 U	1 U	1 U	1 U	**0.7 J**	**3.7**	**5.7**	**5.6**
1,1,2-Trichlorotrifluoroethane	5	1 U	1 U	1 U	1 U	1 U	**0.91 J**	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	0.04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	50	5 U	5 U	5 U	5 U	5 U	**4.8 J**	**7.6**	5 U	5 U	5 U
2-Hexanone	50*	5 U	5 U	5 U	5 U	5 U	5 U	**2.5 NJ**	5 U	5 U	5 U
4-Methyl-2-Pentanone		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50*	**14**	**14**	5 U	5 U	5 U	5 U	**30**	5 U	5 U	5 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	50*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5	1 U	**0.72 J**	**0.54 J**	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	0.4**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethyl Benzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m/p-Xylenes	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Methyl Acetate		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl tert-butyl Ether	10	1 U	**0.51 J**	1 U	1 U	1 U	**0.59 J**	1 U	1 U	**1.4**	**1.2**
Methylcyclohexane		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U	**0.86 J**	1 U	1 U	1 U	1 U
o-Xylene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	0.4**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	1 U	**7.5 J**	**7.2 J**	1 U	1 U	1 UJ	1 U	1 U	**1.1**	1 UJ
Toluene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	1 U	**7.5**	**5.7**	1 U	1 U	1 U	1 U	1 U	**0.82 J**	**0.71 J**
Trichlorofluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Notes:
* - Guidance Value
** - Sum of these analytes cannot exceed 0.4 ug/l
U - Compound was not detected, reporting limit is provided.
J- Concentration is an approximate value.
UJ - Compound was not detected, reporting limit is estimated.
NJ - Detection of compound is tentative and estimated in value.
Highlighted cells exceed NYSDEC Class GA standard or guidance value.

Table 2. Summary of Validated Groundwater Data (VOCs)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	NYSDEC Class GA	CB-24(101-105)	CB-24(111-115)	CB-24(126-130)	CB-26(36-40)	CB-26(51-55)	CB-26(66-70)	CB-27(32-36)	CB-27(36-40)	CB-28(35-39)	CB-28(46-50)
Sampling Date	Standard or	11/16/2009	11/16/2009	11/16/2009	11/3/2009	11/3/2009	11/3/2009	11/3/2009	11/3/2009	10/30/2009	10/30/2009
Matrix	Guidance Value	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
VOCs											
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichlorotrifluoroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	0.04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	50	5 U	5 U	5 U	**4.7 J**	**5 J**	5 U	5 U	5 U	5 U	5 U
2-Hexanone	50*	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-Pentanone		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50*	5 U	**15**	5 U	5 U	**6.4**	**5.9**	**6.7**	5 U	**4.8 J**	5 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	50*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	**0.59 J**	1 U	1 U	**9.6**	**15**	1 U	1 U
Chloromethane		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	0.4**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethyl Benzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m/p-Xylenes	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Methyl Acetate		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl tert-butyl Ether	10	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylcyclohexane		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	**0.87 J**	**1.1**	1 U	1 U	1 U	1 U	1 U
o-Xylene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	0.4**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	**6.4**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	1 U	**0.74 J**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Notes:
* - Guidance Value
** - Sum of these analytes cannot exceed 0.4 ug/l
U - Compound was not detected, reporting limit is provided.
J- Concentration is an approximate value.
UJ - Compound was not detected, reporting limit is estimated.
NJ - Detection of compound is tentative and estimated in value.
Highlighted cells exceed NYSDEC Class GA standard or guidance value.

Table 2. Summary of Validated Groundwater Data (VOCs)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	NYSDEC Class GA	CB-30(48-52)	CB-30(96-100)	CB-30(111-115)	CB-30(126-130)	CB-32(48-52)	CB-33(111-115)	CB-33(126-130)	MW-15D	MW-20I	MW-23I	MW-23D
Sampling Date	Standard or	11/17/2009	11/17/2009	11/17/2009	11/17/2009	11/18/2009	10/27/2009	10/27/2009	5/18/2010	5/18/2010	5/18/2010	5/17/2010
Matrix	Guidance Value	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
VOCs												
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**0.61 J**	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichlorotrifluoroethane	5	1 U	**3.5**	**3.4**	**2.2**	1 U	1 U	1 U	**1.2**	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	**1.1**	**1.7**	**0.75 J**	1 U	1 U	1 U	**0.76 J**	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	**0.79 NJ**	**1.4 NJ**	**1 J**	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	0.04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	5	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	50*	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-Pentanone		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50*	**13**	5 U	5 U	**6.9**	5 U	5 UJ	5 UJ	5 U	5 U	5 U	5 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	50*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	**0.51 J**	1 U	1 U	1 U	1 U	**0.6 J**	1 U	1 U	1 U
Chloromethane		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5	1 U	**1.7**	**1.8**	**1.2**	1 U	1 U	1 U	**0.7 J**	1 U	1 U	1 U
cis-1,3-Dichloropropene	0.4**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	50	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethyl Benzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m/p-Xylenes	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Methyl Acetate		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl tert-butyl Ether	10	1 U	**0.85 J**	**0.94 J**	**0.84 J**	1 U	1 U	1 U	**0.78 J**	1 U	1 U	1 U
Methylcyclohexane		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
o-Xylene	5	1 U	1 U	1 U	1 U	1 U	1 UJ	1 U	1 U	1 U	1 U	1 U
Styrene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	0.4**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	1 U	**9.9**	**13**	**3.9**	1 U	1 U	1 U	**3.3**	**1.1**	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	**0.68 J**	**0.53 J**	1 U	1 U
trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	1 U	**17**	**19**	**12**	1 U	1 U	1 U	1 U	**5.2**	1 U	1 U
Trichlorofluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Notes:
* - Guidance Value
** - Sum of these analytes cannot exceed 0.4 ug/l
U - Compound was not detected, reporting limit is provided.
J- Concentration is an approximate value.
UJ - Compound was not detected, reporting limit is estimated.
NJ - Detection of compound is tentative and estimated in value.
Highlighted cells exceed NYSDEC Class GA standard or guidance value.

Table 2. Summary of Validated Groundwater Data (VOCs)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	NYSDEC Class GA	MW-24I	MW-X (MW-24I Dup.)	MW-30S	MW-30I	MW-30D	MW-34D	TRIP BLANK	TRIP BLANK	TRIPBLANK	TRIPBLANK	TRIPBLANK
Sampling Date	Standard or	5/18/2010	5/18/2010	5/19/2010	5/19/2010	5/19/2010	5/18/2010	9/18/2009	10/26/2009	11/10/2009	11/12/2009	11/17/2009
Matrix	Guidance Value	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER	WATER
Units	µg/L	µg/L	µg/L	ug/L	ug/L	ug/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
VOCs												
1,1,1-Trichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichlorotrifluoroethane	5	1 U	1 U	1 U	**1.2**	**0.96 J**	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2,4-Trichlorobenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromo-3-Chloropropane	0.04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dibromoethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Butanone (Methyl ethyl ketone)	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Hexanone	50*	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Methyl-2-Pentanone		5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Acetone	50*	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Benzene	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromodichloromethane	50*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	50*	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromomethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chlorobenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	7	1 U	1 U	1 U	1 U	**0.73 J**	1 U	1 U	1 U	1 U	1 U	1 U
Chloromethane		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	**0.6 J**	1 U	1 U	1 U	1 U	1 U	1 U
cis-1,3-Dichloropropene	0.4**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cyclohexane		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Dibromochloromethane	50	1 U	1 U	1 UJ	1 UJ	1 UJ	1 U	1 U	1 U	1 U	1 U	1 U
Dichlorodifluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethyl Benzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Isopropylbenzene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
m/p-Xylenes	5	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Methyl Acetate		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl tert-butyl Ether	10	1 U	1 U	1 U	1 U	**1.5**	1 U	1 U	1 U	1 U	1 U	1 U
Methylcyclohexane		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methylene Chloride	5	1 U	1 U	1 U	1 U	1 U	1 U	**1.2**	1 U	1 U	1 U	**1.4**
o-Xylene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Styrene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
trans-1,3-Dichloropropene	0.4**	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Tetrachloroethene	5	1 U	1 U	1 U	1 U	**1.6**	1 U	1 U	1 U	1 U	1 U	1 U
Toluene	5	1 U	1 U	1 U	1 U	**0.61 J**	**0.76 J**	1 U	1 U	1 U	1 U	1 U
trans-1,2-Dichloroethene	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	5	1 U	1 U	1 U	**2.9**	**4.2**	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Vinyl Chloride	2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Notes:
* - Guidance Value
** - Sum of these analytes cannot exceed 0.4 ug/l
U - Compound was not detected, reporting limit is provided.
J- Concentration is an approximate value.
UJ - Compound was not detected, reporting limit is estimated.
NJ - Detection of compound is tentative and estimated in value.
Highlighted cells exceed NYSDEC Class GA standard or guidance value.

Table 2. Summary of Validated Groundwater Data (VOCs)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	NYSDEC Class GA	TRIPBLANK	TRIPBLANK
Sampling Date	Standard or	5/14/2010	5/14/2010
Matrix	Guidance Value	WATER	WATER
Units	µg/L	µg/L	µg/L
VOCs			
1,1,1-Trichloroethane	5	1 U	1 U
1,1,2,2-Tetrachloroethane	5	1 U	1 U
1,1,2-Trichloroethane	1	1 U	1 U
1,1,2-Trichlorotrifluoroethane	5	1 U	1 U
1,1-Dichloroethane	5	1 U	1 U
1,1-Dichloroethene	5	1 U	1 U
1,2,4-Trichlorobenzene	5	1 U	1 U
1,2-Dibromo-3-Chloropropane	0.04	1 U	1 U
1,2-Dibromoethane	5	1 U	1 U
1,2-Dichlorobenzene	3	1 U	1 U
1,2-Dichloroethane	0.6	1 U	1 U
1,2-Dichloropropane	1	1 U	1 U
1,3-Dichlorobenzene	3	1 U	1 U
1,4-Dichlorobenzene	3	1 U	1 U
2-Butanone (Methyl ethyl ketone)	50	5 U	5 U
2-Hexanone	50*	5 U	5 U
4-Methyl-2-Pentanone		5 U	5 U
Acetone	50*	5 U	5 U
Benzene	1	1 U	1 U
Bromodichloromethane	50*	1 U	1 U
Bromoform	50*	1 U	1 U
Bromomethane	5	1 U	1 U
Carbon Disulfide		1 U	1 U
Carbon Tetrachloride	5	1 U	1 U
Chlorobenzene	5	1 U	1 U
Chloroethane	5	1 U	1 U
Chloroform	7	1 U	1 U
Chloromethane		1 U	1 U
cis-1,2-Dichloroethene	5	1 U	1 U
cis-1,3-Dichloropropene	0.4**	1 U	1 U
Cyclohexane		1 U	1 U
Dibromochloromethane	50	1 U	1 UJ
Dichlorodifluoromethane	5	1 U	1 U
Ethyl Benzene	5	1 U	1 U
Isopropylbenzene	5	1 U	1 U
m/p-Xylenes	5	2 U	2 U
Methyl Acetate		1 U	1 U
Methyl tert-butyl Ether	10	1 U	1 U
Methylcyclohexane		1 U	1 U
Methylene Chloride	5	1 U	1 U
o-Xylene	5	1 U	1 U
Styrene	5	1 U	1 U
trans-1,3-Dichloropropene	0.4**	1 U	1 U
Tetrachloroethene	5	1 U	1 U
Toluene	5	1 U	1 U
trans-1,2-Dichloroethene	5	1 U	1 U
Trichloroethene	5	1 U	1 U
Trichlorofluoromethane	5	1 U	1 U
Vinyl Chloride	2	1 U	1 U

Notes:
* - Guidance Value
** - Sum of these analytes cannot exceed 0.4 ug/l
U - Compound was not detected, reporting limit is provided.
J- Concentration is an approximate value.
UJ - Compound was not detected, reporting limit is estimated.
NJ - Detection of compound is tentative and estimated in value.
Highlighted cells exceed NYSDEC Class GA standard or guidance value.

Table 3. Summary of Validated Groundwater Data (Metals)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	NYSDEC Class GA	CB-01(111-115)	CB-01(111-115)F	CB-01(126-130)	CB-01(126-130)F	CB-03(126-130)	CB-03(126-130)F	CB-05(118-122)	CB-05(118-122)F	CB-05(126-130)
Sampling Date	**Standard or**	**10/26/2009**	**10/26/2009**	**10/26/2009**	**10/26/2009**	**10/27/2009**	**10/27/2009**	**11/11/2009**	**11/11/2009**	**11/11/2009**
Matrix	**Guidance Value**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**
Units	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**
Metals										
Aluminum	NS	1,590	19.8 J	5,670	19.3 J	3,810	32.2 J	2,980 J	50 UJ	8,730 J
Antimony	3	25 U	25 U	25 U	25 U	31.3	25 U	25 U	25 U	25 U
Arsenic	25	10 U	10 U	10 U	10 U	68.4	10 U	10 U	10 U	8.5 J
Barium	1,000	31.5 J	17.7 J	82.5	36.6 J	58.8	50 U	43.2 J	18.7 J	92
Beryllium	3	3 U	3 U	3 U	3 U	0.76 J	3 U	3 U	3 U	0.98 J
Cadmium	5	3 U	3 U	3 U	3 U	3.12	3 U	3 U	3 U	3 U
Calcium	NS	7,170	7,280	11,600	12,200	11,100	11,300	9,310	8,580	14,100
Chromium, total	50	136 J	5 U	149 J	5 U	1,850 J	5 U	193	5 U	323
Chromium, hexavalent	50	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NS	15 U	15 U	8.19 J	15 U	38.3	15 U	6.32 J	15 U	16
Copper	200	43.9	10 U	51.2	10 U	1,270	10 U	37.1	10 U	52.1
Iron***	300	9,210	250	32,600	4,530	244,000	1,220	27,400	3,970	52,200
Lead	25	7.04	3.77 J	21	6 U	27	3.27 J	13.8	3.51 J	34
Magnesium*	35,000	1,980	1,720	4,680	3,790	3,970	3,120	6,050	5,000	11,300
Manganese***	300	283	92	768	409	1,850	545	539	294	1,130
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	106	9.05 J	68.4	22	1,280	70.1	93.9	14.1 J	153
Potassium	NS	2,170	1,890	2,880	1,990	2,210	1,720	1,870	1,170	2,920
Selenium	10	10 U	10 U	10 U	10 U	7 J	10 U	10 U	10 U	10 U
Silver	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Sodium	20,000	20,000	20,500	14,000	14,500	17,400	16,600	10,900	10,800	8,850
Thallium*	0.5	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Vanadium	NS	8.12 J	20 U	21.8	20 U	20.2	20 U	12.6 J	20 U	36.1
Zinc*	2,000	972	232	613	354	27,100	1,340	267	48.4	178

* Guidance Value
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NS - No standard
NA - Not analyzed
U - Compound not detected, reporting limit is provided.
J - The concentration is an approximate value.
UJ - Compound not detected, reporting limit is estimated.
R - Data unusable, rejected by validator.
F - Filtered sample.
Highlighted cells exceed NYSDEC Class GA standard or guidance value.

Table 3. Summary of Validated Groundwater Data (Metals)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	NYSDEC Class GA	CB-05(126-130)F	CB-6(115-119)	CB-6(115-119)F	CB-6(126-130)	CB-6(126-130)F	CB-08(126-130)	CB-08(126-130)F	CB-10(116-120)	CB-10(116-120)F
Sampling Date	**Standard or**	**11/11/2009**	**11/6/2009**	**11/6/2009**	**11/5/2009**	**11/5/2009**	**10/29/2009**	**10/29/2009**	**11/5/2009**	**11/5/2009**
Matrix	**Guidance Value**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**
Units	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**
Metals										
Aluminum	NS	50 UJ	3,810	19 J	20,200	28.3 J	2,340	33.6 J	3,090	25 J
Antimony	3	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Arsenic	25	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Barium	1,000	21.1 J	110	77	206	46 J	36.2 J	17.6 J	59.3	31.2 J
Beryllium	3	3 U	3 U	3 U	2.46 J	3 U	3 U	3 U	3 U	3 U
Cadmium	5	3 U	3 U	3 U	3.56	3 U	3 U	3 U	3 U	3 U
Calcium	NS	13,300	16,100	15,600	15,500	17,600	7,850	7,530	7,990	7,330
Chromium, total	50	5 U	166	5 U	937	5 U	163 J	1.98 J	414	5 U
Chromium, hexavalent	50	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NS	15 U	7.81 J	15 U	23.8	15 U	5.86 J	15 U	11 J	15 U
Copper	200	10 U	89	14.7	365	15.4	31.2	10 U	65	10 U
Iron***	300	2,340	31,200	4,980	155,000	9,890	24,200	1,880	22,800	1,320
Lead	25	5.23 J	15.2	5.35 J	66.1	5.27 J	12.6	3.32 J	16.3	4.79 J
Magnesium*	35,000	8,920	9,050	8,070	11,000	7,820	3,720	3,250	4,140	3,210
Manganese***	300	363	978	736	2,080	838	418	217	627	287
Mercury	0.7	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UR	0.2 UR	0.2 UJ	0.2 UJ
Nickel	100	10.9 J	72.6	21.4	322	40.3	68.8	13.8 J	231	7.28 J
Potassium	NS	1,060	2,710	1,900	4,850	2,120	1,510	1,040	3,040	2,360
Selenium	10	10 U	10 U	10 U	8.98 J	10 U	10 U	10 U	10 U	10 U
Silver	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Sodium	20,000	8,520	62,000	60,500	34,200	33,300	10,700	10,900	81,100	78,300
Thallium*	0.5	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Vanadium	NS	20 U	14.4 J	20 U	74.9	20 U	9.55 J	20 U	16.1 J	20 U
Zinc*	2,000	27.3	397	99.1	1,040	81.9	259	87.1	78.3	12.1 J

* Guidance Value
***Sum of these compounds can not exceed 300 ug/L.
NS - No standard
NA - Not analyzed
U - Compound not detected, reporting limit is provided.
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R - Data unusable, rejected by validator.
F - Filtered sample.
Highlighted cells exceed NYSDEC Class GA standard
or guidance value.

Table 3. Summary of Validated Groundwater Data (Metals)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	NYSDEC Class GA	CB-10(126-130)	CB-10(126-130)F	CB-11(118-122)	CB-11(118-122)F	CB-11(126-130)	CB-11(126-130)F	CB-12(86-90)	CB-12(86-90)F	CB-12(101-105)
Sampling Date	**Standard or**	**11/5/2009**	**11/5/2009**	**11/4/2009**	**11/4/2009**	**11/4/2009**	**11/4/2009**	**11/10/2009**	**11/10/2009**	**11/10/2009**
Matrix	**Guidance Value**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**
Units	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**
Metals										
Aluminum	NS	2,360	18.6 J	4,690	19.3 J	4,570	30.8 J	3,030	13.3 J	3,170
Antimony	3	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Arsenic	25	10 U	10 U	5.4 J	10 U	6.2 J	10 U	6.78 J	10 U	10 U
Barium	1,000	41.8 J	25 J	57.5	16.1 J	49.3 J	7.91 J	88.8	66.7	38 J
Beryllium	3	3 U	3 U	3 U	3 U	0.92 J	3 U	3 U	3 U	3 U
Cadmium	5	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Calcium	NS	15,100	15,100	8,560	8,590	4,350	3,900	18,200 J	17,200 J	7,630 J
Chromium, total	50	126	5 U	554	5 U	730	5 U	393	5 U	217
Chromium, hexavalent	50	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NS	15 U	15 U	14.8 J	15 U	10.6 J	15 U	10.5 J	15 U	7.86 J
Copper	200	50.8	10.3	114	13.5	167	10 U	64	10 U	70.6
Iron***	300	18,200	482	30,700	1,250	35,700	632	40,200	1,220	39,200
Lead	25	13.1	6.31	23.2	7.14	25	5.38 J	14.6	6 U	12.1
Magnesium*	35,000	7,810	7,210	4,970	3,580	3,330	2,050	8,420	5,550	2,860
Manganese***	300	466	186	682	189	675	188	672	356	560
Mercury	0.7	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 U	0.2 U	0.2 U
Nickel	100	80.9	6.38 J	359	9.97 J	488	8.77 J	210	12.2 J	96.7
Potassium	NS	1,270	833 J	1,900	928 J	1,700	797 J	2,840	2,180	1,720
Selenium	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Silver	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Sodium	20,000	8,870	9,020	10,100	10,400	6,420	6,240	175,000	176,000	8,710
Thallium*	0.5	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Vanadium	NS	12.4 J	20 U	24.1	20 U	29	20 U	12.2 J	20 U	13.6 J
Zinc*	2,000	70.5	16.5 J	143	33.2	189	27.6	540	17.8 J	613

* Guidance Value
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F - Filtered sample.
Highlighted cells exceed NYSDEC Class GA standard
or guidance value.

Table 3. Summary of Validated Groundwater Data (Metals)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	NYSDEC Class GA	CB-12(101-105)F	CB-GW-X2-F: CB-12(101-105)F	CB-12(116-120)	CB-12(116-120)F	CB-17(101-105)	CB-17(101-105)F	CB-18(101-105)	CB-18(101-105)F
Sampling Date	**Standard or**	**11/10/2009**	**11/10/2009**	**11/10/2009**	**11/10/2009**	**11/12/2009**	**11/12/2009**	**11/11/2009**	**11/11/2009**
Matrix	**Guidance Value**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**
Units	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**
Metals									
Aluminum	NS	17 J	13 J	6,030	9.67 J	18,200 J	50 UJ	2,340 J	14.2 J
Antimony	3	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Arsenic	25	10 U	10 U	6.46 J	10 U	18.7	10 U	10 U	10 U
Barium	1,000	10.9 J	13.5 J	70.1	17 J	230	39.3 J	111	92.4
Beryllium	3	3 U	3 U	3 U	3 U	1.77 J	3 U	3 U	3 U
Cadmium	5	3 U	3 U	3 U	3 U	2.09 J	3 U	0.69 J	3 U
Calcium	NS	7,110 J	7,530 J	6,150 J	5,140 J	12,200	10,600	23,700	23,900
Chromium, total	50	5 U	5 U	286	5 U	931	8.71	113	5 U
Chromium, hexavalent	50	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NS	15 U	15 U	13.2 J	15 U	52.5	8.64 J	9.79 J	6.47 J
Copper	200	10 U	10 U	87.5	9.86 J	135	10 U	19.9	10 U
Iron***	300	866	1,270	52,300	3,190	106,000	3,620	14,200	4,730
Lead	25	3.36 J	3.32 J	25.2	6 U	80.4	6.36	18.1	9.21
Magnesium*	35,000	2,030	2,180	4,390	2,640	9,780	4,640	4,910	4,440
Manganese***	300	162	221	875	415	4,320	1,290	1,740	1,640
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	6.57 J	11.4 J	110	17.3 J	395	23.9	91.8	54.3
Potassium	NS	986 J	1,050	2,530	1,200	4,910	1,610	6,370	6,020
Selenium	10	10 U	5.63 J	10 U	6.53 J	6.67 J	10 U	10 U	10 U
Silver	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Sodium	20,000	8,290	8,690	10,900	10,500	31,700	32,400	47,100	47,700
Thallium*	0.5	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Vanadium	NS	20 U	20 U	22.8	20 U	85.2	20 U	9.01 J	20 U
Zinc*	2,000	62	87.3	415	105	198	25.1	214	148

* Guidance Value
***Sum of these compounds can not exceed 300 ug/L.
NS - No standard
NA - Not analyzed
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UJ - Compound not detected, reporting limit is estimated.
R - Data unusable, rejected by validator.
F - Filtered sample.
Highlighted cells exceed NYSDEC Class GA standard
or guidance value.

Table 3. Summary of Validated Groundwater Data (Metals)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	NYSDEC Class GA	CB-18(116-120)	CB-18(116-120)F	CB-20(97-101)	CB-20(97-101)F	CB-20(111-115)	CB-20(111-115)F	CB-20(126-130)	CB-20(126-130)F	CB-21(96-100)
Sampling Date	**Standard or**	**11/10/2009**	**11/10/2009**	**11/12/2009**	**11/12/2009**	**11/12/2009**	**11/12/2009**	**11/12/2009**	**11/12/2009**	**11/9/2009**
Matrix	**Guidance Value**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**
Units	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**
Metals										
Aluminum	NS	7,010	199	14,400 J	50 UJ	8,070 J	50 UJ	6,570 J	50 UJ	6,040
Antimony	3	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Arsenic	25	7.54 J	10 U	23.6	10 U	8.99 J	10 U	9.39 J	10 U	6.1 J
Barium	1,000	163	117	143	21.4 J	90.6	25.6 J	82.4	28.5 J	67.2
Beryllium	3	1.93 J	0.77 J	2 J	3 U	0.79 J	3 U	0.76 J	3 U	3 U
Cadmium	5	0.7 J	3 U	1.82 J	3 U	3 U	3 U	3 U	3 U	3 U
Calcium	NS	19,700 J	19,300 J	12,300	10,300	11,000	9,670	12,200	11,200	3,870 J
Chromium, total	50	336	5 U	791	5 U	394	5 U	325	5 U	325
Chromium, hexavalent	50	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NS	28.3	18.9	30.8	15 U	13.1 J	15 U	9.42 J	15 U	14.8 J
Copper	200	68.3	15.4	145	10 U	92.8	10 U	83.1	10 U	69.8
Iron***	300	38,600	4,890	124,000	2,110	65,000	4,670	55,200	4,590	46,900
Lead	25	30.8	4.51 J	55.8	4.22 J	32.7	6.14	30.6	4.55 J	20
Magnesium*	35,000	9,430	7,930	9,600	5,960	6,710	4,230	6,680	4,900	2,100
Manganese***	300	1,730	1,350	3,050	833	1,120	609	761	322	1,320
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	176	41.3	192	10.5 J	135	16.6 J	97.1	18.2 J	92.9
Potassium	NS	5,000	3,820	3,810	1,370	3,110	1,450	2,980	1,500	2,010
Selenium	10	10 U	10 U	6.62 J	10 U	4.96 J	10 U	10 U	10 U	10 U
Silver	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Sodium	20,000	54,300	55,300	11,100	9,740	19,300	18,700	22,700	22,300	7,870
Thallium*	0.5	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Vanadium	NS	25.9	20 U	76	20 U	32.4	20 U	23	20 U	23
Zinc*	2,000	474	233	244	23.4	386	55.2	314	56.5	161

* Guidance Value
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NA - Not analyzed
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UJ - Compound not detected, reporting limit is estimated.
R - Data unusable, rejected by validator.
F - Filtered sample.
Highlighted cells exceed NYSDEC Class GA standard or guidance value.

Table 3. Summary of Validated Groundwater Data (Metals)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	NYSDEC Class GA	CB-21(96-100)F	CB-21(111-115)	CB-21(111-115)F	CB-21(126-130)	CB-21(126-130)F	CB-23(100-104)	CB-23(100-104)F	CB-23(111-115)	CB-23(111-115)F
Sampling Date	**Standard or**	**11/9/2009**	**11/9/2009**	**11/9/2009**	**11/6/2009**	**11/6/2009**	**10/29/2009**	**10/29/2009**	**10/29/2009**	**10/29/2009**
Matrix	**Guidance Value**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**
Units	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**
Metals										
Aluminum	NS	7.48 J	6,980	14.5 J	9,300	32.9 J	17,200	24.6 J	3,160 J	29 J
Antimony	3	25 U	25 U	25 U	25 U	25 U	16.6 J	25 U	25 U	25 U
Arsenic	25	10 U	7.38 J	10 U	10 U	10 U	48.3	10 U	10 U	10 U
Barium	1,000	16.3 J	110	28.6 J	116	45 J	256	30.3 J	40.2 J	11.7 J
Beryllium	3	3 U	3 U	3 U	0.97 J	3 U	1.63 J	3 U	3 U	3 U
Cadmium	5	3 U	3 U	3 U	0.84 J	3 U	4.63	3 U	3 U	3 U
Calcium	NS	3,310 J	4,800 J	4,220 J	12,600	11,700	19,200	16,600	10,900	10,600
Chromium, total	50	5 U	184	5 U	410	5 U	1,310 J	5 U	233 J	5 U
Chromium, hexavalent	50	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NS	7.68 J	19.8	15 U	11.8 J	15 U	47.4	13.5 J	7.17 J	15 U
Copper	200	10 U	55.8	10 U	94.2	10 U	1,110	10 U	68.6	10 U
Iron***	300	7,010	34,800	2,920	45,000	4,640	170,000	16,500	26,000	2,080
Lead	25	6 U	21.7	6 U	30.5	3.9 J	57.1	3.44 J	15.4	6 U
Magnesium*	35,000	809 J	2,930	1,090	5,960	3,580	8,940	4,880	6,150	5,320
Manganese***	300	825	2,580	1,100	1,040	511	4,140	2,190	949	402
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 UJ	0.2 UR	0.2 UR	0.2 UR	0.2 UR
Nickel	100	18.4 J	95	18.2 J	180	14.2 J	713	76.2	107	11.9 J
Potassium	NS	887 J	2,600	1,180	3,720	1,990	5,570	2,750	2,090	1,210
Selenium	10	10 U	10 U	10 U	5.41 J	10 U	8.67 J	10 U	10 U	10 U
Silver	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Sodium	20,000	7,470	19,400	20,200	38,500	36,500	10,400	9,150	10,700	10,200
Thallium*	0.5	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Vanadium	NS	20 U	20.8	20 U	29.3	20 U	65	20 U	12.5 J	20 U
Zinc*	2,000	40.4	120	36.2	123	28.3	18,300	1,930	912	83.1

* Guidance Value
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Table 3. Summary of Validated Groundwater Data (Metals)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	NYSDEC Class GA	CB-23(126-130)	CB-GW-X1: CB-23(126-130)	CB-23(126-130)F	CB-24(101-105)	CB-24(101-105)F	CB-24(111-115)	CB-24(111-115)F	CB-24(126-130)
Sampling Date	**Standard or**	**10/29/2009**	**10/29/2009**	**10/29/2009**	**11/16/2009**	**11/16/2009**	**11/16/2009**	**11/16/2009**	**11/16/2009**
Matrix	**Guidance Value**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**
Units	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**
Metals									
Aluminum	NS	2,320 J	2,160 J	121 J	9,390	24.5 J	6,550	26.5 J	5,590
Antimony	3	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Arsenic	25	10 U	10 U	10 U	7.32 J	10 U	10 U	10 U	10 U
Barium	1,000	112	108	91.8	104	21.9 J	78.8	19.2 J	70.4
Beryllium	3	3 U	3 U	3 U	0.7 J	3 U	0.71 J	3 U	3 U
Cadmium	5	3 U	3 U	3 U	1.28 J	3 U	3 U	3 U	3 U
Calcium	NS	12,800	12,800	12,800	18,000	16,600	15,300	14,300	11,600
Chromium, total	50	250 J	222 J	5 U	578	5 U	245	5 U	200
Chromium, hexavalent	50	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NS	15 U	15 U	15 U	25.6	11 J	14.6 J	6.03 J	13.2 J
Copper	200	38.2	33.7	10 U	99.4	10 U	53	10 U	26.1
Iron***	300	14,700	13,700	1,940	65,600	10,200	41,600	6,860	24,600
Lead	25	10.3	9.08	6 U	40	5.66 J	26.6	3 J	24.3
Magnesium*	35,000	6,600	6,410	6,150	5,360	2,590	3,950	2,320	5,980
Manganese***	300	477	461	324	3,110	2,310	1,110	747	479
Mercury	0.7	0.2 UR	0.2 UR	0.2 UR	0.2 U	0.2 U	0.2 U	0.1 J	0.2 U
Nickel	100	120	106	15.7 J	237	33.3	88.9	22.9	96.2
Potassium	NS	2,180	2,130	1,710	3,820	1,770	3,130	1,560	2,480
Selenium	10	5.58 J	10 U	10 U	10 U	10 U	10 U	10 U	4.88 J
Silver	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Sodium	20,000	19,900	19,600	19,800	11,900	11,200	15,400	15,100	15,000
Thallium*	0.5	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Vanadium	NS	7.5 J	8.11 J	20 U	31.6	20 U	18.3 J	20 U	15.7 J
Zinc*	2,000	470	423	139	234	61.2	181	40.7	78

* Guidance Value
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Table 3. Summary of Validated Groundwater Data (Metals)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	NYSDEC Class GA	CB-24(126-130)F	CB-26(36-40)	CB-26(36-40)F	CB-26(51-55)	CB-26(51-55)F	CB-26(66-70)	CB-26(66-70)F	CB-27(32-36)	CB-27(32-36)F
Sampling Date	**Standard or**	**11/16/2009**	**11/3/2009**	**11/3/2009**	**11/3/2009**	**11/3/2009**	**11/3/2009**	**11/3/2009**	**11/3/2009**	**11/3/2009**
Matrix	**Guidance Value**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**
Units	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**
Metals										
Aluminum	NS	29.4 J	9,530	30.4 J	13,800	21.4 J	13,700	21 J	8,670	37.9 J
Antimony	3	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Arsenic	25	10 U	4.64 J	10 U	10 U	10 U	6.23 J	10 U	10 U	10 U
Barium	1,000	16 J	141	80.4	181	38.5 J	189	13 J	79.6	36.7 J
Beryllium	3	3 U	0.77 J	3 U	1.32 J	3 U	1.06 J	3 U	0.71 J	3 U
Cadmium	5	3 U	0.67 J	3 U	1.15 J	3 U	0.85 J	3 U	3 U	3 U
Calcium	NS	10,600	19,600	19,700	10,600	9,990	4,930	4,150	11,400	8,300
Chromium, total	50	5 U	317	5 U	358	5 U	229	5 U	123	5 U
Chromium, hexavalent	50	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NS	15 U	13.2 J	15 U	18.1	15 U	21.6	15 U	6.46 J	15 U
Copper	200	10 U	108	14.2	143	10 U	76.6	10 U	39.7	10 U
Iron***	300	1,950	36,200	4,290	53,600	2,330	39,100	106	17,000	1,070
Lead	25	5.2 J	25.4	4.96 J	41.6	3.58 J	39.8	4.08 J	16.3	4.1 J
Magnesium*	35,000	4,130	5,160	3,940	4,690	2,260	4,820	1,520	3,430	1,760
Manganese***	300	152	1,740	773	3,110	1,420	6,130	705	1,010	316
Mercury	0.7	0.2 U	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ	0.2 UJ
Nickel	100	7.5 J	178	18.5 J	184	18.9 J	209	9.48 J	88	6.18 J
Potassium	NS	1,050	4,380	3,310	4,090	1,930	3,480	1,390	3,040	2,210
Selenium	10	10 U	5.14 J	10 U	6.94 J	10 U	7.32 J	10 U	10 U	10 U
Silver	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Sodium	20,000	14,700	98,900	105,000	23,900	24,200	12,700	12,300	9,480	9,450
Thallium*	0.5	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Vanadium	NS	20 U	20.8	20 U	33.1	20 U	36.9	20 U	15.5 J	20 U
Zinc*	2,000	16.1 J	519	105	631	72.4	172	14.5 J	128	30.1

* Guidance Value
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Table 3. Summary of Validated Groundwater Data (Metals)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	NYSDEC Class GA	CB-27(36-40)	CB-27(36-40)F	CB-28(35-39)	CB-28(35-39)F	CB-28(46-50)	CB-28(46-50)F	CB-30(48-52)	CB-30(48-52)F	CB-30(96-100)
Sampling Date	**Standard or**	**11/3/2009**	**11/3/2009**	**10/30/2009**	**10/30/2009**	**10/30/2009**	**10/30/2009**	**11/17/2009**	**11/17/2009**	**11/17/2009**
Matrix	**Guidance Value**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**
Units	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**
Metals										
Aluminum	NS	4,750	43.9 J	13,000 J	22.3 J	17,900 J	26.4 J	16,800	24.2 J	6,500
Antimony	3	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Arsenic	25	10 U	10 U	5.68 J	10 U	7.07 J	10 U	9.57 J	10 U	10 U
Barium	1,000	98.6	76.9	229	50.6	326	38.3 J	239	64.1	93.2
Beryllium	3	3 U	3 U	1.1 J	3 U	1.39 J	3 U	1.36 J	3 U	3 U
Cadmium	5	3 U	3 U	1.29 J	3 U	1.96 J	3 U	2.67 J	3 U	3 U
Calcium	NS	16,800	14,800	10,800	9,030	8,310	6,900	26,200	24,400	13,800
Chromium, total	50	260	5 U	677 J	5 U	459 J	5 U	493	5 U	173
Chromium, hexavalent	50	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NS	15 U	15 U	39.8	9.84 J	56.2	6.99 J	33.1	8.98 J	21.3
Copper	200	54.1	10 U	145	10 U	111	10 U	153	10 U	43.4
Iron***	300	14,100	518	69,000	5,810	71,600	2,460	81,100	8,420	32,700
Lead	25	12.5	6.2	41.2	4.23 J	57.6	6 U	42.2	6 U	21.2
Magnesium*	35,000	3,860	2,820	4,240	1,550	5,140	1,660	9,250	6,250	5,060
Manganese***	300	700	389	3,350	1,390	5,570	1,240	3,250	1,080	679
Mercury	0.7	0.2 UJ	0.2 UJ	0.2 UR	0.2 UR	0.2 UR	0.2 UR	0.2 U	0.2 U	0.2 U
Nickel	100	182	9.24 J	349	33.9	209	19.4 J	184	28.6	67.8
Potassium	NS	3,910	3,780	4,510	2,280	4,580	2,120	4,130	1,680	3,640
Selenium	10	10 U	10 U	7.02 J	10 U	8.03 J	10 U	5 J	10 U	10 U
Silver	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Sodium	20,000	15,900	17,200	13,300	12,200	24,700	25,800	46,600	45,500	22,900
Thallium*	0.5	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Vanadium	NS	9.69 J	20 U	34.5	20 U	45.5	20 U	39.6	20 U	18.2 J
Zinc*	2,000	485	60.2	1350	260	538	92	894	185	287

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Table 3. Summary of Validated Groundwater Data (Metals)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	NYSDEC Class GA	CB-30(96-100)F	CB-30(111-115)	CB-30(111-115)F	CB-30(126-130)	CB-30(126-130)F	CB-32(48-52)	CB-32(48-52)F	CB-33(111-115)	CB-33(111-115)F
Sampling Date	**Standard or**	**11/17/2009**	**11/17/2009**	**11/17/2009**	**11/17/2009**	**11/17/2009**	**11/18/2009**	**11/18/2009**	**10/27/2009**	**10/27/2009**
Matrix	**Guidance Value**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**
Units	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**
Metals										
Aluminum	NS	36.6 J	4,770	30 J	14,000	25.4 J	6,190	34 J	13,200 J	22.8 J
Antimony	3	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Arsenic	25	10 U	10 U	10 U	10.4	10 U	6.98 J	10 U	11.1	10 U
Barium	1,000	30.2 J	73.8	22.7 J	153	16.1 J	91.5	25 J	176	47.7 J
Beryllium	3	3 U	3 U	3 U	1.3 J	3 U	3 U	3 U	1.23 J	3 U
Cadmium	5	3 U	3 U	3 U	1.51 J	3 U	0.83 J	3 U	0.5 J	3 U
Calcium	NS	12,300	10,800	10,100	11,500	9,940	21,400	22,600	15,400	15,000
Chromium, total	50	5 U	252	5 U	556	5 U	204	5 U	301 J	5 U
Chromium, hexavalent	50	NA	NA	NA	NA	NA	NA	NA	NA	NA
Cobalt	NS	9.04 J	11.3 J	15 U	29.6	15 U	14 J	15 U	19	15 U
Copper	200	10 U	68.3	10 U	97.9	10 U	34	10 U	107	10 U
Iron***	300	2,990	35,200	3,700	72,700	2,470	25,100	896	65,900	3,210
Lead	25	6 U	23.5	3.34 J	46.7	6 U	28.6	6 U	38.1	2.85 J
Magnesium*	35,000	3,120	5,210	4,030	7,410	3,570	4,450	3,320	6,780	4,070
Manganese***	300	329	596	255	1630	479	2240	290	1,550	533
Mercury	0.7	0.2 U	0.11 J	0.09 J	0.11 J	0.1 J	0.12 J	0.12 J	0.2 U	0.2 U
Nickel	100	13.3 J	101	16.4 J	262	14.2 J	122	5.68 J	117	16.6 J
Potassium	NS	2,010	2,260	1,030	3,920	786 J	3,770	2,880	4,160	2,150
Selenium	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Silver	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Sodium	20,000	21,100	15,800	15,700	15,200	15,700	12,400	12,000	25,400	24,900
Thallium*	0.5	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Vanadium	NS	20 U	16.6 J	20 U	46.5	20 U	22.3	20 U	49.7	20 U
Zinc*	2,000	69.9	494	95.9	635	38.8	38.2	20 U	661	106

* Guidance Value
***Sum of these compounds can not exceed 300 ug/L.
NS - No standard
NA - Not analyzed
U - Compound not detected, reporting limit is provided.
J - The concentration is an approximate value.
UJ - Compound not detected, reporting limit is estimated.
R - Data unusable, rejected by validator.
F - Filtered sample.
Highlighted cells exceed NYSDEC Class GA standard
or guidance value.

Table 3. Summary of Validated Groundwater Data (Metals)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	NYSDEC Class GA	CB-33(126-130)	CB-33(126-130)F	MW-15D	MW-15D-F	MW-20I	MW-20I-F	MW-23I	MW-23I-F	MW-23D
Sampling Date	**Standard or**	**10/27/2009**	**10/27/2009**	**5/18/2010**	**5/18/2010**	**5/18/2010**	**5/18/2010**	**5/18/2010**	**5/18/2010**	**5/17/2010**
Matrix	**Guidance Value**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**
Units	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**
Metals										
Aluminum	NS	4,770 J	15.5 J	2,760	21.9 J	780	13.4 J	1,310	16.2 J	860
Antimony	3	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Arsenic	25	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Barium	1,000	133	77.3	97.5	4.63 J	26.6 J	23.1 J	33.6 J	24.9 J	44.2 J
Beryllium	3	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Cadmium	5	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Calcium	NS	18,400	18,900	14,700	12,200	8,840	9,300	4,190	4,310	10,100
Chromium, total	50	261 J	5 U	88	5 U	5.8	5 U	8.06	1.37 J	8.65
Chromium, hexavalent	50	NA	NA	10 U	NA	NA	NA	10 U	NA	NA
Cobalt	NS	9.72 J	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U
Copper	200	71.8	10 U	43.8	10 U	10 U	10 U	10 U	10 U	10 U
Iron***	300	38,800	6,410	6,880	57	3,040	45 J	4,410	59	1,530
Lead	25	23.9	3.68 J	16.6	2.95 J	3.7 J	3.05 J	4.54 J	6 U	4.49 J
Magnesium*	35,000	7,130	6,600	4,350	3,230	4,060	3,980	1,430	1,120	2,280
Manganese***	300	904	633	485	121	181	76.5	288	180	804
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	114	29.2	18.6 J	20 U	20 U	20 U	9.14 J	4.41 J	14.6 J
Potassium	NS	3,510	2,790	2,250	1,700	1,230	1,140	2,200	2,120	2,670
Selenium	10	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Silver	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Sodium	20,000	30,800	31,700	31,500	30,100	17,700	18,600	9,440	9,940	15,600
Thallium*	0.5	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Vanadium	NS	15.8 J	20 U	6.4 J	20 U	20 U	20 U	20 U	20 U	20 U
Zinc*	2,000	541	133	127	61.4	61.3	54.5	62.5	56.8	73.6

* Guidance Value
***Sum of these compounds can not exceed 300 ug/L.
NS - No standard
NA - Not analyzed
U - Compound not detected, reporting limit is provided.
J - The concentration is an approximate value.
UJ - Compound not detected, reporting limit is estimated.
R - Data unusable, rejected by validator.
F - Filtered sample.
Highlighted cells exceed NYSDEC Class GA standard or guidance value.

Table 3. Summary of Validated Groundwater Data (Metals)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	NYSDEC Class GA	MW-23D-F	MW-24I	MW-X (MW-24I Dup.)	MW-24I-F	MW-30S	MW-30I	MW-30I-F	MW-30D	MW-30D-F
Sampling Date	**Standard or**	**5/17/2010**	**5/18/2010**	**5/18/2010**	**5/18/2010**	**5/19/2010**	**5/19/2010**	**5/19/2010**	**5/19/2010**	**5/19/2010**
Matrix	**Guidance Value**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**	**WATER**
Units	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**
Metals										
Aluminum	NS	9.85 J	517	451	12.8 J	270	1550	143	485	13 J
Antimony	3	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U	25 U
Arsenic	25	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Barium	1,000	30.8 J	31.7 J	30 J	28.7 J	64.7	84.8	78.9	85.6	78.3
Beryllium	3	3 U	3 U	3 U	3 U	1.16 J	3 U	3 U	3 U	3 U
Cadmium	5	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Calcium	NS	8,920	22,700	22,200	22,800	18,600	13,400	13,800	18,200	18,300
Chromium, total	50	1.29 J	2.81 J	2.48 J	5 U	5 U	22.3	1.68 J	11.2	1.62 J
Chromium, hexavalent	50	NA	10 U	NA	NA	NA	NA	NA	NA	NA
Cobalt	NS	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U	15 U
Copper	200	10 U	10 U	10 U	10 U	10 U	10 U	10 U	22	21.9
Iron***	300	32 J	1,840	1,550	32 J	629	4,940	444	1,300	412
Lead	25	6 U	4.47 J	3.53 J	3.17 J	6 U	6 U	6 U	4.73 J	3.57 J
Magnesium*	35,000	1,910	2,830	2,730	2,680	3,420	6,420	6,360	5,460	5,430
Manganese***	300	663	412	392	354	109	566	332	292	285
Mercury	0.7	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U	0.2 U
Nickel	100	11.7 J	20 U	20 U	20 U	20 U	13.7 J	20 U	9.36 J	9.06 J
Potassium	NS	2,600	1,760	1,710	1,700	3,310	1,970	1,680	1,730	1,630
Selenium	10	10 U	10 U	10 U	10 U	36 U	10 U	10 U	10 U	10 U
Silver	50	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Sodium	20,000	15,800	18,400	17,900	18,600	24,300	24,800	24,800	19,500	20,400
Thallium*	0.5	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Vanadium	NS	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U	20 U
Zinc*	2,000	50.4	59.3	51.7	42.2	35.4	59.5	53.5	70.2	75.9

* Guidance Value
***Sum of these compounds can not exceed 300 ug/L.
NS - No standard
NA - Not analyzed
U - Compound not detected, reporting limit is provided.
J - The concentration is an approximate value.
UJ - Compound not detected, reporting limit is estimated.
R - Data unusable, rejected by validator.
F - Filtered sample.
Highlighted cells exceed NYSDEC Class GA standard
or guidance value.

Table 3. Summary of Validated Groundwater Data (Metals)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	NYSDEC Class GA	MW-34D	MW-34D-F	Field Blank
Sampling Date	Standard or	5/18/2010	5/18/2010	3/4/2010
Matrix	Guidance Value	WATER	WATER	WATER
Units	µg/L	µg/L	µg/L	µg/L
Metals				
Aluminum	NS	1,940	13.9 J	50 U
Antimony	3	25 U	25 U	25 U
Arsenic	25	10 U	10 U	10 U
Barium	1,000	73.9	53.3	50 U
Beryllium	3	3 U	3 U	3 U
Cadmium	5	3 U	3 U	3 U
Calcium	NS	22,400	21,800	1,000 U
Chromium, total	50	20.8	1.21 J	5 U
Chromium, hexavalent	50	NA	NA	NA
Cobalt	NS	15 U	15 U	15 U
Copper	200	8.49 J	10 U	10 U
Iron***	300	4,280	29 J	50 U
Lead	25	9.33	2.94 J	6 U
Magnesium*	35,000	5,480	4,650	1,000 U
Manganese***	300	262	107	10 U
Mercury	0.7	0.2 U	0.2 U	0.2 R
Nickel	100	6.69 J	20 U	20 U
Potassium	NS	4,400	3,820	1,000 U
Selenium	10	10 U	10 U	10 U
Silver	50	5 U	5 U	5 U
Sodium	20,000	27,700	25,600	1,000 U
Thallium*	0.5	20 U	20 U	20 U
Vanadium	NS	20 U	20 U	20 U
Zinc*	2,000	96.8	64.1	20 U

* Guidance Value
***Sum of these compounds can not exceed 300 ug/L.
NS - No standard
NA - Not analyzed
U - Compound not detected, reporting limit is provided.
J - The concentration is an approximate value.
UJ - Compound not detected, reporting limit is estimated.
R - Data unusable, rejected by validator.
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Highlighted cells exceed NYSDEC Class GA standard
or guidance value.

Table 4. Summary of Validated Groundwater Data (Additional Analyses)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	NYSDEC Class GA	CB-05(126-130)	CB-05(118-122)	CB-30(96-100)
Sampling Date	Standard or	11/11/2009	11/11/2009	11/17/2009
Matrix	Guidance Value	WATER	WATER	WATER
Units	µg/L	µg/L	µg/L	µg/L
Parameters				
Chloride	250,000	12,000	11,000	49,000
Nitrate	10,000	2,420 J	2,210 J	4,280 J
Ammonia	2,000	308	281	200 U

Notes:
U - Compound not detected, reporting limit provided.
J - The concentration given is an approximate value.

Table 5. Summary of Validated Soil Data (VOCs)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	6 NYCRR Part 375	6 NYCRR Part 375	6 NYCRR Part 375	CB-27	CB-X3: CB-27	CB-28	CB-30	CB-30	CB-32	MW-15D	MW-20I
Sample Depth (feet)	Unrestricted Use	Residential	Commercial	26.5-29.5	26.5-29.5	26.5-29.5	28-30	39-41	44.5-46.5	50-52	90-91.3
Sampling Date	Soil Cleanup	Soil Cleanup	Soil Cleanup	12/2/2009	12/2/2009	12/2/2009	11/30/2009	11/30/2009	11/30/2009	3/15/2010	3/11/2010
Matrix	Objective	Objective	Objective	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Units	mg/kg	mg/kg	mg/kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
VOCs											
1,1,1-Trichloroethane	0.68	100	500	0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
1,1,2,2-Tetrachloroethane				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
1,1,2-Trichloroethane				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
1,1,2-Trichlorotrifluoroethane				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
1,1-Dichloroethane	0.27	19	240	0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
1,1-Dichloroethene	0.33	100	500	0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
1,2,4-Trichlorobenzene				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
1,2-Dibromo-3-chloropropane				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
1,2-Dibromoethane				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
1,2-Dichlorobenzene	1.1	100	500	0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
1,2-Dichloroethane	0.02	2.3	30.0	0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
1,2-Dichloropropane				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
1,3-Dichlorobenzene	2.4	17	49	0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
1,4-Dichlorobenzene	1.8	10	13	0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
2-Butanone (MEK)	0.12	100	500	0.026 U	0.026 U	0.026 U	0.027 U	0.026 U	0.026 U	0.026 U	0.026 U
2-Hexanone				0.026 U	0.026 U	0.026 U	0.027 U	0.026 U	0.026 U	0.026 U	0.026 U
4-Methyl-2-pentanone				0.026 U	0.026 U	0.026 U	0.027 U	0.026 U	0.026 U	0.026 U	0.026 U
Acetone	0.05	100	500	0.026 U	0.026 U	0.026 U	0.027 U	0.026 U	0.026 U	0.026 U	0.026 U
Benzene	0.06	2.9	44.0	0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Bromodichloromethane				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Bromoform				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Bromomethane				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Carbon Disulfide				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Carbon Tetrachloride	0.76	1.4	22.0	0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Chlorobenzene	1.1	100	500	0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Chloroethane				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Chloroform	0.37	10	350	0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Chloromethane				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
cis-1,2-Dichloroethene	0.25	59	500	0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
cis-1,3-Dichloropropene				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Cyclohexane				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Dibromochloromethane				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Dichlorodifluoromethane				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Ethylbenzene	1	30	390	0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Isopropylbenzene				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
m,p-Xylene*	0.26	100	500	0.01 U	0.01 U	0.01 U	0.011 U	0.011 U	0.01 U	0.01 U	0.01 U
Methyl Acetate				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Methyl tert-butyl ether	0.93	62	500	0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Methylcyclohexane				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Methylene Chloride	0.05	51	500	0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
o-Xylene*	0.26	100	500	0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Styrene				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
trans-1,3-Dichloropropene				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Tetrachloroethene	1.30	5.5	150	0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Toluene	0.7	100	500	0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
trans-1,2-Dichloroethene	0.19	100	500	0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Trichloroethene	0.47	10	200	0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Trichlorofluoromethane				0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Vinyl Chloride	0.02	0.21	13.0	0.0052 U	0.0052 U	0.0051 U	0.0053 U	0.0053 U	0.0052 U	0.0052 U	0.0052 U
Total TICs					0.006						

Notes:

*Sum of these compounds cannot exceed the respective SCOs.

U - Compound not detected, reporting limit provided.

UJ - Compound not detected; reporting limit is estimated.

Table 5. Summary of Validated Soil Data (VOCs)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	6 NYCRR Part 375	6 NYCRR Part 375	6 NYCRR Part 375	MW-23D	X-5: MW-23D	MW-24I	MW-30D	MW-34D
Sample Depth (feet)	Unrestricted Use	Residential	Commercial	75-77	75-77	55-57	38-39	55-57
Sampling Date	Soil Cleanup	Soil Cleanup	Soil Cleanup	3/4/2010	3/4/2010	3/9/2010	2/18/2010	3/17/2010
Matrix	Objective	Objective	Objective	SOIL	SOIL	SOIL	SOIL	SOIL
Units	mg/kg	mg/kg	mg/kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
VOCs								
1,1,1-Trichloroethane	0.68	100	500	0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
1,1,2,2-Tetrachloroethane				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
1,1,2-Trichloroethane				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
1,1,2-Trichlorotrifluoroethane				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
1,1-Dichloroethane	0.27	19	240	0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
1,1-Dichloroethene	0.33	100	500	0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
1,2,4-Trichlorobenzene				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
1,2-Dibromo-3-chloropropane				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
1,2-Dibromoethane				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
1,2-Dichlorobenzene	1.1	100	500	0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
1,2-Dichloroethane	0.02	2.3	30.0	0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
1,2-Dichloropropane				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
1,3-Dichlorobenzene	2.4	17	49	0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
1,4-Dichlorobenzene	1.8	10	13	0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
2-Butanone (MEK)	0.12	100	500	0.026 U	0.026 U	0.026 U	0.026 U	0.025 U
2-Hexanone				0.026 U	0.026 U	0.026 U	0.026 U	0.025 U
4-Methyl-2-pentanone				0.026 U	0.026 U	0.026 U	0.026 U	0.025 U
Acetone	0.05	100	500	0.026 U	0.026 U	0.026 U	0.026 U	0.025 U
Benzene	0.06	2.9	44.0	0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Bromodichloromethane				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Bromoform				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Bromomethane				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Carbon Disulfide				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Carbon Tetrachloride	0.76	1.4	22.0	0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Chlorobenzene	1.1	100	500	0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Chloroethane				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Chloroform	0.37	10	350	0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Chloromethane				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
cis-1,2-Dichloroethene	0.25	59	500	0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
cis-1,3-Dichloropropene				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Cyclohexane				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Dibromochloromethane				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Dichlorodifluoromethane				0.0053 U	0.0052 U	0.0052 UJ	0.0052 U	0.005 U
Ethylbenzene	1	30	390	0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Isopropylbenzene				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
m,p-Xylene*	0.26	100	500	0.011 U	0.01 U	0.01 U	0.01 U	0.01 U
Methyl Acetate				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Methyl tert-butyl ether	0.93	62	500	0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Methylcyclohexane				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Methylene Chloride	0.05	51	500	0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
o-Xylene*	0.26	100	500	0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Styrene				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
trans-1,3-Dichloropropene				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Tetrachloroethene	1.30	5.5	150	0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Toluene	0.7	100	500	0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
trans-1,2-Dichloroethene	0.19	100	500	0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Trichloroethene	0.47	10	200	0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Trichlorofluoromethane				0.0053 U	0.0052 U	0.0052 U	0.0052 U	0.005 U
Vinyl Chloride	0.02	0.21	13.0	0.0053 U	0.0052 U	0.0052 UJ	0.0052 U	0.005 U
Total TICs						0.0077		

Notes:

*Sum of these compounds cannot exceed the respective SCOs.

U - Compound not detected, reporting limit provided.

UJ - Compound not detected; reporting limit is estimated.

Table 6. Summary of Validated Soil Data (SVOCs)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	6 NYCRR Part 375	6 NYCRR Part	6 NYCRR Part 375	CB-27	CB-X3: CB-27	CB-28	CB-30	CB-30	CB-32
Sample Depth (feet)	Unrestricted Use	Residential	Commercial	26.5-29.5	26.5-29.5	26.5-29.5	28-30	39-41	44.5-46.5
Sampling Date	Soil Cleanup	Soil Cleanup	Soil Cleanup	12/2/2009	12/2/2009	12/2/2009	11/30/2009	11/30/2009	11/30/2009
Matrix	Objective	Objective	Objective	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
SVOCs									
1,1-Biphenyl				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
2,2-oxybis(1-Chloropropane)				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
2,4,5-Trichlorophenol				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
2,4,6-Trichlorophenol				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
2,4-Dichlorophenol				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
2,4-Dimethylphenol				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
2,4-Dinitrophenol				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
2,4-Dinitrotoluene				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
2,6-Dinitrotoluene				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
2-Chloronaphthalene				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
2-Chlorophenol				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
2-Methylnaphthalene				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
2-Methylphenol				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
2-Nitroaniline				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
2-Nitrophenol				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
3,3-Dichlorobenzidine				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
3+4-Methylphenols				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
3-Nitroaniline				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
4,6-Dinitro-2-methylphenol				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
4-Bromophenyl-phenylether				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
4-Chloro-3-methylphenol				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
4-Chloroaniline				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
4-Chlorophenyl-phenylether				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
4-Nitroaniline				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
4-Nitrophenol				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Acenaphthene	20	100	500	0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Acenaphthylene	100	100	500	0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Acetophenone				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Anthracene	100	100	500	0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Atrazine				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Benzaldehyde				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Benzo(a)anthracene	1	1	5.6	0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Benzo(a)pyrene	1	1	1	0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Benzo(b)fluoranthene	1	1	5.6	0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Benzo(g,h,i)perylene	100	100	500	0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Benzo(k)fluoranthene	0.8	1	56	0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
bis(2-Chloroethoxy)methane				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
bis(2-Chloroethyl)Ether				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
bis(2-Ethylhexyl)phthalate				0.350 U	0.350 U	0.340 U	**0.140 J**	**0.090 J**	0.340 U
Butylbenzylphthalate				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Caprolactam				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Carbazole				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Chrysene	1	1	56	0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Dibenzo(a,h)anthracene	0.33	0.33	0.56	0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Dibenzofuran				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Diethylphthalate				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Dimethylphthalate				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Di-n-butylphthalate				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Di-n-octylphthalate				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Fluoranthene	100	100	500	0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Fluorene	30	100	500	0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Hexachlorobenzene				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Hexachlorobutadiene				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Hexachlorocyclopentadiene				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Hexachloroethane				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Isophorone				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Naphthalene	12	100	500	0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Nitrobenzene				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
N-Nitroso-di-n-propylamine				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
N-Nitrosodiphenylamine(1)				0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Pentachlorophenol	0.8	2.4	6.7	0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Phenanthrene	100	100	500	0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Phenol	0.33	100	500	0.350 U	0.350 U	0.340 U	0.350 U	**0.037 J**	0.340 U
Pyrene	100	100	500	0.350 U	0.350 U	0.340 U	0.350 U	0.350 U	0.340 U
Total TICs				1.040 U	1.420 U	0.700 U	0.863	0.770	1.000

Notes:
U - Compound not detected, reporting limit provided.
J- Concentration is an approximate value.

Table 7. Summary of Validated Soil Data (Metals)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	6 NYCRR Part 375	6 NYCRR Part 375	6 NYCRR Part 375	CB-27	CB-X3: CB-27	CB-28	CB-30	CB-30	CB-32	MW-15D
Sample Depth (feet)	Unrestricted Use	Residential	Commercial	26.5-29.5	26.5-29.5	26.5-29.5	28-30	39-41	44.5-46.5	50-52
Sampling Date	Soil Cleanup	Soil Cleanup	Soil Cleanup	12/2/2009	12/2/2009	12/2/2009	11/30/2009	11/30/2009	11/30/2009	3/15/2010
Matrix	Objective	Objective	Objective	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Units	mg/kg	mg/kg	mg/kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Metals										
Aluminum				409 J	432 J	314 J	970 J	457 J	407 J	603
Antimony				2.28 U	2.43 U	2.58 U	2.41 U	2.39 U	2.59 U	2.48 U
Arsenic	13	16	16	0.91 U	0.97 U	1.03 U	0.97 U	0.95 U	1.04 U	0.99 U
Barium	350	350	400	1.08 J	1.13 J	2.01 J	4.41 J	3.05 J	3.36 J	2.57 J
Beryllium	7.2	14	590	0.27 U	0.29 U	0.31 U	0.07 J	0.29 U	0.31 U	0.3 U
Cadmium	2.5	2.5	9.3	0.27 U	0.29 U	0.31 U	0.29 U	0.29 U	0.31 U	0.3 U
Calcium				31.6 J	36.4 J	31.9 J	89.9 J	46.6 J	33.7 J	59 J
Chromium*	30	36	1,500	1.55	1.98	1.95	3.69	2.25	1.47	1.38
Cobalt				0.55 J	1.46 U	1.55 U	0.99 J	1.43 U	0.88 J	1.49 U
Copper	50	270	270	1.31	1.36	1.4	1.65	1.14	1.04 U	1.44
Iron				1,050	1,040	1,110	3,140 J	1,540 J	1,320 J	1,090
Lead	63	400	1,000	0.83	0.84	0.89	1.05	0.66	10.6	0.88 J
Magnesium				69.5 J	68.2 J	64.5 J	247	127	92 J	156
Manganese	1,600	2,000	10,000	30.3	29.7	20.4	55.8 J	36.3 J	25.2 J	42
Mercury	0.18	0.81	2.8	0.01 U	0.011 U	0.01 U	0.011 U	0.011 U	0.002 J	0.01 UJ
Nickel	30	140	310	0.83 J	0.73 J	0.63 J	1.53 J	0.81 J	1.05 J	1.35 J
Potassium				52.9 J	45.3 J	41.6 J	134	66.3 J	62.7 J	75.4 J
Selenium	3.9	36	1,500	0.56 J	0.46 J	0.47 J	0.54 J	0.43 J	4.49	0.42 J
Silver	2	36	1,500	0.46 U	0.49 U	0.52 U	0.48 U	0.48 U	0.52 U	0.5 U
Sodium				92.5	95.2 J	91.1 J	97.1	80.2 J	84.1 J	42.7 J
Thallium				1.82 U	1.95 U	2.06 U	1.93 U	1.91 U	2.07 U	1.98 U
Vanadium				1.71 J	2.34	1.77 J	3.15	2.27	2.3	1.44 J
Zinc	109	2,200	10,000	5.19	4.58	4.42	5.84	4.82	3.23	5

Notes:
*SCOs are for trivalent chromium, total chromium results are reported.
U - Compound not detected, reporting limit provided.
J- Concentration is an approximate value.
Highlighted cell exceeds Unrestricted Use SCO.

Table 7. Summary of Validated Soil Data (Metals)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	6 NYCRR Part 375	6 NYCRR Part 375	6 NYCRR Part 375	MW-20I	MW-23D	X-5: MW-23D	MW-24I	MW-30D	MW-34D
Sample Depth (feet)	Unrestricted Use	Residential	Commercial	90-91.3	75-77	75-77	55-57	38-39	55-57
Sampling Date	Soil Cleanup	Soil Cleanup	Soil Cleanup	3/11/2010	3/4/2010	3/4/2010	3/9/2010	2/18/2010	3/17/2010
Matrix	Objective	Objective	Objective	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Units	mg/kg	mg/kg	mg/kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Metals									
Aluminum				327	578	572	313	452	312
Antimony				2.63 U	2.64 U	2 U	2.57 U	2.57 U	2.3 U
Arsenic	13	16	16	1.05 U	1.06 U	0.29 J	0.47 J	1.03 U	0.45 J
Barium	350	350	400	2.09 J	1.71 J	1.94 J	2.39 J	3.76 J	2.1 J
Beryllium	7.2	14	590	0.32 U	0.32 U	0.06 J	0.31 U	0.31 U	0.28 U
Cadmium	2.5	2.5	9.3	0.32 U	0.32 U	0.24 U	0.31 U	0.31 U	0.28 U
Calcium				56.1 J	82.2 J	74.5 J	70.4 J	120	49.6 J
Chromium*	30	36	1,500	1.22	2.8	1.75	3.58	2.02	2.12
Cobalt				1.58 U	1.59 U	1.2 U	1.54 U	1.54 U	0.9 J
Copper	50	270	270	0.94 J	1.66	1.51	1.15	1.77	1.25
Iron				1,270	1,570	1,470	1,760	1,270	1,980
Lead	63	400	1,000	0.81 J	0.97	1.08	0.64	0.53 J	0.83 J
Magnesium				101 J	169	144	98.5 J	110	68.8 J
Manganese	1,600	2,000	10,000	31.5	21.7	21	25.2	36.4	46.7
Mercury	0.18	0.81	2.8	0.011 UJ	0.004 J	0.014 DJ	0.01 U	0.01 UJ	0.01 U
Nickel	30	140	310	0.9 J	0.9 J	0.9 J	0.69 J	0.8 J	0.99 J
Potassium				58.7 J	92.4 J	83.7	64.3 J	73 J	42.6 J
Selenium	3.9	36	1,500	1.05 U	1.06 U	0.8 U	1.03 U	1.03 U	0.56 J
Silver	2	36	1,500	0.53 U	0.53 U	0.4 U	0.51 U	0.51 U	0.46 U
Sodium				42.2 J	130	61.8 J	62.5 J	72.1 J	62.1 J
Thallium				2.11 U	2.11 U	1.6 U	2.06 U	2.06 U	1.84 U
Vanadium				1.62 J	1.73 J	1.94	1.88 J	1.89 J	2.46
Zinc	109	2,200	10,000	4.15	4.61	3.67	3.47	3.68	3.33

Notes:
*SCOs are for trivalent chromium, total chromium results are reported.
U - Compound not detected, reporting limit provided.
J- Concentration is an approximate value.
Highlighted cell exceeds Unrestricted Use SCO.

Table 8. Summary of Validated Soil Data (PCBs)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	6 NYCRR Part 375	6 NYCRR Part 375	6 NYCRR Part 375	CB-27	CB-X3: CB-27	CB-28	CB-30	CB-30	CB-32
Sample Depth (feet)	Unrestricted Use	Residential	Commercial	26.5-29.5	26.5-29.5	26.5-29.5	28-30	39-41	44.5-46.5
Sampling Date	Soil Cleanup	Soil Cleanup	Soil Cleanup	12/2/2009	12/2/2009	12/2/2009	11/30/2009	11/30/2009	11/30/2009
Matrix	Objective	Objective	Objective	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Units	mg/kg	mg/kg	mg/kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
PCBs									
Aroclor-1016				0.018 U	0.018 U	0.017 U	0.018 U	0.018 U	0.018 U
Aroclor-1221				0.018 U	0.018 U	0.017 U	0.018 U	0.018 U	0.018 U
Aroclor-1232				0.018 U	0.018 U	0.017 U	0.018 U	0.018 U	0.018 U
Aroclor-1242				0.018 U	0.018 U	0.017 U	0.018 U	0.018 U	0.018 U
Aroclor-1248				0.018 U	0.018 U	0.017 U	0.018 U	0.018 U	0.018 U
Aroclor-1254				0.018 U	0.018 U	0.017 U	0.018 U	0.018 U	0.018 U
Aroclor-1260				0.0046 J	0.011 J	0.0062 J	0.018 U	0.018 U	0.018 U
Total Concentration.	0.1	1	1	0.0046 J	0.011 J	0.0062 J	0	0	0

Notes:
U - Compound not detected, reporting limit provided.
J - The concentration given is an approximate value.

Table 9. Summary of Validated Soil Data (Pesticides)
Hauppauge Area-Wide Groundwater Investigation
Smithtown, New York

Sample ID	6 NYCRR Part 375	6 NYCRR Part 375	6 NYCRR Part 375	CB-27	CB-X3: CB-27	CB-28	CB-30	CB-30	CB-32
Sample Depth (feet)	Unrestricted Use	Residential	Commercial	26.5-29.5	26.5-29.5	26.5-29.5	28-30	39-41	44.5-46.5
Sampling Date	Soil Cleanup	Soil Cleanup	Soil Cleanup	12/2/2009	12/2/2009	12/2/2009	11/30/2009	11/30/2009	11/30/2009
Matrix	Objective	Objective	Objective	SOIL	SOIL	SOIL	SOIL	SOIL	SOIL
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Pesticides									
4,4'-DDD	0.0033	2.6	92	0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U
4,4'-DDE	0.0033	1.8	62	0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U
4,4'-DDT	0.0033	1.7	47	0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U
Aldrin	0.005	0.019	0.68	0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U
alpha-BHC	0.02	0.097	3.4	0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U
Chlordane (alpha)	0.094	0.91	24	0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U
beta-BHC	0.036	0.072	3	0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U
delta-BHC	0.04	100	500	0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U
Dieldrin	0.005	0.039	1.4	0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U
Endosulfan I	2.4	4.8	200	0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U
Endosulfan II	2.4	4.8	200	0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U
Endosulfan sulfate	2.4	4.8	200	0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U
Endrin	0.014	2.2	89	0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U
Endrin aldehyde				0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U
Endrin ketone				0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U
gamma-BHC				0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U
gamma-Chlordane				0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U
Heptachlor	0.042	0.42	15	0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U
Heptachlor epoxide				0.0018 U	0.0018 U	0.0017 U	0.0018 U	0.0018 U	0.0018 U
Methoxychlor				0.0018 U	0.0018 UJ	0.0017 U	0.0018 U	0.0018 U	0.0018 U
Toxaphene				0.018 U	0.018 U	0.017 U	0.018 U	0.018 U	0.018 U

Notes:
U - Compound not detected, Reporting Limit provided.
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Table 10. Summary of Validated Soil Vapor Data
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Sample ID	HPG-SV-01	HPG-SV-02	HPG-SV-03	HPG-SV-04	HPG-SV-07 (HPG-SV-04 Dup)	HPG-SV-05	HPG-SV-06
Sampling Date	5/19/2010	5/19/2010	5/19/2010	5/19/2010	5/19/2010	5/19/2010	5/19/2010
Matrix	Air	Air	Air	Air	Air	Air	Air
Units	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³	µg/m³
TO-15							
Acetone	**13**	**9.7**	**23**	5.2 U	10 U	**14**	**39**
Benzene	0.32 U	0.32 U	0.32 U	0.32 U	0.32 U	**0.35**	0.32 U
Benzyl chloride	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U	0.52 U
Bromodichloromethane	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U	0.67 U
Bromoform	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane	0.39 U	0.39 U	0.39 U	**0.84 J**	0.39 UJ	0.39 U	0.39 U
1,3-Butadiene	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U	0.22 U
2-Butanone (MEK)	**2.8**	**2.2**	**3.1**	**0.92**	**2.6** J	**0.92 J**	**3.2**
Carbon Disulfide	**1.7**	**0.64**	0.31	**1.2**	**1.0**	**0.77**	**1.1**
Carbon Tetrachloride	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U	0.63 U
Chlorobenzene	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
Chloroethane	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
Chloroform	**3.3**	**2.7**	**0.9**	**1.9**	**1.7**	**22**	**2.6**
Chloromethane	**0.73**	**0.28**	**1.1**	0.21 U	0.21 U	**0.83**	0.21 U
Cyclohexane	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U	0.34 U
Dibromochloromethane	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U	0.85 U
1,2-Dibromoethane (EDB)	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U	0.77 U
1,2-Dichlorobenzene	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
1,3-Dichlorobenzene	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
1,4-Dichlorobenzene	**1.4**	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U	0.60 U
Dichlorodifluoromethane (Freon 12)	**2.2**	**2.2**	**2.3**	**2.5**	**2.1**	**2.3**	**3.1**
1,1-Dichloroethane	0.40 U	0.40 U	0.40 U	**17**	**16**	0.40 U	**76**
1,2-Dichloroethane	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
1,1-Dichloroethylene	0.40 U	0.40 U	0.40 U	**1.6**	**1.3**	0.40 U	**2.1**
cis-1,2-Dichloroethylene	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
trans-1,2-Dichloroethylene	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U	0.40 U
1,2-Dichloropropane	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U	0.46 U
cis-1,3-Dichloropropene	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
trans-1,3-Dichloropropene	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U	0.45 U
1,2-Dichloro-1,1,2,2-tetrafluoroethane (Freon 114)	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U	0.70 U
Ethanol	**3**	2.4 U	**24**	**1.9**	**2**	**3**	2.5 U
Ethyl Acetate	0.36 U	0.36 U	**0.68**	0.36 U	0.36 U	0.36 U	0.36 U
Ethylbenzene	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
4-Ethyltoluene	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U
Heptane	**0.67**	0.41 U	**0.88**	0.41 U	0.41 U	**0.56**	0.41 U
Hexachlorobutadiene	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U	1.1 U
Hexane	**1.1**	**0.94**	**3.3**	**0.53**	**0.44**	**1.1**	**0.96**
2-Hexanone (MBK)	**0.7**	**0.66**	0.41 U	0.41 U	**0.63**	**0.44**	**0.59**
Isopropanol	**0.76**	0.25 U	**1.8**	**0.33**	**0.45**	**0.62**	0.25 U
Methyl tert-Butyl Ether (MTBE)	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U	0.36 U
Methylene Chloride	1.1 U	0.95 U	**8.2**	1 U	**0.76**	1.7 U	**1.6**
4-Methyl-2-pentanone (MIBK)	0.41 U	0.41 U	**0.57**	0.41 U	0.41 U	0.41 U	0.41 U
Propene	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U	1.7 U
Styrene	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U
1,1,2,2-Tetrachloroethane	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U	0.69 U
Tetrachloroethylene	**3.9**	**5.3**	**4.5**	**1.8**	**1.8**	**4.7**	**21**
Tetrahydrofuran	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U	0.29 U
Toluene	0.38 U	0.38 U	**3**	0.38 U	0.38 U	**0.53**	**0.66**
1,2,4-Trichlorobenzene	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U	0.74 U
1,1,1-Trichloroethane	**0.69**	0.55 U	**9.4**	**680**	**700**	**15**	**390**
1,1,2-Trichloroethane	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U	0.55 U
Trichloroethylene	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	0.54 U	**1**
Trichlorofluoromethane (Freon 11)	**1.2**	**1.7**	**1.5**	**1.6**	**1.4**	**1.4**	**1.4**
1,1,2-Trichloro-1,2,2-trifluoroethane (Freon 113)	**1.7**	0.77 U	**0.9**	**3.1**	**2.7**	**0.87**	**1.6**
1,2,4-Trimethylbenzene	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	**2.2**	0.49 U
1,3,5-Trimethylbenzene	0.49 U	0.49 U	0.49 U	0.49 U	0.49 U	**1**	0.49 U
Vinyl Acetate	0.35 U	0.35 U	**3.2**	0.35 U	0.35 U	0.35 U	0.35 U
Vinyl Chloride	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U	0.26 U
m&p-Xylene	0.87 U	0.87 U	**0.91**	0.87 U	0.87 U	0.87 U	**0.91**
o-Xylene	0.43 U	0.43 U	0.43 U	0.43 U	0.43 U	**0.65**	0.43 U

Notes:
U - Compound not detected, reporting limit provided.
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Table 11. Summary of Groundwater Elevations
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Smithtown, New York

Well ID	Measuring point elevation (feet AMSL)		DTW (feet bgs) 5/17/2010	Groundwater Elevation (feet AMSL)
Computer Circuit MWs				
MW-7	150.54		97.02	53.52
MW-9	139.93		87.28	52.65
MW-10	138.49	*	85.79	52.70
MW-11	136.49	*	83.76	52.73
ERT-MW-12S	150.94	*	96.92	54.02
ERT-MW-13S	136.72	*	83.76	52.96
ERT-MW-14S	132.09	*	79.21	52.88
Oser Ave MWs				
ITMW-14S	124.79	**	73.55	51.24
ITMW-01S	116.56		65.30	51.26
ITMW-01D	116.38	**	64.96	51.42
ITMW-5S	116.19	**	65.88	50.31
ITMW-4S	117.75	**	65.26	52.49
ITMW-11S	127.09		79.98	47.11
MW-31S	118.11	**	65.21	52.90
ITMW-00-19S	72.71	**	25.24	47.47
ITMW-00-16S	93.23	**	44.86	48.37
ITMW-00-9S	106.42	**	56.90	49.52
ITMW-00-9D	106.21	**	53.74	52.47
ITMW-00-17S	89.21	**	41.92	47.29
ITMW-00-17D		**	43.95	
ITMW-00-18S	95.80		47.78	48.02
ITMW-00-18D		**	52.16	
ITMW-02-22S	68.82		23.25	45.57
ITMW-02-22D	69.17	**	25.61	43.56
Hauppauge MWs				
MW-15D	100.32		50.04	50.28
MW-20I	141.96		89.16	52.80
MW-23I	135.60		83.33	52.27
MW-23D	135.86		83.42	52.44
MW-24I	112.53		62.60	49.93
MW-30S	85.89		37.65	48.24
MW-30I	85.6		37.48	48.12
MW-30D	85.84		37.35	48.49
MW-34D	106.54		58.07	48.47

*Measuring point elevations provided by USEPA; ERT-MW-12S through ERT-MW-14S surveyed May 20,2008 by Island Wide Land Surveyors.

**Measuring point elevations provided by URS; some wells surveyed by A.Tay, date unknown.