TOWN OF OYSTER BAY
BETHPAGE COMMUNITY PARK
INTERIM REMEDIAL MEASURE - CONSTRUCTION AREA

SUPPLEMENTAL INVESTIGATION REPORT

DECEMBER 2005

Prepared For:

Town of Oyster Bay
Department of Public Works

H2M GROUP

Engineers • Architects • Scientists • Planners • Surveyors

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1.0 INTRODUCTION

This Supplemental Investigation Report summarizes results of additional field investigation activities conducted at the Bethpage Community Park in Bethpage, New York (site) as part of the New York State Department of Environmental Conservation (NYSDEC) approved Interim Remedial Measure (IRM) investigation for a designated construction area (Construction Area). The supplemental investigation was performed in accordance with the NYSDEC approved IRM Work Plan, prepared by Holzmacher, McLendon & Murrell, P.C. (H2M) dated May 2005, as well as the terms of an Order on Consent between the Town of Oyster Bay and the NYSDEC.

The purpose of the supplemental investigation was to characterize the nature and extent of contamination in select areas not addressed during the initial IRM investigation. The investigated areas included the current ice skating rink, a concourse area between the ice rink and the bathhouse/pool, and a perimeter boundary area outside and around the playground to the south of the Construction Area. Part of the concourse area and the area around the playground are not within the established Construction Area. These areas were investigated and including in the IRM, however, because planned site redevelopment may necessitate excavation in these areas to facilitate installation of drainage and/or utilities. Results of this environmental investigation supplement but do not alter the proposed remedial strategy identified in the previously prepared Investigation Report & Remedial Action Plan, dated November 2005.

The initial remedial investigation was completed in support of an Interim Remedial Measure (IRM) at the Bethpage Community Park. The site is currently owned by the Town of Oyster Bay, but was formerly owned and operated by Grumman Aircraft Engineering Corporation, a predecessor to Northrop Grumman Systems Corporation (Northrop Grumman). Prior site investigation reports, prepared on behalf of Northrop Grumman, have indicated that the site had

been utilized by Northrop Grumman for waste disposal activities including industrial wastewater treatment sludge disposal, spent paint booth rag disposal, possible used oil disposal, and fire training activity that included ignition of waste oil and jet fuel. Previous site investigations documented significant impacts to site soils from these activities including the presence of elevated concentrations of metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and polychlorinated biphenyls (PCBs). In addition, prior investigation reports documented volatile organic compound impacts to groundwater at the site.

The Bethpage Community Park totals approximately 18-acres. In an effort to expedite remediation of an approximately 7-acre portion of the Park for redevelopment, designated as the Construction Area, the Town of Oyster Bay entered into an Order on Consent with the NYSDEC. It is understood that the NYSDEC has negotiated an Order on Consent with Northrop Grumman relating to further investigation and remediation of the subject property and off-site impacts.

2.0 SITE HISTORY AND DESCRIPTION

The Bethpage Community Park is located in Bethpage, New York, on the west side of the intersection of Stewart Avenue and Cherry Avenue. The site is located within the Town of Oyster Bay in Nassau County. A site location map is presented in Figure 1. The park includes a pool, skating rink, baseball field, tennis courts, children's play areas and parking. The entire site is approximately 18 acres in size and is currently owned by the Town of Oyster Bay.

Prior to being donated to the Town of Oyster Bay, the subject site was owned by Grumman Aircraft Engineering Corporation, a predecessor to Northrop Grumman Systems Corporation. According to reports prepared on behalf of Northrop Grumman Systems Corporation[1], Northrop Grumman utilized the property for waste disposal purposes including industrial wastewater treatment sludge, spent paint booth rag disposal, and possible used oil disposal. In addition, it

[1] Dvirka and Bartilucci, December 2003, Town of Oyster Bay Bethpage Community Park Investigation Sampling Program – Field Report.

has been reported that Northrop Grumman utilized the site for fire training, which included ignition of waste oil and jet fuel.

Ownership of the site was transferred to the Town of Oyster Bay in 1962, after which, the Town constructed the present-day Park. The community actively utilized the site until 2002, when the Park was partially closed due to the identification of PCB and metals impacts above state guideline concentrations in surface soils. Portions of the site remain closed to this day, pending remediation.

A number of environmental investigations have been conducted relative to the Park. Recent site investigations have been conducted by Dvirka and Bartilucci Consulting Engineers, on behalf of Northrop Grumman. Two significant soil sampling programs were implemented by Northrop Grumman in recent years, a March/May 2002 soil sampling event and a May/June 2003 sampling event. Northrop Grumman also conducted groundwater sampling in June, September and November 2003. These events were documented in two reports dated June 2002 and December 2003.

The Town of Oyster Bay intends to improve the Park grounds through construction of new facilities including an indoor ice-skating rink. The anticipated redevelopment activities will impact approximately 7 acres of the site. The Construction Area, as it is referred to, extends from the north border of the property in a southerly direction approximately central to the site. Although redevelopment activities have not been finalized, the construction of a new building measuring approximately 30,000-50,000 square feet is anticipated as well as upgrading of surrounding parking areas. The proposed redevelopment will require site excavation.

3.0 DESCRIPTION OF WORK COMPLETED

The purpose of the supplemental IRM field investigation was to characterize the nature and extent of contamination in both soil and shallow groundwater in areas not addressed during the initial field investigation and augment information obtained during the initial IRM field investigation.

The supplemental investigation was performed in conformance with the methodology of the initial IRM field investigation. Investigation activities were based on the NYSDEC approved IRM Work Plan dated May 2005. The methodologies and procedures utilized during the supplemental investigation were identified in a NYSDEC approved Quality Assurance Project Plan (QAPP), which was included as part of the IRM Work Plan. Potential contaminants for investigation included PCBs, VOCs, SVOCs, and metals (including hexavalent chromium and cyanide).

3.1 Geophysical Survey

A geophysical survey was conducted by NAEVA Geophysics Inc. (NAEVA) under the direction of H2M on September 20, 2005 to delineate detectable buried utilities and significant subsurface anomalies in areas planned for subsurface investigation. The geophysical survey was limited to areas not previously surveyed by NAEVA during the initial IRM field investigation.

3.2 Soil Sampling Program

The soil investigation component of the supplemental field investigation included the advancement of 19 soil borings. Most soil borings were positioned on a grid format with approximately 50-foot on-center node spacing. The grid correlated with the initial field investigation but was expanded to include the additional soil boring locations. As during the initial IRM field investigation, each grid node was identified with an alpha-numeric code representing a letter for each row transect and a number for each column transect. Numeric columns were in an approximate north-south orientation. The boring locations are shown on Figure 2.

The areas investigated during the supplemental soil sampling program included the current ice rink area, the concourse area between the ice rink and bathhouse/pool, as well as the perimeter area surrounding the playground to the south of the Construction Area. Six borings were advanced within the ice rink area, identified as R1 through R6. Of these, three were advanced to 60 feet below grade and three were advanced to 10 feet below grade. These boring locations do

not correlate with the sampling grid format. Drilling in the area of the current ice rink was planned for inclusion in the initial IRM field investigation. However, considering that the short-term fate of the existing rink had not been determined at the time of the initial IRM field investigation, drilling was not performed due to the possibility of damaging refrigerant coils from invasive drilling. Subsequent to the initial field investigation, it was determined that drilling could be performed in a manner that was protective of the refrigerant coils. This was the primary impetus for the supplemental field investigation.

The soil investigation included three soil borings in the concourse area to the south of the existing rink and north of the bathhouse and swimming pool. These boring locations were identified as I13, I14 and J11, and were each completed to a depth of 10 feet below grade. Although these borings are not within the designated Construction Area, they were included in the IRM to characterize the soils which may require excavation to facilitate installation of drainage piping and/or utilities.

Ten soil borings were advanced to a maximum depth of 10 feet below grade at the south end of the Park in the general vicinity of the playground. This area was investigated as part of the IRM to characterize the soils which may require excavation to facilitate the installation of new drainage piping. The actual boring locations were outside the inner fence surrounding the playground. The investigated area surrounding the playground is also enclosed by fencing, and the area between the two fences is not accessible to the public. Investigation activities were not performed as part of the IRM within the playground itself, which remains open to the public. The playground area had been previously investigated by Northrop Grumman Corporation[1,2]. Surface and near surface soils were remediated in the playground area during a remodeling of the playground in 2004.

The supplemental soil investigation was conducted under the direction of H2M during the period of September 21, 2005 through September 29, 2005, excluding weekends. In a manner similar to the initial IRM field investigation, the supplemental soil investigation included shallow borings, advanced to a maximum depth of 10 feet below grade utilizing direct-push drilling

[2] Dvirka and Bartilucci, March 2002, Town of Oyster Bay Bethpage Community Park Soil Sampling Program.

methods, and deep borings, advanced to a maximum depth of 60 feet below grade utilizing hollow stem auger drilling methods. As specified in the IRM Work Plan, sampling was typically performed continuously in two-foot intervals from grade to 10 feet below grade. From 10 feet below grade to 60 feet below grade, sampling was performed in two-foot cores at 10 foot intervals, i.e. 18-20, 28-30, 38-40, etc. Drilling services were provided by Universal Testing & Inspection Services (Universal) of West Babylon, New York.

Shallow soil probes were advanced as 2-inch diameter by 4-feet long "macro-core" barrels fitted with a cutting shoe and disposable acetate liner. Soil samples from deep borings were retained using 2-foot split spoon samplers. Between sampling intervals, all non-disposable sampling equipment was decontaminated in accordance with the IRM Quality Assurance Project Plan. Non-disposable drilling equipment was decontaminated between boring locations. All collected soil samples were visually inspected, characterized and screened with a portable photoionization detector (PID) for evidence of contamination. Copies of soil boring logs are provided in Appendix A. All retained soil samples were analyzed for PCBs and RCRA metals. At least one sample from each boring location was also analyzed for an expanded list of parameters including Target Analyte List (TAL) metals (including hexavalent chromium and cyanide), Target Compound List (TCL) VOCs and TCL SVOCs. During the deep soil borings in the ice rink area, three additional samples from increasing depths were also analyzed for VOCs to serve as a vertical profile of potential contamination. Blind duplicate, matrix/matrix spike duplicates, field blank and trip blank samples were also collected and analyzed in accordance with standard QA/QC procedures. Analytical services were provided by H2M Labs following Contract Laboratory Protocols (CLP) for NYSDEC ASP Category B deliverables.

3.3 Soil Vapor Sampling

A supplemental soil vapor sampling program was implemented in the area of the current ice rink to better characterize VOCs that were identified during the initial IRM field investigation. Soil vapor samples were collected in three locations within the ice rink, i.e., R1, R3 and R6, and at three depths to serve as vertical profiles. The soil vapor sampling program also included the collection and analysis of an ambient sample for each field day that soil vapor samples were collected.

Soil vapor borings samples were collected with a post run tubing system using Summa canisters fitted with flow restrictors to provide a sampling flow of not greater than 0.2 liters per minute. The tubing systems were discarded after each use. Each collected sample was submitted to Severn Trent Laboratories, Inc. (STL Burlington) in Colchester, VT and analyzed for Target Compound List VOCs via EPA Method TO-15.

3.4 Monitoring Well Installation and Sampling

A new groundwater monitoring well was installed as part of the supplemental IRM field investigation under the direction of H2M. The monitoring well, identified as CAMW-5, was completed on September 22, 2005. The monitoring well was installed in the northeast portion of the Construction Area to serve as an additional upgradient well and permit increased precision in the generation of a potentiometric groundwater surface map in the Construction Area. The monitoring well location is shown on Figure 2.

The monitoring well installation work was conducted utilizing a hollow stem auger drill rig provided by Universal. Each well was constructed of 4" diameter Schedule 40 PVC piping with 20-feet of 0.01-inch slot screen in accordance with the Work Plan and utilizing generally accepted NYSDEC protocols for monitoring well installations. The well was finished with a locking cap and flush mounted road box. Upon completion of the monitoring well installation, the well was properly developed using a Grundfos® submersible pump in accordance with the Work Plan and generally accepted NYSDEC protocols. A copy of the well construction diagram is provided in Appendix B.

A groundwater sample was collected from monitoring well CAMW-5 on October 4, 2005 by H2M. The groundwater sampling was performed in accordance with US EPA 540/S-95/504 Low-Flow (Minimal Drawdown) Groundwater Sampling Procedure. The groundwater sample was analyzed for PCBs, metals including hexavalent chromium, VOCs, SVOCs and cyanide. In addition, a blind duplicate, matrix/matrix spike duplicate, field blank and trip blank were collected and analyzed in accordance with standard QA/QC procedures.

3.5 Community Air Monitoring

In accordance with the Work Plan, a community air monitoring program (CAMP) was implemented for the duration of the supplemental IRM field investigation during all ground intrusive activities. The CAMP was based on the New York State Department of Health Generic Community Air Monitoring Plan as referenced in the approved project Work Plan and included regular monitoring of VOCs and particulates. Equipment utilized as part of the CAMP included portable photoionization detectors (Photovac Pro 2020) for VOCs and TSI Dust Traks for particulates. The TSI Dust Traks were fitted with environmental enclosures and visual alarm indicators.

Monitoring was performed at upwind and downwind locations from each drilling or sampling area, which were typically 30-50 feet away. The upwind or background measurements were recorded prior to the initiation of intrusive activity. All measurements were logged on pre-printed forms. Downwind measurements were recorded hourly. As recommended by the NYSDOH, a threshold of 5 parts per million (ppm) over background was utilized for VOC measurements. At no point during the duration of the IRM field investigation activities did the VOC monitoring detect any airborne concentration of VOCs.

Particulates were monitored continuously during the field investigation although documented hourly on the pre-printed log forms. The NYSDOH recommends an initial airborne dust threshold of 100 micrograms per cubic meter ($\mu g/m^3$) for comparison of downwind to upwind airborne dust levels. The visual alarm indicators on the particulate monitors were programmed to alarm at 100 $\mu g/m^3$ to provide an early indication of possible dust migration. At no point during the IRM field investigation did the downwind airborne dust concentration exceed the upwind level by 100 $\mu g/m^3$. For the duration of the IRM field investigation, dust measurements in both upwind and downwind locations were typically between 10 and 50 $\mu g/m^3$.

In consideration of the community air monitoring results, it is H2M's opinion that no off-site receptors were adversely impacted by elevated airborne VOC or dust contaminants related to the IRM field work activities.

4.0 NATURE AND EXTENT OF CONTAMINATION

The supplemental IRM field investigation included soil, soil vapor and groundwater sampling. The findings of the sampling program are provided within this section.

4.1 Standards, Criteria and Guidelines (SCG)

To assess the soil sampling analytical data, the laboratory results were compared to the Recommended Soil Cleanup Objectives (RSCOs), as presented in New York State Department of Environmental Conservation (NYSDEC) Technical and Administrative Guidance Memorandum (TAGM) #4046 entitled "Determination of Soil Cleanup Objectives and Cleanup Levels," April 1995. With regards to metals, the TAGM RSCOs identify a specific cleanup objective concentration for mercury, cadmium and chromium. All other metal contaminants are identified with "site background" or given "site background" as an option for the RSCO. In these cases, the upper range of the TAGM-identified Eastern USA Regional Background Concentration was used as the cleanup objective.

For assessment of groundwater sampling analytical data, the laboratory results were compared to the applicable NYSDEC Class GA groundwater and effluent standards as presented in 6 NYCRR Part 703; Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations, amended August 1999.

With regards to soil vapor sampling and subsurface vapors, the State of New York has not promulgated specific standards, criteria or guidance values for concentrations of compounds in subsurface vapors, as reported in the New York State Department of Health (NYSDOH) *Guidance for Evaluating Soil Vapor Intrusion in the State of New York*, February 2005 Public Comment Draft. However, the NYSDOH guidance document offers decision making matrices to serve as risk management tools for evaluating soil vapor entering buildings. Although the matrices were developed for trichloroethylene (TCE) and tetrachloroethylene (PCE), these matrices were considered when evaluating the soil vapor data collected as part of this investigation. As recommended within the NYSDOH guidance document, soil vapor sampling

results were also evaluated individually, compared with background outdoor air levels and reviewed "as a whole" to identify trends and special variations in the data.

4.2 Soil Investigation Findings

The supplemental IRM soil investigation in the Bethpage Community Park Construction Area included 16 shallow soil borings advanced to a maximum of 10 feet below grade and three soil borings advanced to 60 feet below grade. All collected samples were analyzed for PCBs and RCRA metals. Additionally, at least one set of samples from each boring were analyzed for an expanded list of parameters comprising TAL metals (including cyanide and hexavalent chromium), TCL VOCs, and TCL SVOCs. Three samples from each of the three deep borings within the rink area were also analyzed for VOCs.

Analytical services were provided by H2M Labs, Inc., a New York ELAP approved and ASP certified laboratory. Analytical results were presented as a NYSDEC ASP Category B data package that documented the quality of the analytical work. As part of the soil sampling program, Quality Assurance/Quality Control (QA/QC) samples were collected including trip blanks, field blanks, blind duplicates, and matrix spike/matrix spike duplicates (MS/MSDs).

Soil sampling results from the supplemental IRM field investigation are summarized in Tables 4.2.1, 4.2.2, 4.2.3 and 4.2.4 for PCBs, metals (including cyanide and hexavalent chromium), VOCs and SVOCs, respectively. In Table 4.2.1, all sampling results with a PCB concentration greater than 1 mg/kg are identified in bold. The NYSDEC TAGM 4046 Recommended Soil Cleanup Objective (RSCO) is 1 mg/kg for surface soils and 10 mg/kg for subsurface soil samples. As with the initial IRM investigation, the RSCO of 1 mg/kg for surface soils was used as the cleanup objective for all soils to a depth of 10 feet below grade. PCBs were identified above a concentration of 1 mg/kg in six of the 19 soil borings conducted as part of the supplemental investigation, and were detected in the vicinity of the playground only. No PCBs were detected in the general vicinity of the existing ice rink. The highest PCB concentration was detected at soil boring O4 at a depth of 2-4 feet below ground at a concentration of 100 mg/kg. The vertical extent of contamination in this location could not be properly delineated due to drill rig refusal at 4 feet below grade. The O4 boring location had already been moved

two feet west due to refusal, which was encountered in the initial location at a depth of 2 feet below ground. The other PCB concentrations in the vicinity of the play ground ranged from 1.06 at Q4 (4-6) to 34.3 mg/kg at Q9 (0-2). A site plan showing all PCBs detected at concentrations above 1 mg/kg is provided as Figure 3.

Soil sampling results for metals are summarized in Table 4.2.2. Metal concentrations exceeding the NYSDEC RSCOs are identified in bold and included arsenic, cadmium, chromium (both total and hexavalent), mercury, and zinc. All metals detected at concentrations above their respective RSCOs are shown in Figure 3. The highest concentration of mercury was detected at boring location O9 (2-4) at 3.4 mg/kg. For reference, the NYSDEC RSCO for mercury is 0.1 mg/kg. Hexavalent chromium was detected in two locations at concentrations of 65 mg/kg (Q4 (8-10)) and 140 mg/kg (P9 (8-10)). The RSCO for total chromium is 50 mg/kg.

Cyanide soil sampling results are provided in Table 4.2.2 with the metals results. The NYSDEC TAGM 4046 does not identify a RSCO for cyanide considering the stability of cyanide is dependent on the chemical form. Cyanide was detected in one location (P9 (8-10)) at a concentration of 1.5 mg/kg.

Soil sampling results for VOCs are summarized in Table 4.2.3. VOCs were either non-detectable or less than the NYSDEC RSCOs in all samples collected as part of the supplemental IRM site investigation.

Semi-volatile organic compound soil sampling results are summarized in Table 4.2.4. Semi-volatile organics were detected in three of the 19 boring locations at concentrations above the RSCOs. The semi-volatile contaminants that exceeded their individual RSCOs were predominantly polycyclic aromatic hydrocarbons and included benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene. However, not all of these contaminants were detected at each location. The NYSDEC TAGM 4046 recommends a comparison of individual compounds with their respective RSCOs. A cumulative total SVOC concentration maximum of 500 mg/kg is also recommended, when individual contaminant concentrations are

not known. The cumulative total of SVOC concentrations did not exceed 500 mg/kg in any boring location or sample. A summary of the SVOC impacts detected above the RSCOs is shown on the site plan provided as Figure 3.

4.3 Soil Vapor Sampling Results

The supplemental IRM field investigation included soil vapor sampling in three boring locations, i.e., R1, R3 and R6, and at three depths within each boring, i.e., 8-10 feet or 10-12 feet, 28-30 feet and 48-50 feet. The soil vapor samples were all analyzed for TCL VOCs. The sampling locations were selected based on the results of the initial IRM field investigation which identified select VOCs including dichlorodifluoromethane (Freon-12) in soil vapor samples collected in the vicinity of the existing ice rink. Furthermore, information was obtained indicating that there were two historical failures in the integrity of the refrigerant coils beneath the ice rink surface. These failures had been repaired by Town personnel, however, their locations were investigated as part of this effort (via borings R1 and R3). The soil vapor sampling results are summarized in Table 4.3.1.

As discussed in Section 4.1, the State of New York has not promulgated any standards, criteria or guidance values with regards to soil vapor concentrations. The soil vapor sampling results shown in Table 4.3.1 are compared with ambient/background outdoor air levels, which were collected on each day of soil gas sampling. As shown, soil vapor concentrations exceeded ambient volatile organic compound conditions in all locations. Detected organics were predominantly 2,2,4-trimethylpentane, carbon disulfide, dichlorodifluoromethane, methyl ethyl ketone (2-butanone), isopropyl alcohol, and toluene. It should be noted that none of the detected organics were identified in the soil samples.

No vertical profile trends are discernable in the soil vapor data provided in Table 4.3.1 for borings R1, R3 and R6. For example, in location R1, the concentration of dichlorodifluoromethane decreases with increasing depth. At R1, the concentration of dichlorodifluoromethane is 590,000 $\mu g/m^3$ at 10-12 feet below grade compared with 44,000 $\mu g/m^3$ at a depth of 48-50 feet below grade. At R3, the concentration of dichlorodifluoromethane increases from 48,000 $\mu g/m^3$ at 8-10 feet below grade to 190,000

$\mu g/m^3$ at 28-30 feet, then decreases to 110,000 at 48-50 feet below grade. At R6, the concentrations for dichlorodifluoromethane are 64,000 $\mu g/m^3$, 10,000 $\mu g/m^3$ and 28,000$\mu g/m^3$ for sampling depths comparable with R3. Similar variations are noted for the other detected VOCs. Based on the soil vapor sampling results, there does not appear to be a current "source area" for the detected soil vapors considering 1) there are no current refrigerant leaks at the ice rink, 2) the soil vapor concentrations vary with depth with no apparent trend, and 3) no VOCs were detected in the soil samples.

During the initial IRM field investigation, the compound chlorodifluoromethane (freon-22) was detected at a concentration of 200 µg/L in the groundwater at monitoring well CAMW-4, located on the south side of the existing skating rink. Chlorodifluoromethane was not detected in the soil or soil vapor samples collected beneath the ice rink during this supplemental IRM investigation. It should be noted that chlorodifluoromethane was included as an analyte for analysis during the supplemental soil investigation. As previously mentioned, the soil vapor analytical services were provided by Severn Trent (STL). The STL analyte list for analytical method TO-15 for TCL VOCs does not include chlorodifluoromethane. However, according to STL, chlorodifluoromethane would be specifically identified as a TIC (tentatively identified compound) during the analysis, if present.

4.4 Groundwater Sampling Results

The supplemental IRM field investigation at the Bethpage Community Park included the installation and sampling of one monitoring well. The well is identified as CAMW-5. Well installation and sampling details were provided in Section 3.4. The well was sampled for PCBs, TAL metals (including cyanide and hexavalent chromium), VOCs and SVOCs. A summary of the analytical results for these analyses are provided in Tables 4.4.1 through 4.4.4. For comparison purposes, the sampling results from the initial IRM field investigation for monitoring wells CAMW-1 through CAMW-4 are included in the tables.

No PCBs were detected in the groundwater sample collected from monitoring well CAMW-5, as shown in Table 4.4.1. Groundwater sampling for metals are shown in Table 4.4.2. Only sodium was detected at a concentration above the NYSDEC Class GA Groundwater Quality Standards.

Sodium was detected at a concentration of 44,300 µg/L, which exceeds the Class GA Standard of 20,000 µg/L. Sodium was detected at comparable concentrations in monitoring wells CAMW-1 through CAMW-4 during the initial IRM investigation. Due to its relatively benign nature, sodium impacts are not considered significant to this IRM program.

Volatile organic compound groundwater sampling results are presented in Table 4.4.3. As shown, no VOCs were identified at monitoring well CAMW-5. As summarized in Table 4.4.4, analytical results for SVOCs indicate that all compounds were present at concentrations below their respective method detection limits.

Utilizing the new monitoring well, an updated monitoring well survey was conducted to define the site specific groundwater flow direction. Results of the well survey and associated groundwater contours are depicted on Figure 4 (Supplemental IRM Investigation Potentiometric Groundwater Surface Map).

The shallow groundwater in the vicinity of the Bethpage Community Park flows in a south-southeasterly direction. An assessment of potential impacts to the shallow groundwater underlying the Construction Area from possible on-site contaminant source areas was performed and previously reported in the IRM Investigation Report & Remedial Action Plan based on monitoring wells CAMW-1 through CAMW-4. However, due to the monitoring well locations and the groundwater flow direction, monitoring well CAMW-4 was not well positioned for comparison with upgradient well CAMW-1. Based on the groundwater contours in Figure 4, CAMW-5 may be considered an upgradient well with respect to CAMW-4.

As discussed earlier in this section, no PCBs, VOCs or SVOCs were detected at monitoring well CAMW-5. With regards to metals, only sodium was detected above NYSDEC Class GA Groundwater Standards. The concentrations of sodium at CAMW-5 and downgradient at CAMW-4 were nearly identical, i.e., 44,300 µg/L at CAMW-5 compared with 44,200 µg/L at CAMW-4. Sodium, however, is not typically considered a significant environmental concern.

The volatile organic compounds 1,2-dichloroethene and trans-1,3 dichloropropene were detected at low concentrations in monitoring well CAMW-4. Chlorodifluoromethane was also detected at a concentration of 200 µg/L. These compounds were not detected in upgradient well CAMW-5 indicating a possible on-site source or historical on-site source. The soil and soil vapor investigation components of the initial and supplemental IRM investigations did not identify any existing on-site source areas for these compounds.

5.0 QA/QC SAMPLING & DATA VALIDATION

This section summarizes the quality assurance/quality control (QA/QC) procedures used during the field investigation, data validation results and data usability.

5.1 Field Investigation QA/QC

QA/QC procedures for the supplemental field investigation activities as well as all laboratory work were consistent with the procedures identified in the NYSDEC approved Work Plan for the initial IRM investigation. The purpose of establishing and following strict field and laboratory specific procedures was to ensure that the data collected was precise, accurate, representative, complete and comparable.

The field QA/QC procedures included the use of specially developed forms and logs for the collection of repetitive data such as soil and groundwater sampling, and community air monitoring. In addition, QA/QC procedures stipulated in the Work Plan such as Chain-of-Custody procedures, field measurement requirements, QA/QC sample collection, etc., were followed.

In order to meet project-specific Data Quality Objectives (DQOs), various types of QA/QC blank and duplicated samples were collected and analyzed. These QA/QC samples included trip blanks, field blanks and blind duplicate samples.

Trip Blanks

Trip blanks containing distilled and de-ionized water from the analytical laboratory were transported to the site and returned without opening. Trip blanks serve as a check for potential contamination from volatile organic compounds that may originate from sample transport, shipping and/or from site conditions. Trip blanks were collected during the supplemental field investigation at the rate of one per day. All trip blanks were analyzed for VOCs. The analytical results are summarized in Table 5.1.1. As shown, no VOCs were detected in any trip blank. Therefore, it is unlikely that any of the samples collected during the field investigation were impacted by sample transport and shipping.

Field Blanks

Field blanks, also identified as equipment blanks, were used to determine if field sampling or sampling equipment decontamination procedures resulted in cross-contamination of site samples. Field blanks were collected at a rate of one per sample delivery group (SDG, i.e., up to 20 samples) by pouring distilled and deionized water through or over the sampling equipment following cleaning. Field blank samples were analyzed for PCBs, TAL metals including hexavalent chromium and cyanide, TCL VOCs and TCL SVOCs. The field blanks were collected during soil sampling, which was performed by split-spoon sampling or direct-push drilling core barrel sampling, and during groundwater sampling.

The analytical results for field blanks were reviewed by the independent data validator and are reported in the Data Usability Summary Report. As reported in the data validation report, methylene chloride was detected in the method blank and field blanks at low concentrations similar to those detected in the project samples. Accordingly, the detection of methylene chloride was recommended to be disregarded.

Blind Duplicates

Blind duplicate samples were utilized as an additional QA/QC measure to assess the accuracy and repeatability of field procedures and laboratory analytical procedures. Duplicate samples were collected and labeled with a fictitious identifier known only to the samplers and those responsible for data interpretation. The analytical laboratory was not aware of the precise

sampling location. Field blanks were submitted to the analytical laboratory in an identical manner as all other samples, and were documented on the chains of custody. Sample collection times were not provided on the chains of custody for the blind duplicate samples.

Blind duplicate samples were analyzed for PCBs and RCRA metals. Analysis of the blind duplicate samples did not include the expanded list of metals (i.e., TAL metals), cyanide, hexavalent chromium, VOCs or SVOCs, as specified in the NYSDEC approved Work Plan. All soil samples collected during the supplemental field investigation were analyzed for PCBs and RCRA metals. The expanded list of analytical parameters was reserved to a minimum of one sample per boring location based on field screening results. Analysis of the blind duplicates for the expanded list of parameters would have reduced the effective "blind" nature of these duplicate samples.

According to the Data Usability Summary Report, all results for blind field duplicate correlation were within acceptable limits.

5.2 Data Validation

All of the CLP analytical data packages and results generated as part of this supplemental IRM investigation underwent independent data validation. A total of 6 analytical data packages or sample delivery groups (SDGs) were generated as part of the supplemental soil investigation, and one sample delivery group (SDG #46) was generated during groundwater sampling. Analytical services for soil and groundwater samples were provided by H2M Labs, Inc., a New York ELAP approved and ASP certified laboratory. Soil vapor sampling results were provided as one data package by Severn Trent Laboratories (STL Burlington).

Independent data validation was provided by Data Validation Services of North Creek, New York. Methodologies utilized were those of the 1995 NYSDEC ASP. The Data Usability Summary Report is included in Appendix C.

As per NYSDEC CLP procedures, the concentrations and data qualifiers shown on the summary analytical tables referenced in Section 4.0 have been edited to reflect minor recommendations

made during the validation process. The analytical results presented in the data summary tables report validated data, which are applicable for use in health-based risk assessments. The data validation was performed following NYSDEC Analytical Services Protocol (ASP) guidelines.

6.0 SUMMARY & CONCLUSIONS

6.1 Site Investigation Summary

The supplemental IRM site investigation, which consisted of soil, groundwater and soil vapor sampling, served to further characterize the nature and extent of contamination within the Construction Area at the Bethpage Community Park. Areas investigated during the supplemental field investigation included the current ice rink area, the concourse area to the south of the rink but north of the bath house/swimming pool, and a perimeter area surrounding the playground to the south of the Construction Area.

The data obtained during the supplemental investigation, as summarized within this section, has been used to revise the proposed Remedial Action Plan, which was previously prepared (Investigation Report & Remedial Action Plan, November 2005), so as to include additional areas that likely require excavation to facilitate site redevelopment. The results of the supplemental site investigation were presented in Section 4.0.

Contaminants including PCBs, metals and select SVOCs were identified at levels exceeding NYSDEC Recommended Soil Cleanup Objectives. No VOCs were identified above NYSDEC RSCOs in all areas investigated. PCBs were detected in some of the borings locations surrounding the playground. The predominant metals identified during the supplemental site investigation included chromium, mercury and zinc. SVOCs identified above NYSDEC guidance values were limited to polynuclear aromatic hydrocarbons (PAHs) and primarily included benzo(a)anthracene, benzo(a)pyrene and chrysene.

PCB contamination, as summarized in Table 4.2.1, was identified in some boring locations surrounding the playground in the southern portion of the Park. The highest PCB concentration

was detected at soil boring O4 at a depth of 2-4 feet below ground at a concentration of 100 mg/kg. Due to subsurface refusal at four feet below grade in this location, the vertical extent of contamination could not be properly delineated. The remaining PCB concentrations in the vicinity of the playground ranged from 1.06 at Q4 (4-6) to 34.3 mg/kg at Q9 (0-2). All PCBs detected at concentrations above 1 mg/kg were shown in Figure 3.

Sampling results for metals are summarized in Table 4.2.2. All metals detected at concentrations above their respective RSCOs are shown in Figure 3. The highest concentration of mercury was detected at boring location O9 (2-4) at 3.4 mg/kg. For reference, the NYSDEC RSCO for mercury is 0.1 mg/kg. Hexavalent chromium was detected in two locations at concentrations of 65 mg/kg (Q4 (8-10)) and 140 mg/kg (P9 (8-10)). The RSCO for total chromium is 50 mg/kg.

Cyanide soil sampling results are also provided in Table 4.2.2 with the metals results. The NYSDEC TAGM 4046 does not identify a RSCO for cyanide considering the stability of cyanide is dependent on the chemical form. Cyanide was detected in one location (P9 (8-10)) at a concentration of 1.5 mg/kg.

Semi-volatile organic compound soil sampling results are summarized in Table 4.2.4. Semi-volatile organics were detected in three of the 19 boring locations at concentrations above the RSCOs. The semi-volatile contaminants that exceeded their individual RSCOs included benzo(a)pyrene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene. However, not all of these contaminants were detected at each location. A summary of the SVOC impacts detected above the RSCOs is shown on the site plan provided as Figure 3.

Soil vapor sampling was performed as three vertical profile borings through the existing ice skating rink. Soil vapor data is provided in Table 4.3.1. Two of the profile borings were positioned in areas where refrigerant coils had been repaired. Detected organics were predominantly 2,2,4-trimethylpentane, carbon disulfide, dichlorodifluoromethane, methyl ethyl ketone (2-butanone), isopropyl alcohol, and toluene. Of these contaminants,

dichlorodifluoromethane was detected in all three borings. No discernable trends were noted in the concentrations of dichlorodifluoromethane and other organics with depth. It should also be noted that none of the detected organics were identified in the soil samples.

6.2 Impact of Supplemental Investigation on Proposed Remedial Strategy

The remedial action plan proposed in the Interim Remedial Measure Investigation Report & Remedial Action Plan (November 2005) was developed to be protective of human health, protective of the environment, and to facilitate redevelopment of a portion of the Bethpage Community Park by the Town of Oyster Bay. Past environmental investigations conducted at the Bethpage Community Park, on behalf of Northrop Grumman, documented contamination within the designated Construction Area. Investigative results documented in the Investigation Report & Remedial Action Plan and herein provide significantly greater detail relative to the impacts to the subject area. As previously reported, near-term plans for redevelopment at the site include the construction of a new indoor ice skating rink in the vicinity of the existing outdoor rink. Associated with the redevelopment will be reconfiguration of the site access and parking areas. In developing the remedial strategy, the near-term future use and potential future use of the subject area were considered.

As reported in the Investigation Report & Remedial Action Plan, a set of remedial strategy criteria were applied to the IRM investigation results to develop a remedial action plan. The remedial action plan provided for remediation of all contaminated surface and near surface soils to a depth of ten feet, remediation of contaminated fill areas identified from historical records, such as aerial photographs or site records and identified from soil classification information obtained during the IRM field investigation, and remediation of all source areas (impacted soils) affecting or having the potential to affect groundwater or soil vapor quality to NYSDEC recommended soil cleanup objective concentrations for subsurface soils.

Applying the results of the supplemental IRM investigation to the previously proposed remedial strategy criteria, a revised remedial excavation plan was developed and is shown as Figure 5. The revised remedial excavation plan does not alter the initial excavation plan, but only proposes the excavation of approximately 5,000 additional cubic yards of contaminated soil.

The additional excavation areas include a portion of the ice rink area, a portion of the concourse and a perimeter boundary area outside and around the playground to the south of the Construction Area. The area around the playground is not accessible to the public and outside the perimeter fence surrounding the playground. Investigation activities were not performed as part of the IRM within the playground itself, which remains open to the public. As previously reported, the playground area had been investigated by Northrop Grumman Corporation. Surface and near surface soils were remediated in the playground area during a remodeling of the playground in 2004.

All impacted soils that are excavated as part of the remediation effort will be transported off-site and disposed at a facility permitted to accept the contaminant concentrations identified during the IRM field investigations. All excavated soils will be replaced with clean fill and top soil, as necessary. All remedial excavation and backfilling will be coordinated with the site redevelopment and construction plan to minimize duplication of effort.

With regards to soil vapor, the proposed Remedial Action Plan recommended that any enclosed spaces contemplated as part of the proposed development activity include provision for soil vapor mitigation (i.e., prevention of soil vapor intrusion) as a design consideration. There are no changes to this recommendation based on the results of the supplemental IRM investigation given that no specific source for the soil vapor concentrations was identified.

Through the application of the remedial strategy criteria to the results of the supplemental IRM investigation, the recommendations of this supplemental investigation for additional remedial excavation are compliant with the conclusions of the Human Exposure Assessment presented within the November 2005 Interim Remedial Measure Investigation Report & Remedial Action Plan.

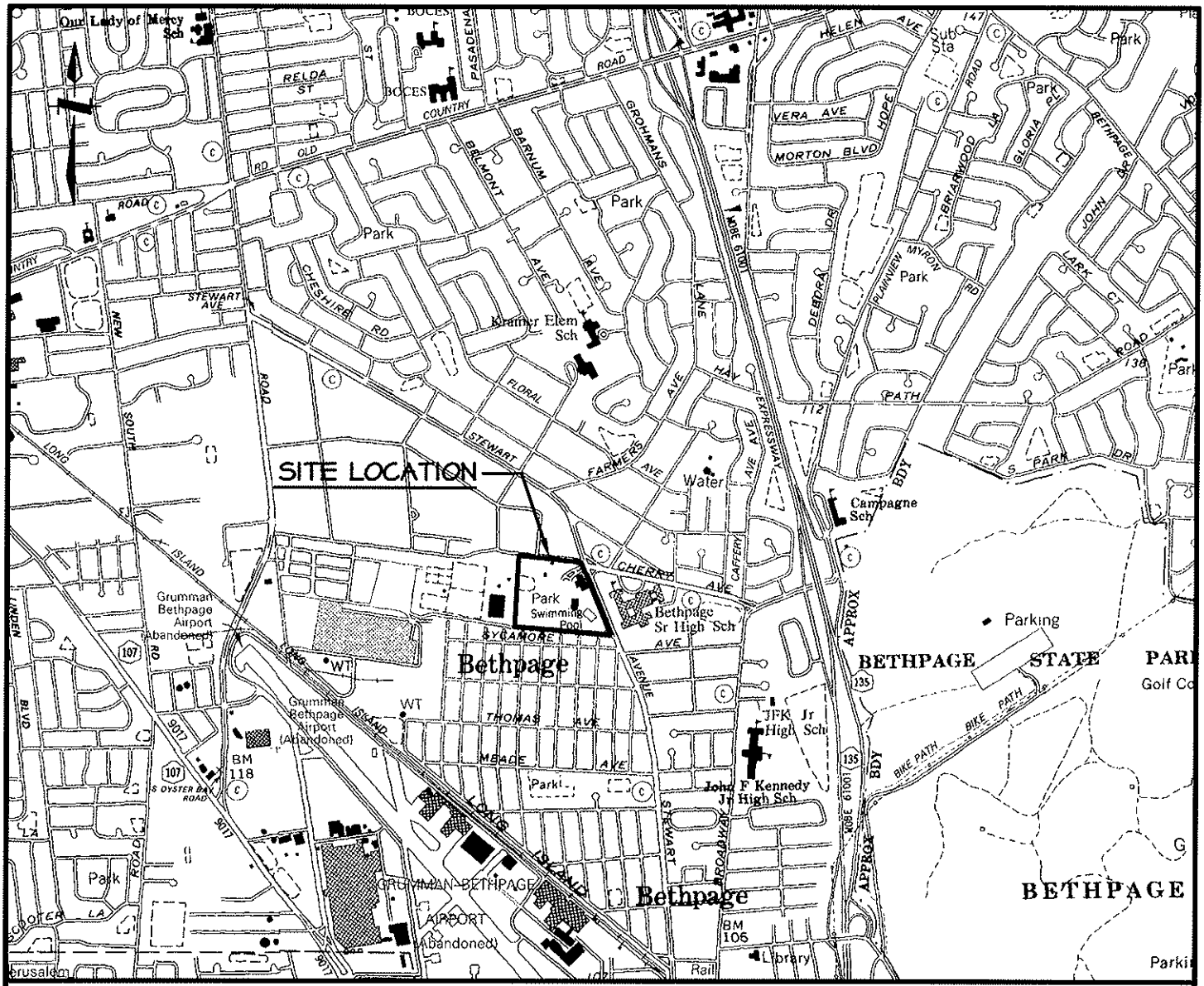

FIGURE 1. SITE LOCATION

SCALE: 1" = 2000'

H2MGROUP
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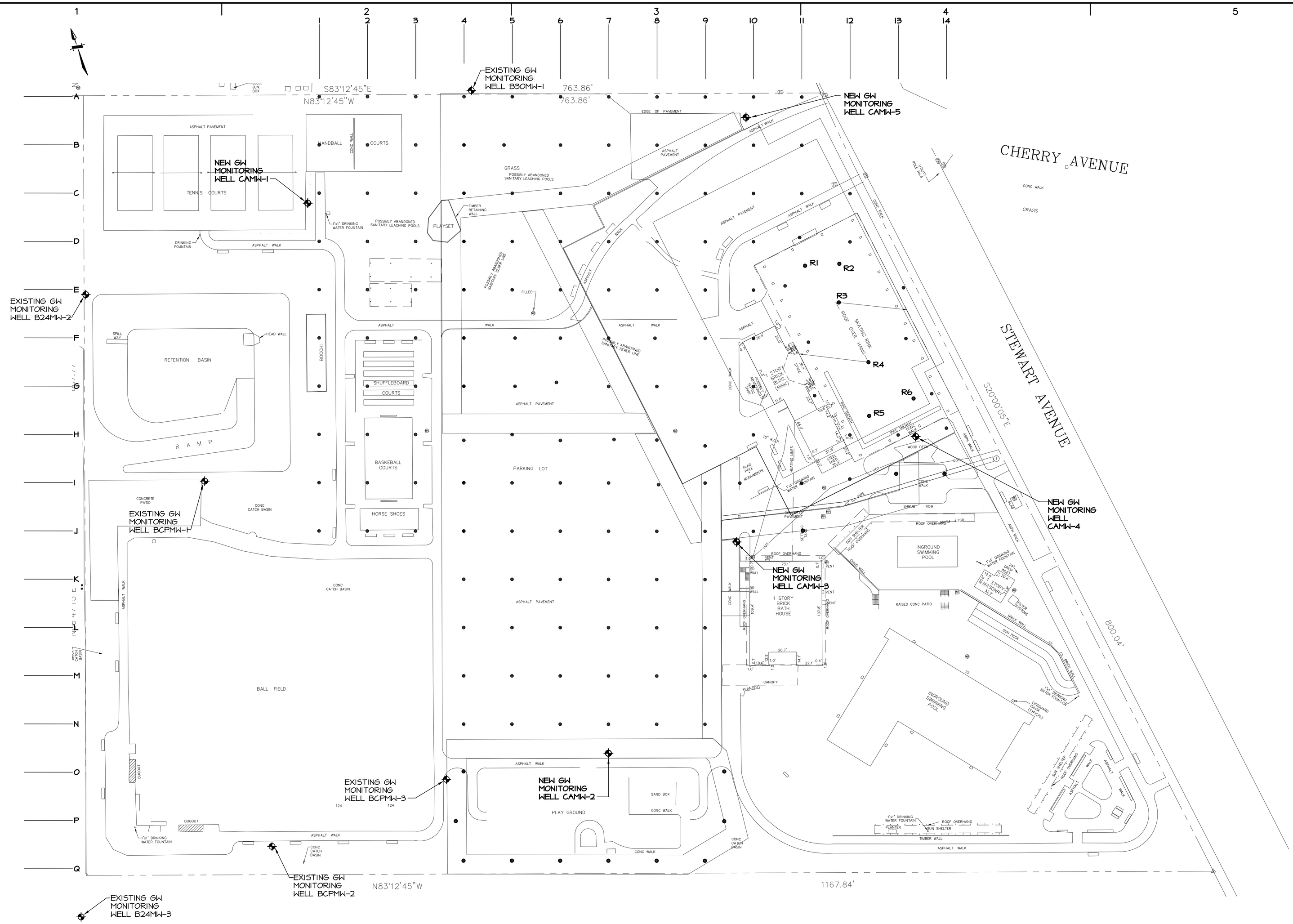
MELVILLE, N.Y.
TOTOWA, N.J.



NOTES:

1. BASEMAP SOURCE: SIDNEY B. BOWNE & SON, LLP, PROJ. NO. 10408802, SEPT. 2004

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MARK	DATE	DESCRIPTION
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DATE:	NOVEMBER 2004
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SCALE:	1"= 50'
FILE LOCATION:	
DESIGNED BY:	PJS
DRAWN BY:	DP
CHECKED BY:	C
REVIEWED BY:	Q

TOWN OF OYSTER BAY
BETHPAGE COMMUNITY PARK
BETHPAGE, NEW YORK

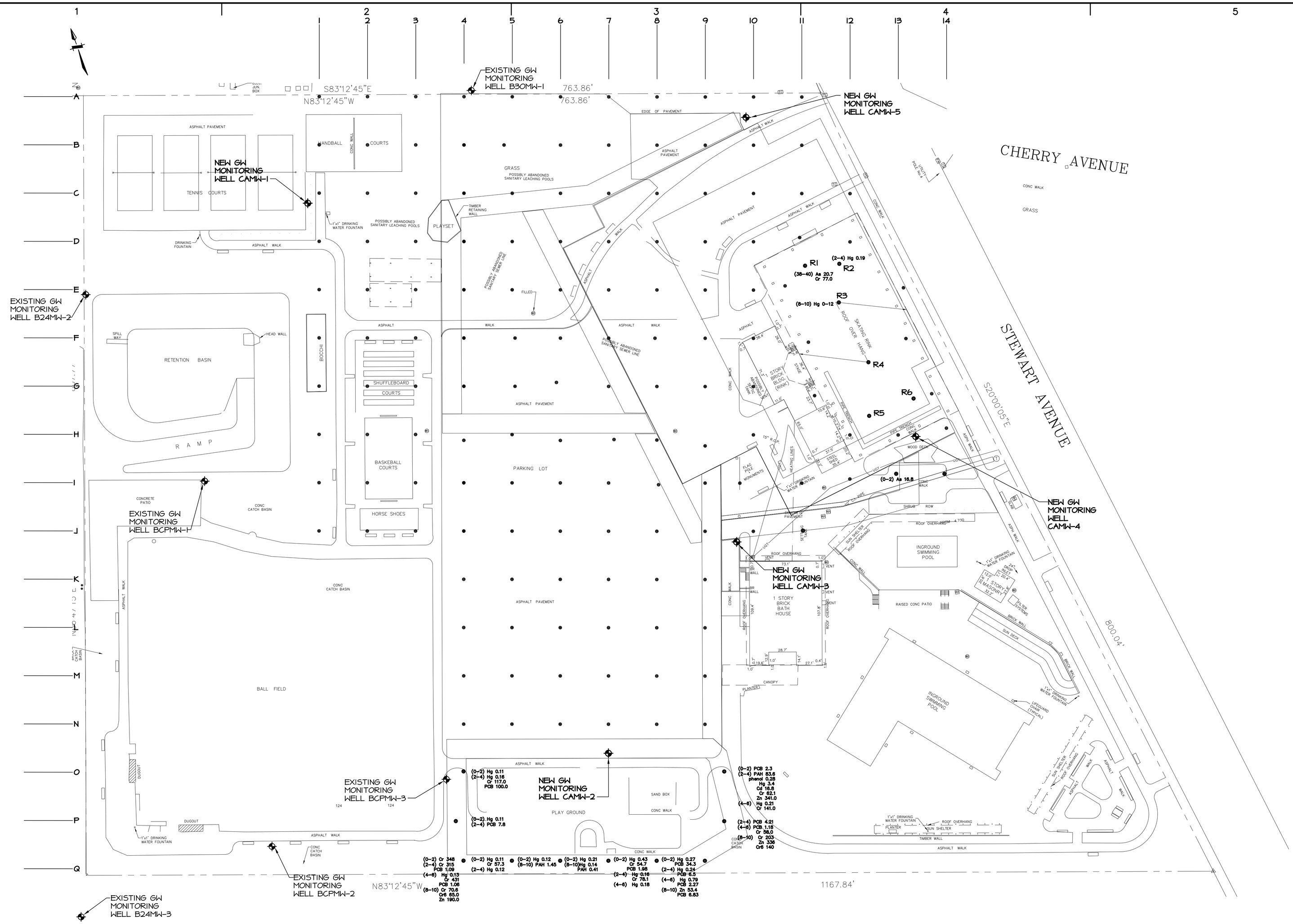
CONSTRUCTION AREA SUPPLEMENTAL IRM SITE INVESTIGATION

CONTRACT

SHEET TITLE

SHEET NUMBER

FIGURE 2



LEGEND

(0-2) Cr 348 ● SOIL SAMPLING POINT (DEPTH IN FEET) CONTAMINANT & CONCENTRATION IN MG/KG

GROUND WATER MONITORING WELL

NOTES:

1. BASEMAP SOURCE: SIDNEY B. BOWNE & SON, LLP, PROJ. NO. 10408802, SEPT. 2004

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MARK	DATE	DESCRIPTION
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PROJECT NO:	TOBY 0402
DATE:	NOVEMBER 2004
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XREF DWG FILE:	xr_EXCAVATION.dwg
SCALE:	1"= 50'
FILE LOCATION:	
DESIGNED BY:	PJS
DRAWN BY:	DP
CHECKED BY:	C
REVIEWED BY:	Q

TOWN OF OYSTER BAY
BETHPAGE COMMUNITY PARK
BETHPAGE, NEW YORK

CONSTRUCTION AREA SUPPLEMENTAL IRM SITE INVESTIGATION

CONTRACT

SHEET TITLE

SOIL SAMPLING RESULTS FOR PCBS, VOCS & SVOCS

SHEET NUMBER

FIGURE 3

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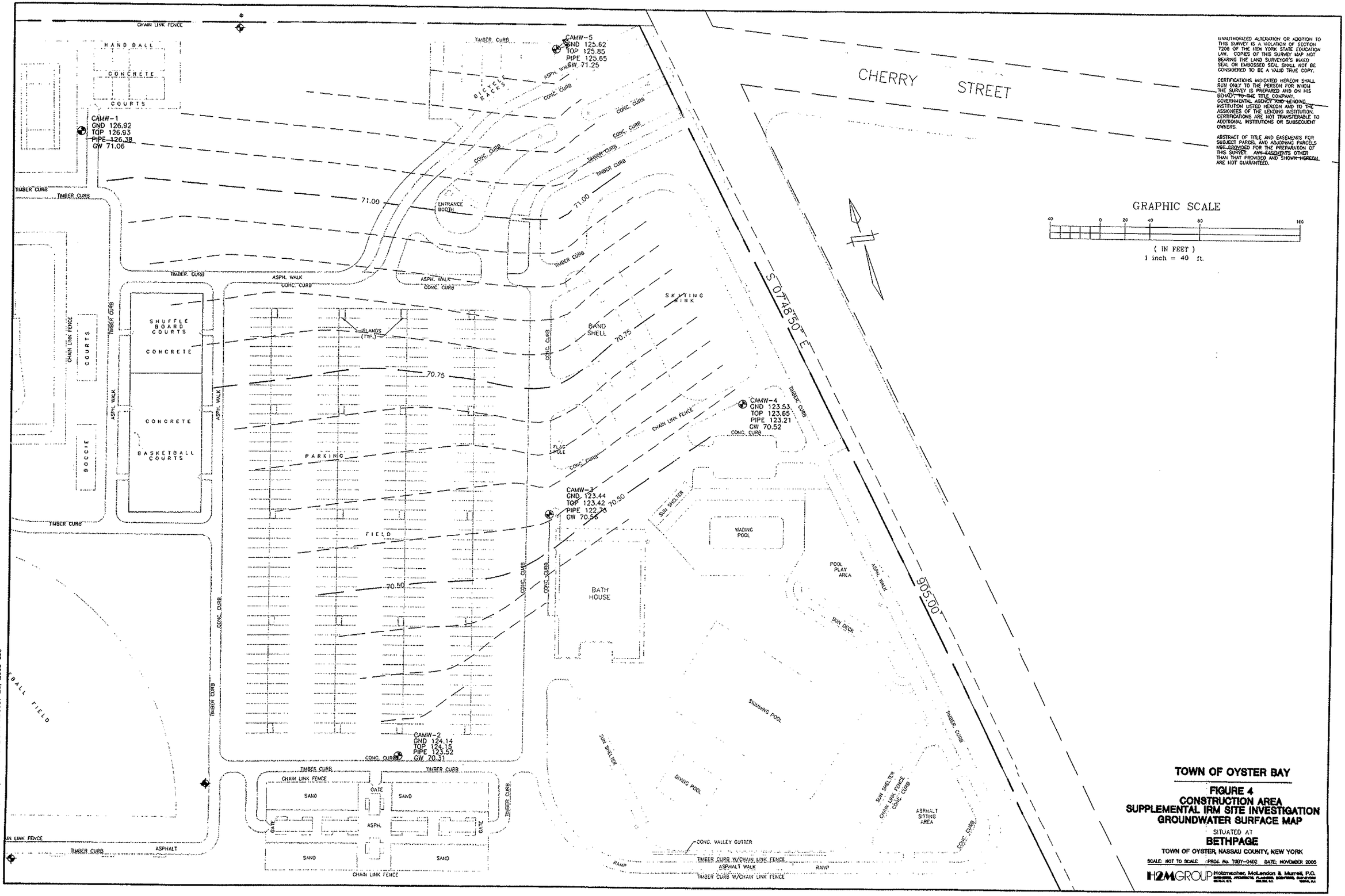

TOWN OF OYSTER BAY

FIGURE 4
CONSTRUCTION AREA
SUPPLEMENTAL IRM SITE INVESTIGATION
GROUNDWATER SURFACE MAP

SITUATED AT
BETHPAGE
TOWN OF OYSTER, NASSAU COUNTY, NEW YORK

SCALE: NOT TO SCALE (PROJ. No. TOBY-0402 DATE: NOVEMBER 2005

H2M GROUP Holzmacher, McLendon & Murrell, P.C.

PROPOSED EXCAVATION DEPTH LEGEND

NO EXCAVATION REQUIRED			
2'		10'	
4'		12'	
6'		14'	
8'		20'	

LEGEND

- SOIL SAMPLING POINT
- GROUND WATER MONITORING WELL

NOTES:

1. BASEMAP SOURCE: SIDNEY B. BOWNE & SON, LLP, PROJ. NO. 10408802, SEPT. 2004

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MARK	DATE	DESCRIPTION
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ISSUE:	
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DATE:	NOVEMBER 2004
CAD DWG FILE:	FIGURE 5.DWG
XREF DWG FILE:	xr_EXCAVATION.dwg
SCALE:	AS SHOWN
FILE LOCATION:	
DESIGNED BY:	PJS
DRAWN BY:	DP/PB
CHECKED BY:	C
REVIEWED BY:	Q

TOWN OF OYSTER BAY
BETHPAGE COMMUNITY PARK
BETHPAGE, NEW YORK

CONSTRUCTION AREA IRM INVESTIGATION SOIL SAMPLING AND MONITORING WELL LOCATIONS

CONTRACT

SHEET TITLE

PROPOSED REMEDIAL STRATEGY EXCAVATION PLAN

SHEET NUMBER

FIGURE 5

TABLE 4.2.1. SOIL SAMPLING RESULTS FOR PCBS

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	Boring R-1										Boring R-2			
		0-2	2-4	4-6	6-8	8-10	18-20	28-30	38-40	48-50	58-60	0-2	2-4	4-6	8-10
	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
Aroclor 1016		U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1221		U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1232		U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1242		U	31 J	U	U	U	57	U	U	U	U	23 J	62	U	U
Aroclor 1248		U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1254		U	U	U	U	U	U	U	U	U	U	U	34	U	U
Aroclor 1260		U	U	U	U	U	U	U	U	U	U	U	U	U	U
Total	1000/10000	U	31	U	U	U	57	U	U	U	U	23	96	U	U

[1] New York State Department of Environmental Conservation (NYSDEC) Technical & Administrative Guidance Memorandum (TAGM) #4046, Recommended Soil Cleanup Objectives. 1 mg/kg for surface soils. 10 mg/kg for subsurface soils.

D - Compound detected in an analysis at a secondary dilution factor.
J – Estimated Value.
P – Greater than 25% difference detected between concentrations on two Gas Chromatograph columns.
U – Compound not detected.
X – Aroclor compound may be partially masked by the presence of another Aroclor.
Z – Indicates compound may be biased high due to presence of another Aroclor.

TABLE 4.2.1 (continued). SOIL SAMPLING RESULTS FOR PCBS

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	Boring R-3									Boring R-4				
		0-2	2-4	4-6	8-10	18-20	30-32	38-40	48-50	58-60	0-2	2-4	4-6	6-8	8-10
	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
Aroclor 1016		U	UJX	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1221		U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1232		U	UJX	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1242		U	130	U	U	U	U	U	U	U	39	U	20 PJ	U	30 J
Aroclor 1248		U	UJX	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1254		U	UJX	U	U	U	U	U	U	U	20 J	U	U	U	U
Aroclor 1260		U	U	U	U	U	U	U	U	U	U	U	U	U	U
Total	1000/10000	U	130	U	U	U	U	U	U	U	59	U	U	U	30

[1] New York State Department of Environmental Conservation (NYSDEC) Technical & Administrative Guidance Memorandum (TAGM) #4046, Recommended Soil Cleanup Objectives. 1 mg/kg for surface soils. 10 mg/kg for subsurface soils.

D - Compound detected in an analysis at a secondary dilution factor.
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TABLE 4.2.1 (continued). SOIL SAMPLING RESULTS FOR PCBS

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	Boring R-5					Boring R-6									
		0-2	2-4	4-6	6-8	8-10	0-2	2-4	4-6	6-8	8-10	20-22	28-30	38-40	48-50	58-60
	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
Aroclor 1016		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1221		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1232		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1242		U	U	U	U	U	U	20 J	U	U	U	U	U	U	U	U
Aroclor 1248		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1254		U	U	U	U	U	U	20 J	29 J	U	U	U	U	U	U	U
Aroclor 1260		U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Total	1000/10000	U	U	U	U	U	U	40	29	U	U	U	U	U	U	U

[1] New York State Department of Environmental Conservation (NYSDEC) Technical & Administrative Guidance Memorandum (TAGM) #4046, Recommended Soil Cleanup Objectives. 1 mg/kg for surface soils. 10 mg/kg for subsurface soils.

D - Compound detected in an analysis at a secondary dilution factor.
J – Estimated Value.
P – Greater than 25% difference detected between concentrations on two Gas Chromatograph columns.
U – Compound not detected.
X – Aroclor compound may be partially masked by the presence of another Aroclor.
Z – Indicates compound may be biased high due to presence of another Aroclor.

TABLE 4.2.1 (continued). SOIL SAMPLING RESULTS FOR PCBS

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	Boring I-13				Boring I-14				Boring J-11			
		0-2	2-4	4-6	8-10	0-2	2-4	4-6	8-10	0-2	2-4	4-6	8-10
	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
Aroclor 1016		U	U	U	U	U	U	U	U	U	UJX	U	U
Aroclor 1221		U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1232		U	U	U	U	U	U	U	U	U	UJX	U	U
Aroclor 1242		U	U	U	U	U	U	U	22 J	U	220 P	21 PJ	20 PJ
Aroclor 1248		U	U	U	U	U	U	U	U	U	JUX	U	U
Aroclor 1254		U	U	U	U	U	U	U	U	53 JP	230	U	20 PJ
Aroclor 1260		U	44	U	U	53	19 J	U	U	U	44	U	18 J
Total	1000/10000	U	44	U	U	53	19	U	U	53	494	21	58

[1] New York State Department of Environmental Conservation (NYSDEC) Technical & Administrative Guidance Memorandum (TAGM) #4046, Recommended Soil Cleanup Objectives. 1 mg/kg for surface soils. 10 mg/kg for subsurface soils.

D - Compound detected in an analysis at a secondary dilution factor.
J – Estimated Value.
P – Greater than 25% difference detected between concentrations on two Gas Chromatograph columns.
U – Compound not detected.
X – Aroclor compound may be partially masked by the presence of another Aroclor.
Z – Indicates compound may be biased high due to presence of another Aroclor.

TABLE 4.2.1 (continued). SOIL SAMPLING RESULTS FOR PCBS

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	Boring O-4		Boring O-9				Boring P-4				Boring P-9			
		0-2	2-4	0-2	2-4	4-6	8-10	0-2	2-4	4-6	8-10	0-2	2-4	4-6	8-10
	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)		(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
Aroclor 1016		UJX	UJX	UJX	UJX	UJX	UJX	UJX	UJX	U	UJX	UJX	UJX	UJX	UJX
Aroclor 1221		U	U	U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1232		UJX	UJX	UJX	UJX	UJX	JUX	UJX	UJX	U	UJX	UJX	UJX	UJX	UJX
Aroclor 1242		220 P	100000 D	1800 D	320	220	300 P	180 JP	6500 D	U	200	74 P	3700 D	900 D	120
Aroclor 1248		UJX	UJX	UJX	UJX	UJX	UJX	UJX	UJX	U	UJX	UJX	UJX	UJX	UJX
Aroclor 1254		230 JPZ	UJX	540 JZ	D	90 JZ	120 JZ	210 JP	1300 DJZ	U	63 JZ	120	510 JZ	210 JPZ	120
Aroclor 1260		48	UX	UJX	220	31 J	55	45	UX	U	47	30 J	UJX	67	75
Total	1000/10000	498	**100000**	**2340**	540	341	475	435	**7800**	U	310	224	**4210**	**1177**	315

[1] New York State Department of Environmental Conservation (NYSDEC) Technical & Administrative Guidance Memorandum (TAGM) #4046, Recommended Soil Cleanup Objectives. 1 mg/kg for surface soils. 10 mg/kg for subsurface soils.

D - Compound detected in an analysis at a secondary dilution factor.
J – Estimated Value.
P – Greater than 25% difference detected between concentrations on two Gas Chromatograph columns.
U – Compound not detected.
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Z – Indicates compound may be biased high due to presence of another Aroclor.

TABLE 4.2.1 (continued). SOIL SAMPLING RESULTS FOR PCBS

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	Boring Q-4				Boring Q-5				Boring Q-6			
		0-2	2-4	4-6	8-10	0-2	2-4	4-6	8-10	0-2	2-4	4-6	8-10
	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
Aroclor 1016		UJX	UJX	UJX	UJX	U	U	U	U	UJX	U	U	U
Aroclor 1221		U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1232		UJX	UJX	UJX	UJX	U	U	U	U	UJX	U	U	U
Aroclor 1242		190 JP	190	470	72	U	U	U	U	140 P	U	22 J	48
Aroclor 1248		UJX	UJX	UJX	UJX	U	U	U	U	UJX	U	U	U
Aroclor 1254		170 JPZ	500 P	350 JPZ	69 JPZ	23 J	U	17 PJ	U	110 JPZ	U	U	41 JZ
Aroclor 1260		82 P	400 P	240 P	80 P	61 P	46 P	29 PJ	41 P	69	21 PJ	U	21 PJ
Total	1000/10000	442	**1090**	**1060**	149	84	46	46	41	319	21	22	110

[1] New York State Department of Environmental Conservation (NYSDEC) Technical & Administrative Guidance Memorandum (TAGM) #4046, Recommended Soil Cleanup Objectives. 1 mg/kg for surface soils. 10 mg/kg for subsurface soils.

D - Compound detected in an analysis at a secondary dilution factor.
J – Estimated Value.
P – Greater than 25% difference detected between concentrations on two Gas Chromatograph columns.
U – Compound not detected.
X – Aroclor compound may be partially masked by the presence of another Aroclor.
Z – Indicates compound may be biased high due to presence of another Aroclor.

TABLE 4.2.1 (continued). SOIL SAMPLING RESULTS FOR PCBS

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	Boring Q-7				Boring Q-8				Boring Q-9			
		0-2	2-4	4-6	8-10	0-2	2-4	4-6	8-10	0-2	2-4	4-6	8-10
	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
Aroclor 1016		U	UJX	UJX	U	UJX	UJX	UX	U	UJX	UJX	UJX	UJX
Aroclor 1221		U	U	U	U	U	U	U	U	U	U	U	U
Aroclor 1232		U	UJX	UJX	U	UJX	UJX	UJX	U	UJX	UJX	UJX	UJX
Aroclor 1242		83	230 JP	72	50 P	1100 D	440	240 P	U	28000 DP	4800 D	1900 DP	5200 D
Aroclor 1248		U	UJX	UJX	U	UJX	UJX	JUX	U	JUX	UJX	UJX	UJX
Aroclor 1254		300	200 P	67 P	50 P	450 JPZ	330 JPZ	170 JZ	U	6300 DJPZ	1700 DJZ	370 JPZ	1500 DJZ
Aroclor 1260		44 P	47	17 PJ	31 PJ	430	160	92	U	UX	UX	UJX	130
Total	1000/10000	427	477	156	131	**1980**	930	502	U	**34300**	**6500**	**2270**	**6830**

[1] New York State Department of Environmental Conservation (NYSDEC) Technical & Administrative Guidance Memorandum (TAGM) #4046, Recommended Soil Cleanup Objectives. 1 mg/kg for surface soils. 10 mg/kg for subsurface soils.

D - Compound detected in an analysis at a secondary dilution factor.
J – Estimated Value.
P – Greater than 25% difference detected between concentrations on two Gas Chromatograph columns.
U – Compound not detected.
X – Aroclor compound may be partially masked by the presence of another Aroclor.
Z – Indicates compound may be biased high due to presence of another Aroclor.

TABLE 4.2.2. SOIL SAMPLING RESULTS FOR METALS

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	NYSDEC Eastern USA Background[1]	Boring R-1										Boring R-2			
			0-2	2-4	4-6	6-8	8-10	18-20	28-30	38-40	48-50	58-60	0-2	2-4	4-6	8-10
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Mercury	0.1	0.001 - 0.2	0.054	U	U	U	U	U	0.074 B	0.088 B	0.075 B	0.083 B	0.065 B	**0.19**	U	U
Aluminum	SB	33,000				1590								1660		
Antimony	SB	N/A				U								U		
Arsenic	7.5 or SB	3 - 12	0.61	0.61 B	U	U	U	0.63 B	3.3 *	**20.7 ***	1.5 *	1.2 *	U	1.1	0.73 B	1.2
Barium	300 or SB	15 - 600	6.4	8.5 B	5.2 B	3.9 B	3.3 B	5.7 B	14.9 B	10.9 B	3.5 B	4.0 B	4.0 B	6.9 B	5.5 B	5.9 B
Beryllium	0.16 or SB	0 - 1.75				0.13 B								**0.17 B**		
Calcium	SB	130 – 35,000				43.8 B								64.0 JBE		
Cadmium	10	0.1 - 1	0.040	0.065 B	U	U	U	0.066 B	0.15 B	U	U	U	0.058 B	0.15 B	0.069 B	0.075 B
Chromium	50	1.5 - 40	3.6	7.4 *	5.1 *	2.5 *	2.0 *	7.2 *	19.1 *	**77.0 ***	2.6 *	4.0 *	2.0 *	7.3 *	8.5 *	17.3 *
Cobalt	30 or SB	2.5 - 60				1.3 B								1.4 B		
Copper	25 or SB	1 - 50				2.5 B								3.9		
Iron	2,000 or SB	2,000 – 550,000				4420 *								3810		
Lead	400	200 - 500	1.3	1.9	1.2	0.75	0.81	0.99	4.5 *	0.12 U*	1.2 *	2.9 *	0.66	1.9	0.83	0.73
Magnesium	SB	100 – 5,000				179 B								269 JBE		
Manganese	SB	50 – 5,000				116 JN								54.6		
Nickel	13 or SB	0.5 - 25				2.0 B								1.6 B		
Potassium	SB	8,500 – 43,000				154 B								192 B		
Selenium	2 or SB	0.1 - 3.9	0.58	U	U	U	U	U	UJN	UJN	UJN	UJN	U	U	U	U
Silver	SB	N/A	0.39	U	U	U	U	0.62 B	U	U	U	U	U	U	0.67 B	U
Sodium	SB	6,000 - 8,000				19.5 B								27.0 B		
Thallium	SB	N/A				U								U		
Vanadium	150 or SB	1 - 300				2.7 B								3.9 B		
Zinc	20 or SB	9 - 50				7.5 J*								6.7 JE		
Chromium, hexavalent						U								U		
Cyanide						U								U		

[1] New York State Department of Environmental Conservation (NYSDEC) Technical & Administrative Guidance Memorandum (TAGM) #4046.
B – Parameter detected less than the Contract Required Detection Limit (CRDL) but greater than Instrumentation Detection Limit (IDL).
E – Reported value is estimated due to the presence of interference.
N – Matrix spike sample recovery not within control limits.
U – Parameter was analyzed for but not detected, i.e., less than IDL.
* - Duplicate analysis is not within control limits.

TABLE 4.2.2 (continued). SOIL SAMPLING RESULTS FOR METALS

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	NYSDEC Eastern USA Background[1]	Boring R-3									Boring R-4				
			0-2	2-4	4-6	8-10	18-20	30-32	38-40	48-50	58-60	0-2	2-4	4-6	6-8	8-10
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Mercury	0.1	0.001 - 0.2	U	U	0.071 B	**0.12**	0.083 B	0.083 B	0.088 B	0.10 B	0.068 B	U	U	U	U	U
Aluminum	SB	33,000		2020						686 JE*					1040	
Antimony	SB	N/A		U						UJN					U	
Arsenic	7.5 or SB	3 - 12	U	0.77 B	U	U	1.6 *	3.3 *	10.9 *	3.4 *	5.5 *	4.0	0.88 B	0.97 B	U	1.3
Barium	300 or SB	15 - 600	8.1 B	7.1 B	4.4 B	5.6 B	20.1 B	5.5 B	4.7 B	4.3 B	5.4 B	6.3 B	6.4 B	8.0 B	3.1 B	7.7 B
Beryllium	0.16 or SB	0 - 1.75		0.16 B						UJ					0.071 B	
Calcium	SB	130 – 35,000		75.8 B						98.2 B					37.1 BEJ	
Cadmium	10	0.1 - 1	0.092 B	0.074 B	0.094 B	U	UJ	0.15 B	0.18 B	0.046 B	UJ	0.13 B	0.12 B	0.071 B	U	0.092 B
Chromium	50	1.5 - 40	4.7 *	8.7 *	4.0 *	6.2 *	8.4 *	15.0 *	35.2 *	6.8 *	4.1 *	17.5 *	8.3 *	17.3 *	1.2 *	11.8 *
Cobalt	30 or SB	2.5 - 60		1.2 B						0.44 B					0.73 B	
Copper	25 or SB	1 - 50		2.4 B						2.9					1.2 B	
Iron	2,000 or SB	2,000 – 550,000		3620 *						5360 *					2140	
Lead	400	200 - 500	1.6	2.5	1.3	0.95	1.5 *	0.96 *	0.35 *	2.0 *	3.6 *	1.6	1.2	1.0	0.50	1.1
Magnesium	SB	100 – 5,000		340 B						31.0 B					138 JBE	
Manganese	SB	50 – 5,000		54.1 JN						18.1					50.8	
Nickel	13 or SB	0.5 - 25		2.0 B						0.88 B					0.78 B	
Potassium	SB	8,500 – 43,000		176 B						126 JBE					101 B	
Selenium	2 or SB	0.1 - 3.9	U	U	U	U	UJN	UJN	UJN	UJN	UJN	1.8	U	U	U	U
Silver	SB	N/A	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Sodium	SB	6,000 - 8,000		19.9 B						U					18.3 B	
Thallium	SB	N/A		U						U					U	
Vanadium	150 or SB	1 - 300		4.1 B						5.9					2.1 B	
Zinc	20 or SB	9 - 50		9.1 J*						5.0 JE*					3.4 JE	
Chromium, hexavalent				U						U					U	
Cyanide				U						U					U	

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N – Matrix spike sample recovery not within control limits.
U – Parameter was analyzed for but not detected, i.e., less than IDL.
* - Duplicate analysis is not within control limits.

TABLE 4.2.2 (continued). SOIL SAMPLING RESULTS FOR METALS

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	NYSDEC Eastern USA Background[1]	Boring R-5				
			0-2	2-4	4-6	6-8	8-10
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Mercury	0.1	0.001 - 0.2	U	0.060 B	U	0.081 B	0.072 B
Aluminum	SB	33,000			1620	1810	
Antimony	SB	N/A			U	U	
Arsenic	7.5 or SB	3 - 12	U	2.4	0.84 B	0.58 B	0.76 B
Barium	300 or SB	15 - 600	6.9 B	6.2 B	4.9 B	8.1 B	10.6 B
Beryllium	0.16 or SB	0 - 1.75			0.12 B	0.13 B	
Calcium	SB	130 – 35,000			170 B	452 B	
Cadmium	10	0.1 - 1	0.054 B	0.039 B	0.068 B	0.087 B	0.21 B
Chromium	50	1.5 - 40	3.8 *	3.5 *	6.3 *	11.5 *	15.4 *
Cobalt	30 or SB	2.5 - 60			2.0 B	2.0 B	
Copper	25 or SB	1 - 50			1.8 B	2.7	
Iron	2,000 or SB	2,000 – 550,000			4660 *	4690 *	
Lead	400	200 - 500	1.3	1.7	1.0	1.5	1.7
Magnesium	SB	100 – 5,000			215 B	328 B	
Manganese	SB	50 – 5,000			55.7 JN	48.5 JN	
Nickel	13 or SB	0.5 - 25			4.1 B	3.4 B	
Potassium	SB	8,500 – 43,000			185 B	257 B	
Selenium	2 or SB	0.1 - 3.9	U	U	U	U	U
Silver	SB	N/A	0.85 B	U	U	U	U
Sodium	SB	6,000 - 8,000			37.2 B	40.1 B	
Thallium	SB	N/A			U	U	
Vanadium	150 or SB	1 - 300			4.5 B	3.7 B	
Zinc	20 or SB	9 - 50			8.5 J*	9.2 J*	
Chromium, hexavalent					U	U	
Cyanide					U	U	

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E – Reported value is estimated due to the presence of interference.
N – Matrix spike sample recovery not within control limits.
U – Parameter was analyzed for but not detected, i.e., less than IDL.
* - Duplicate analysis is not within control limits.

TABLE 4.2.2 (continued). SOIL SAMPLING RESULTS FOR METALS

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	NYSDEC Eastern USA Background[1]	Boring R-6									
			0-2	2-4	4-6	6-8	8-10	20-22	28-30	38-40	48-50	58-60
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Mercury	0.1	0.001 - 0.2	U	U	U	0.073 B	0.077 B	0.074 B	0.075 B	0.074 B	0.086 B	0.083 B
Aluminum	SB	33,000				1430 EJ*						
Antimony	SB	N/A				0.34 UJN						
Arsenic	7.5 or SB	3 - 12	1.7	U	U	0.74 B*	0.78 B*	1.1 *	1.0 *	3.4 *	7.9 *	1.6 *
Barium	300 or SB	15 - 600	5.8 B	6.4 B	5.6 B	4.5 B	4.8 B	7.7 B	5.1 B	4.6 B	6.1 B	5.5 B
Beryllium	0.16 or SB	0 - 1.75				0.10 B						
Calcium	SB	130 – 35,000				466 B						
Cadmium	10	0.1 - 1	0.070 B	0.080 B	0.052 B	0.040 B	0.042 B	UJ	U	0.15 B	0.19 B	U
Chromium	50	1.5 - 40	11.5 *	5.8 *	7.8 *	3.6 *	5.3 *	9.6 *	3.1 *	19.7 *	10.2 *	5.4 *
Cobalt	30 or SB	2.5 - 60				1.1 B						
Copper	25 or SB	1 - 50				1.9 B						
Iron	2,000 or SB	2,000 – 550,000				4760 *						
Lead	400	200 - 500	1.2	1.3	1.0	1.6 *	0.99 *	0.78 *	0.62 *	1.4 *	1.5 *	1.9 *
Magnesium	SB	100 – 5,000				215 B						
Manganese	SB	50 – 5,000				55.7						
Nickel	13 or SB	0.5 - 25				1.4 B						
Potassium	SB	8,500 – 43,000				144 JBE						
Selenium	2 or SB	0.1 - 3.9	U	U	U	0.55 UJN	UJN	UJN	UJN	UJN	UJN	UJN
Silver	SB	N/A	1.5	U	U	U	U	U	U	U	U	U
Sodium	SB	6,000 - 8,000				18.5 B						
Thallium	SB	N/A				U						
Vanadium	150 or SB	1 - 300				4.2 B						
Zinc	20 or SB	9 - 50				7.1 JE*						
Chromium, hexavalent						U						
Cyanide						U						

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E – Reported value is estimated due to the presence of interference.
N – Matrix spike sample recovery not within control limits.
U – Parameter was analyzed for but not detected, i.e., less than IDL.
* - Duplicate analysis is not within control limits.

TABLE 4.2.2 (continued). SOIL SAMPLING RESULTS FOR METALS

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	NYSDEC Eastern USA Background[1]	Boring I-13				Boring I-14				Boring J-11			
			0-2	2-4	4-6	8-10	0-2	2-4	4-6	8-10	0-2	2-4	4-6	8-10
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Mercury	0.1	0.001 - 0.2	U	U	U	U	U	U	U	U	U	U	0.069 B	U
Aluminum	SB	33,000				870 *	1060				1040 *			
Antimony	SB	N/A				U	U				U			
Arsenic	7.5 or SB	3 - 12	**16.8 JN**	0.47 BJN	0.82 BJN	0.58 BJN	U	U	0.96 B	U	0.40 BJN	2.6 JN	1.9 JN	1.3 JN
Barium	300 or SB	15 - 600	3.6 B*	5.4 B*	4.4 B*	4.2 B*	4.6 B	4.3 B	3.1 B	5.6 B	4.0 B*	8.5 B*	9.4 B*	6.8 B*
Beryllium	0.16 or SB	0 - 1.75				UJ	0.11 B				UJ			
Calcium	SB	130 – 35,000				62.4 B*	108 BEJ				107 JB*			
Cadmium	10	0.1 - 1	JUN*	0.27 JBN*	JUN*	JUN*	0.13 B	0.095 B	0.11 B	0.15 B	UJN*	UJN*	UJN*	0.12 BJN*
Chromium	50	1.5 - 40	35.4 JN*	41.0 JN*	2.7 JN*	1.6 JN*	16.8 *	25.7 *	4.1 *	17.5 *	3.1 JN*	17.6 JN*	18.2 JN*	22.2 JN*
Cobalt	30 or SB	2.5 - 60				0.64 B	0.83 B				0.71 B			
Copper	25 or SB	1 - 50				1.4 JBN*	1.7 B				1.3 JBN*			
Iron	2,000 or SB	2,000 – 550,000				2710	2670				2020			
Lead	400	200 - 500	1.1 *	1.7 *	1.3 *	1.0 *	0.68	0.81	0.62	0.88	0.74 *	4.4 *	5.6 *	1.6 *
Magnesium	SB	100 – 5,000				146 B*	202 JBE				172 B*			
Manganese	SB	50 – 5,000				25.2	21.2				31.6			
Nickel	13 or SB	0.5 - 25				1.7 B*	0.93 B				1.0 B*			
Potassium	SB	8,500 – 43,000				93.0 B	155 B				88.1 B			
Selenium	2 or SB	0.1 - 3.9	0.51	U	U	U	U	U	U	U	U	0.61	0.57	0.56
Silver	SB	N/A	U	U	U	U	U	U	U	U	U	U	U	U
Sodium	SB	6,000 - 8,000				38.7 B	34.9 B				14.8 B			
Thallium	SB	N/A				U	U				U			
Vanadium	150 or SB	1 - 300				1.9 B	2.4 B				2.2 B			
Zinc	20 or SB	9 - 50				7.4 *	7.6 JE				7.1 *			
Chromium, hexavalent						U	U				U			
Cyanide						U	U				U			

[1] New York State Department of Environmental Conservation (NYSDEC) Technical & Administrative Guidance Memorandum (TAGM) #4046.
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E – Reported value is estimated due to the presence of interference.
N – Matrix spike sample recovery not within control limits.
U – Parameter was analyzed for but not detected, i.e., less than IDL.
* - Duplicate analysis is not within control limits.

TABLE 4.2.2 (continued). SOIL SAMPLING RESULTS FOR METALS

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	NYSDEC Eastern USA Background[1]	Boring O-4		Boring O-9				Boring P-4				Boring P-9			
			0-2	2-4	0-2	2-4	4-6	8-10	0-2	2-4	4-6	8-10	0-2	2-4	4-6	8-10
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Mercury	0.1	0.001 - 0.2	**0.11**	**0.16**	0.078 B	**3.4**	**0.21**	0.096 B	**0.11**	U	U	0.070 B	U	U	0.063 B	U
Aluminum	SB	33,000				5440 *						5210 *				1100
Antimony	SB	N/A				1.5 B						U				0.57 BJN
Arsenic	7.5 or SB	3 - 12	4.6 JN	3.3 JN	2.3 JN	9.0 JN	1.9 JN	0.89 BJN	4.4	2.2	0.82 B	3.1 JN	4.0	2.9	2.4	1.6
Barium	300 or SB	15 - 600	16.3 B*	25.7 *	21.4 *	223 *	24.1 *	16.5 B*	15.7 B	21.6 B	6.2 B	23.1 *	8.9 B	16.3 B	18.1 B	8.3 B
Beryllium	0.16 or SB	0 - 1.75				0.22 B						0.14 B				0.043 B
Calcium	SB	130 – 35,000				26700 *						845 J*				1270
Cadmium	10	0.1 - 1	0.25 BJN*	4.4 JN*	0.18 BJN*	**16.8 JN***	0.28 BJN*	0.26 BJN*	0.12 B	0.29 B	U	0.45 BJN*	0.41 B	0.63	0.87	0.46 B
Chromium	50	1.5 - 40	31.2 JN*	**117 JN***	23.8 JN*	**62.1 JN***	**141 JN***	29.0 JN*	27.0 JN*	15.3 JN*	8.7 JN*	29.2 JN*	14.5	21.9	**58.0**	**203**
Cobalt	30 or SB	2.5 - 60				3.1 B						3.0 B				1.3 B
Copper	25 or SB	1 - 50				42.3 JN*						17.3 JN*				6.2
Iron	2,000 or SB	2,000 – 550,000				6820						8890				5580
Lead	400	200 - 500	18.7 *	23.7 *	15.4 *	54.8 *	6.3 *	5.5 *	9.9	10.0	2.2	6.2 *	6.8	7.2	17.8	32.1
Magnesium	SB	100 – 5,000				1700 *						986 *				223 B
Manganese	SB	50 – 5,000				152						89.0				34.0 JN
Nickel	13 or SB	0.5 - 25				13.2 *						4.7 *				3.7 B
Potassium	SB	8,500 – 43,000				280 B						264 B				203 BEJ
Selenium	2 or SB	0.1 - 3.9	0.88	0.89	U	2.1	0.57	U	U	0.62	U	U	UN	UN	UN	UN
Silver	SB	N/A	0.31 B	7.9	0.27 B	0.33 B	U	U	0.41 B	0.26 B	U	0.18 B	0.49 B	U	0.80 B	0.49 B
Sodium	SB	6,000 - 8,000				111 B						26.4 B				29.0 B
Thallium	SB	N/A				U						U				U
Vanadium	150 or SB	1 - 300				8.9						16.7				3.2 B
Zinc	20 or SB	9 - 50				**341 ***						35.7 *				**336**
Chromium, hexavalent						U						1.2				**140**
Cyanide						U						U				1.5

[1] New York State Department of Environmental Conservation (NYSDEC) Technical & Administrative Guidance Memorandum (TAGM) #4046.

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E – Reported value is estimated due to the presence of interference.

N – Matrix spike sample recovery not within control limits.

U – Parameter was analyzed for but not detected, i.e., less than IDL.

* - Duplicate analysis is not within control limits.

TABLE 4.2.2 (continued). SOIL SAMPLING RESULTS FOR METALS

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	NYSDEC Eastern USA Background[1]	Boring Q-4				Boring Q-5				Boring Q-6			
			0-2	2-4	4-6	8-10	0-2	2-4	4-6	8-10	0-2	2-4	4-6	8-10
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Mercury	0.1	0.001 - 0.2	0.077 B	0.094 B	**0.13**	U	**0.11**	**0.12**	U	0.057 B	**0.12**	0.063 B	U	0.064 B
Aluminum	SB	33,000				1320				5930				4480
Antimony	SB	N/A				UJN				UJN				UJN
Arsenic	7.5 or SB	3 - 12	3.6	2.0	2.9	0.43 B	2.1	4.0	1.3	2.9	3.1	3.8	0.59 B	2.6
Barium	300 or SB	15 - 600	40.4	71.1	53.9	16.1 B	21.9	28.9	12.4 B	23.9	23.0	26.8	7.6 B	22.3
Beryllium	0.16 or SB	0 - 1.75				UJ				0.16 B				0.12 B
Calcium	SB	130 – 35,000				170 B				305 B				482 B
Cadmium	10	0.1 - 1	2.9	0.62	1.2	0.12 B	0.12 B	0.38 B	UJ	0.28 B	0.71	0.49 B	U	0.37 B
Chromium	50	1.5 - 40	**348 JN***	**315 JN***	**431 JN***	**70.6 JN***	**57.3 JN***	46.6 JN*	11.0 JN*	49.4 JN*	41.4 JN*	34.2 JN*	3.1 JN*	31.2 JN*
Cobalt	30 or SB	2.5 - 60				1.8 B				2.8 B				2.6 B
Copper	25 or SB	1 - 50				3.0 E*J				9.5 E*J				11.8 E*J
Iron	2,000 or SB	2,000 – 550,000				2880				8830				7260
Lead	400	200 - 500	32.2	22.6	29.5	6.1	11.3	36.4	5.1	13.6	21.4	22.0	2.3	16.3
Magnesium	SB	100 – 5,000				215 B				728				616
Manganese	SB	50 – 5,000				26.6 JN				75.9 JN				161 JN
Nickel	13 or SB	0.5 - 25				1.3 B				4.2				4.9
Potassium	SB	8,500 – 43,000				133 BEJ				268 BEJ				313 BEJ
Selenium	2 or SB	0.1 - 3.9	0.60	1.3	0.61	U	U	0.86	0.74	0.54	U	0.71	U	U
Silver	SB	N/A	2.3	0.59 B	0.75 B	U	U	U	U	0.27 B	2.7	1.8	U	1.4
Sodium	SB	6,000 - 8,000				15.7 B				21.9 B				24.4 B
Thallium	SB	N/A				U				0.66 B				0.42 B
Vanadium	150 or SB	1 - 300				3.3 B				11.3				8.9
Zinc	20 or SB	9 - 50				**190**				34.9				36.6
Chromium, hexavalent						**65**				1.5				U
Cyanide						U				U				U

[1] New York State Department of Environmental Conservation (NYSDEC) Technical & Administrative Guidance Memorandum (TAGM) #4046.
B – Parameter detected less than the Contract Required Detection Limit (CRDL) but greater than Instrumentation Detection Limit (IDL).
E – Reported value is estimated due to the presence of interference.
N – Matrix spike sample recovery not within control limits.
U – Parameter was analyzed for but not detected, i.e., less than IDL.
* - Duplicate analysis is not within control limits.

TABLE 4.2.2 (continued). SOIL SAMPLING RESULTS FOR METALS

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	NYSDEC Eastern USA Background[1]	Boring Q-7				Boring Q-8				Boring Q-9			
			0-2	2-4	4-6	8-10	0-2	2-4	4-6	8-10	0-2	2-4	4-6	8-10
	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Mercury	0.1	0.001 - 0.2	**0.21**	0.085 B	0.069 B	**0.14**	**0.43**	**0.16**	**0.18**	U	**0.27**	**0.24**	**0.79**	U
Aluminum	SB	33,000				4500				954				2180
Antimony	SB	N/A				UJN				UJN				UJN
Arsenic	7.5 or SB	3 - 12	5.3	2.2	1.4	4.0	5.2	7.8	**10.6**	0.97 B	6.5	6.0	4.9	1.6
Barium	300 or SB	15 - 600	28.7	31.2	13.3 B	23.0	29.7	35.8	60.4	4.9 B	24.2	20.8	21.0	15.9 B
Beryllium	0.16 or SB	0 - 1.75				0.14 B				UJ				**0.17 B**
Calcium	SB	130 – 35,000				1070				146 B				591
Cadmium	10	0.1 - 1	0.62	1.8	0.85	0.84	1.8	2.3	0.72	U	1.5	1.5	0.64	0.19 B
Chromium	50	1.5 - 40	44.6	12.9	7.6	19.8	**54.7**	**78.1**	25.1	2.0	32.5	38.5	21.0	8.3
Cobalt	30 or SB	2.5 - 60				2.4 B				1.2 B				2.5 B
Copper	25 or SB	1 - 50				21.7				64.5				5.6
Iron	2,000 or SB	2,000 – 550,000				8350				2660				4880
Lead	400	200 - 500	17.1	11.4	6.2	24.0	29.8	30.4	34.0	1.1	22.1	19.6	35.3	5.4
Magnesium	SB	100 – 5,000				749				184 B				378 B
Manganese	SB	50 – 5,000				97.2 JN				58.9 JN				192 JN
Nickel	13 or SB	0.5 - 25				4.2				1.1 B				2.5 B
Potassium	SB	8,500 – 43,000				197 BEJ				123 BEJ				213 BEJ
Selenium	2 or SB	0.1 - 3.9	UN	UN	UN	UN	UN	UN	UN	UN	0.63 JN	UN	UN	UN
Silver	SB	N/A	2.9	3.2	3.5	4.6	2.4	1.1	0.50 B	U	3.1	1.8	1.2	U
Sodium	SB	6,000 - 8,000				40.0 B				16.9 B				22.6 B
Thallium	SB	N/A				U				U				U
Vanadium	150 or SB	1 - 300				11.1				2.6 B				4.9 B
Zinc	20 or SB	9 - 50				**49.9**				8.0				**53.4**
Chromium, hexavalent						U				U				U
Cyanide						U				U				U

[1] New York State Department of Environmental Conservation (NYSDEC) Technical & Administrative Guidance Memorandum (TAGM) #4046.
B – Parameter detected less than the Contract Required Detection Limit (CRDL) but greater than Instrumentation Detection Limit (IDL).
E – Reported value is estimated due to the presence of interference.
N – Matrix spike sample recovery not within control limits.
U – Parameter was analyzed for but not detected, i.e., less than IDL.
* - Duplicate analysis is not within control limits.

TABLE 4.2.3. SOIL SAMPLING RESULTS FOR VOLATILE ORGANIC COMPOUNDS (VOCS)

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	R-1					R-2	R-3			
		2-4 ft	6-8 ft	8-10 ft	28-30 ft	48-50 ft	2-4 ft	2-4 ft	8-10 ft	30-32 ft	48-50 ft
	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
1,1,1 Trichloroethane	800	U	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	600	U	U	U	U	U	U	U	U	U	U
1,1,2 Trichloroethane		U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	200	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	400	U	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	100	U	U	U	U	U	U	U	U	U	U
1,2-Dichloroethene	300	U	U	U	U	U	U	U	U	U	U
1,2 Dichloropropane		U	U	U	U	U	U	U	U	U	U
2-Butanone	300	U	U	U	U	U	U	U	U	U	U
2-Hexanone		U	U	U	U	U	U	U	U	U	U
4-Methyl-2-Pentanone	1000	U	U	U	U	U	U	U	U	U	U
Acetone	200	U	U	U	4 J	U	U	U	U	U	U
Benzene	60	U	U	U	U	U	U	U	U	U	U
Bromodichloromethane		U	U	U	U	U	U	U	U	U	U
Bromoform		U	U	U	U	U	U	U	U	U	U
Bromomethane		U	U	U	U	U	U	U	U	U	U
Carbon Disulfide	2700	U	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	600	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	1700	U	U	U	U	U	U	U	U	U	U
Chlorodifluoromethane		U	U	U	U	U	U	2 J	10 U	U	U
Chloroethane	1900	U	U	U	U	U	U	U	U	U	U
Chloroform	300	U	U	U	U	U	U	U	U	U	U
Chloromethane		U	U	U	U	U	U	U	U	U	U
cis-1,3 Dichloropropene		U	U	U	U	U	U	U	U	U	U
Dibromochloromethane		U	U	U	U	U	U	U	U	U	U
Dichlorodifluoromethane		JU	JU	JU	U	U	JU	JU	JU	U	U
Ethylbenzene	5500	U	U	U	U	U	U	U	U	U	U
Methylene chloride	100	10 U	10 BJ	10 BJ	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Styrene		U	U	U	U	U	U	U	U	U	U
Tetrachloroethene	1400	U	U	U	U	U	U	U	U	U	U
Toluene	1500	U	U	U	U	U	U	U	U	U	U
trans-1,3 Dichloropropene		U	U	U	U	U	U	U	U	U	U
Trichloroethene	700	U	U	U	U	U	U	U	U	U	U
Vinyl chloride	200	U	U	U	U	U	U	U	U	U	U
Xylenes	1200	U	U	U	U	U	U	U	U	U	U
Total	10000	10	10	10	14	10	10	12	20	10	10

(1): New York State Department of Environmental Conservation (NYSDEC) Technical & Administrative Guidance Memorandum (TAGM) #4046.
B – Analyte found in associated blank as well as sample and may indicate blank contamination.
D – Analyte detected in an analysis at a secondary dilution factor.
J – Estimated value.
U – Parameter was analyzed but was not detected.

TABLE 4.2.3 (continued). SOIL SAMPLING RESULTS FOR VOLATILE ORGANIC COMPOUNDS (VOCS)

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	R-4	R-5		R-6				
		6-8 ft	4-6 ft	6-8 ft	2-4 ft	6-8 ft	8-10 ft	28-30 ft	48-50 ft
	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
1,1,1 Trichloroethane	800	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	600	U	U	U	U	U	U	U	U
1,1,2 Trichloroethane		U	U	U	U	U	U	U	U
1,1-Dichloroethane	200	U	U	U	U	U	U	U	U
1,1-Dichloroethene	400	U	U	U	U	U	U	U	U
1,2-Dichloroethane	100	U	U	U	U	U	U	U	U
1,2-Dichloroethene	300	U	U	U	U	U	U	U	U
1,2 Dichloropropane		U	U	U	U	U	U	U	U
2-Butanone	300	U	U	U	U	U	U	U	U
2-Hexanone		U	U	U	U	U	U	U	U
4-Methyl-2-Pentanone	1000	U	U	U	U	U	U	U	U
Acetone	200	U	U	U	U	5 J	U	U	U
Benzene	60	U	U	U	U	U	U	U	U
Bromodichloromethane		U	U	U	U	U	U	U	U
Bromoform		U	U	U	U	U	U	U	U
Bromomethane		U	U	U	U	U	U	U	U
Carbon Disulfide	2700	U	U	U	U	U	U	U	U
Carbon Tetrachloride	600	U	U	U	U	U	U	U	U
Chlorobenzene	1700	U	U	U	U	U	U	U	U
Chlorodifluoromethane		U	U	U	U	U	U	U	U
Chloroethane	1900	U	U	U	U	U	U	U	U
Chloroform	300	U	U	U	U	U	U	U	U
Chloromethane		U	U	U	U	U	U	U	U
cis-1,3 Dichloropropene		U	U	U	U	U	U	U	U
Dibromochloromethane		U	U	U	U	U	U	U	U
Dichlorodifluoromethane		JU	JU	U	U	U	U	U	U
Ethylbenzene	5500	U	U	U	U	U	U	U	U
Methylene chloride	100	10 U	10 U	10 U	11 U	10 U	10 U	10 U	11 U
Styrene		U	U	U	U	U	U	U	U
Tetrachloroethene	1400	U	U	U	U	U	U	U	U
Toluene	1500	U	U	U	U	U	U	U	U
trans-1,3 Dichloropropene		U	U	U	U	U	U	U	U
Trichloroethene	700	U	U	U	U	U	U	U	U
Vinyl chloride	200	U	U	U	U	U	U	U	U
Xylenes	1200	U	U	U	U	U	U	U	U
Total	10000	10	10	10	4	10	10	10	11

(1): New York State Department of Environmental Conservation (NYSDEC) Technical & Administrative Guidance Memorandum (TAGM) #4046.
B – Analyte found in associated blank as well as sample and may indicate blank contamination.
D – Analyte detected in an analysis at a secondary dilution factor.
J – Estimated value.
U – Parameter was analyzed but was not detected.

TABLE 4.2.3 (continued). SOIL SAMPLING RESULTS FOR VOLATILE ORGANIC COMPOUNDS (VOCS)

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	I-13	I-14	J-11	O-9	P-4	P-9	Q-4	Q-5	Q-6	Q-7
		8-10 ft	0-2 ft	0-2 ft	2-4 ft	8-10 ft	8-10 ft	8-10 ft	8-10 ft	8-10 ft	8-10 ft
	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
1,1,1 Trichloroethane	800	U	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	600	U	U	U	U	U	U	U	U	U	U
1,1,2 Trichloroethane		U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	200	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	400	U	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	100	U	U	U	U	U	U	U	U	U	U
1,2-Dichloroethene	300	U	U	U	U	U	8 J	U	1 J	U	U
1,2 Dichloropropane		U	U	U	U	U	U	U	U	U	U
2-Butanone	300	U	U	U	U	U	U	U	U	U	U
2-Hexanone		U	U	U	U	U	U	U	U	U	U
4-Methyl-2-Pentanone	1000	U	U	U	U	U	U	U	U	U	U
Acetone	200	U	U	U	5 J	U	6 J	U	U	U	U
Benzene	60	U	U	U	U	U	U	U	U	U	U
Bromodichloromethane		U	U	U	U	U	U	U	U	U	U
Bromoform		U	U	U	U	U	U	U	U	U	U
Bromomethane		U	U	U	U	U	U	U	U	U	U
Carbon Disulfide	2700	U	U	U	U	U	U	U	U	U	U
Carbon Tetrachloride	600	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	1700	U	U	U	U	U	U	U	U	U	U
Chlorodifluoromethane		U	U	U	U	U	U	U	U	U	U
Chloroethane	1900	U	U	U	U	U	U	U	U	U	U
Chloroform	300	U	U	U	U	U	U	U	U	U	U
Chloromethane		U	U	U	U	U	U	U	U	U	U
cis-1,3 Dichloropropene		U	U	U	U	U	U	U	U	U	U
Dibromochloromethane		U	JU	U	U	U	U	U	U	U	U
Dichlorodifluoromethane		U	U	U	U	U	U	U	U	U	U
Ethylbenzene	5500	U	U	U	U	U	U	U	U	U	U
Methylene chloride	100	10 U	10 U	10 U	11 U	11 U	12 U	10 U	10 U	10 U	10 U
Styrene		U	U	U	U	U	U	U	U	U	U
Tetrachloroethene	1400	U	U	U	U	U	U	U	U	U	U
Toluene	1500	U	U	U	U	U	U	U	3 J	6 J	U
trans-1,3 Dichloropropene		U	U	U	U	U	U	U	U	U	U
Trichloroethene	700	U	U	U	4 J	U	26	U	15	U	2 J
Vinyl chloride	200	U	U	U	U	U	U	U	U	U	U
Xylenes	1200	U	U	U	U	U	U	U	U	4 J	U
Total	10000	10	10	10	20	11	45	10	29	20	12

(1): New York State Department of Environmental Conservation (NYSDEC) Technical & Administrative Guidance Memorandum (TAGM) #4046.
B – Analyte found in associated blank as well as sample and may indicate blank contamination.
D – Analyte detected in an analysis at a secondary dilution factor.
J – Estimated value.
U – Parameter was analyzed but was not detected.

TABLE 4.2.3 (continued). SOIL SAMPLING RESULTS FOR VOLATILE ORGANIC COMPOUNDS (VOCS)

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	Q-8		Q-9	
		8-10		8-10	
	(µg/kg)	(µg/kg)		(µg/kg)	
1,1,1 Trichloroethane	800		U		U
1,1,2,2-Tetrachloroethane	600		U		U
1,1,2 Trichloroethane			U		U
1,1-Dichloroethane	200		U		U
1,1-Dichloroethene	400		U		U
1,2-Dichloroethane	100		U		U
1,2-Dichloroethene	300		U		U
1,2 Dichloropropane			U		U
2-Butanone	300		U		U
2-Hexanone			U		U
4-Methyl-2-Pentanone	1000		U		U
Acetone	200		U		U
Benzene	60		U		U
Bromodichloromethane			U		U
Bromoform			U		U
Bromomethane			U		U
Carbon Disulfide	2700		U		U
Carbon Tetrachloride	600		U		U
Chlorobenzene	1700		U		U
Chlorodifluoromethane			U		U
Chloroethane	1900		U		U
Chloroform	300		U		U
Chloromethane			U		U
cis-1,3 Dichloropropene			U		U
Dibromochloromethane			U		U
Dichlorodifluoromethane			U		U
Ethylbenzene	5500		U		U
Methylene chloride	100	10	U	10	U
Styrene			U		U
Tetrachloroethene	1400		U		U
Toluene	1500		U		U
trans-1,3 Dichloropropene			U		U
Trichloroethene	700		U		U
Vinyl chloride	200		U		U
Xylenes	1200		U		U
Total	10000	10		10	

(1): New York State Department of Environmental Conservation (NYSDEC) Technical & Administrative Guidance Memorandum (TAGM) #4046.
B – Analyte found in associated blank as well as sample and may indicate blank contamination.
D – Analyte detected in an analysis at a secondary dilution factor.
J – Estimated value.
U – Parameter was analyzed but was not detected.

TABLE 4.2.4. SOIL SAMPLING RESULTS FOR SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS)

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	R-1	R-2	R-3	R-3	R-4	R-5
		6-8 ft	2-4 ft	2-4 ft	48-50 ft	6-8 ft	4-6 ft
	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
1,2,4-Trichlorobenzene	3400	U	U	U	U	U	U
1,2-Dichlorobenzene		U	U	U	U	U	U
1,3-Dichlorobenzene	1600	U	U	U	U	U	U
1,4-Dichlorobenzene	8500	U	U	U	U	U	U
2,2´-oxybis(1-chloropropane)		U	U	U	U	U	U
2,4,5-Trichlorophenol	100	U	U	U	U	U	U
2,4,6-Trichlorophenol		U	U	U	U	U	U
2,4-Dichlorophenol	400	U	U	U	U	U	U
2,4-Dimethylphenol		U	U	U	U	U	U
2,4-Dinitrophenol	200 or MDL	U	U	U	U	U	U
2,4-Dinitrotoluene		U	U	U	U	U	U
2,6-Dinitrotoluene	1000	U	U	U	U	U	U
2-Chloronaphthalene		U	U	U	U	U	U
2-Chlorophenol	800	U	U	U	U	U	U
2-Methylnaphthalene	36400	U	U	U	U	U	U
2-Methylphenol	100 or MDL	U	U	U	U	U	U
2-Nitroaniline	430 or MDL	U	U	U	U	U	U
2-Nitrophenol	330 or MDL	U	U	U	U	U	U
3,3´-Dichlorobenzidine		U	U	U	U	U	U
3-Nitroaniline	500 or MDL	U	U	U	U	U	U
4,6-Dinitro-2-methylphenol		U	U	U	U	U	U
4-Bromophenyl-phenylether		U	U	U	U	U	U
4-Chloro-3-methylphenol	240 or MDL	U	U	U	U	U	U
4-Chloroaniline	220 or MDL	U	U	U	U	U	U
4-Chlorophenyl-phenylether		U	U	U	U	U	U
4-Methylphenol	900	U	U	U	U	U	U
4-Nitroaniline		U	U	U	U	U	U
4-Nitrophenol	100 or MDL	U	U	U	U	U	U
Acenaphthene	50000	U	U	U	U	U	U
Acenaphthylene	41000	U	U	U	U	U	U
Anthracene	50000	U	U	U	U	U	U
Benzo(a)anthracene	224 or MDL	U	U	U	U	U	U
Benzo(a)pyrene	61 or MDL	U	U	U	U	U	U
Benzo(b)fluoranthene	1100	U	U	U	U	U	U
Benzo(g,h,i)perylene	50000	U	U	U	U	U	U
Benzo(k)fluoranthene	1100	U	U	U	U	U	U
Bis(2-chloroethoxy)methane		U	U	U	U	U	U
Bis(2-chloroethyl)ether		U	U	U	U	U	U
Bis(2-ethylhexyl)phthalate		U	U	U	310 J	U	82 J
Butyl benzyl phthalate	50000	U	U	U	U	U	U
Carbazole		U	U	U	U	U	U
Chrysene	400	U	U	U	U	U	U
Dibenzo(a,h)anthracene	14 or MDL	U	U	U	U	U	U
Dibenzofuran	6200	U	U	U	U	U	U
Diethylphthalate	7100	U	U	U	140 J	140 J	U
Dimethylphthalate	2000	U	U	U	U	U	U
Di-n-butyl phthalate	8100	U	U	U	U	U	U
Di-n-octyl phthalate	50000	U	U	U	U	U	U
Fluoranthene	50000	U	U	U	U	U	U
Fluorene	50000	U	U	U	U	U	U
Hexachlorobenzene	410	U	U	U	U	U	U
Hexachlorobutadiene		U	U	U	U	U	U
Hexachlorocyclopentadiene		UJ	UJ	UJ	UJ	UJ	UJ
Hexachloroethane		U	U	U	U	U	U
Indeno(1,2,3-cd)pyrene	3200	U	U	U	U	U	U
Isophorone	4400	U	U	U	U	U	U
Naphthalene	13000	U	U	U	U	U	U
Nitrobenzene	200 or MDL	U	U	U	U	U	U
N-Nitroso-di-n-propylamine		U	U	U	U	U	U
N-Nitrosodiphenylamine		U	U	U	U	U	U
Pentachlorophenol	1000 or MDL	UJ	UJ	UJ	UJ	UJ	UJ
Phenanthrene	50000	U	U	U	U	U	U
Phenol	30 or MDL	U	U	U	U	U	U
Pyrene	50000	U	U	U	U	U	U
Total	500000	U	U	U	450	140	82

(1): New York State Department of Environmental Conservation (NYSDEC) Technical & Administrative Guidance Memorandum (TAGM) #4046.
U – Parameter was analyzed but was not detected.
J – Estimated value.

TABLE 4.2.4 (continued). SOIL SAMPLING RESULTS FOR SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS)

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	R-5	R-6	I-13	I-14	J-11	O-9
		6-8 ft	6-8 ft	8-10 ft	0-2 ft	0-2 ft	2-4 ft
	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
1,2,4-Trichlorobenzene	3400	U	U	U	U	U	U
1,2-Dichlorobenzene		U	U	U	U	U	U
1,3-Dichlorobenzene	1600	U	U	U	U	U	U
1,4-Dichlorobenzene	8500	U	U	U	U	U	U
2,2´-oxybis(1-chloropropane)		U	U	U	U	U	U
2,4,5-Trichlorophenol	100	U	U	U	U	U	U
2,4,6-Trichlorophenol		U	U	U	U	U	U
2,4-Dichlorophenol	400	U	U	U	U	U	U
2,4-Dimethylphenol		U	U	U	U	U	U
2,4-Dinitrophenol	200 or MDL	U	U	U	U	U	U
2,4-Dinitrotoluene		U	U	U	U	U	U
2,6-Dinitrotoluene	1000	U	U	U	U	U	U
2-Chloronaphthalene		U	U	U	U	U	U
2-Chlorophenol	800	U	U	U	U	U	U
2-Methylnaphthalene	36400	U	U	U	U	U	870
2-Methylphenol	100 or MDL	U	U	U	U	U	**110** J
2-Nitroaniline	430 or MDL	U	U	U	U	U	U
2-Nitrophenol	330 or MDL	U	U	U	U	U	U
3,3´-Dichlorobenzidine		U	U	U	U	U	U
3-Nitroaniline	500 or MDL	U	U	U	U	U	U
4,6-Dinitro-2-methylphenol		U	U	U	U	U	U
4-Bromophenyl-phenylether		U	U	U	U	U	U
4-Chloro-3-methylphenol	240 or MDL	U	U	U	U	U	U
4-Chloroaniline	220 or MDL	U	U	U	U	U	U
4-Chlorophenyl-phenylether		U	U	U	U	U	U
4-Methylphenol	900	U	U	U	U	U	410
4-Nitroaniline		U	U	U	U	U	U
4-Nitrophenol	100 or MDL	U	U	U	U	U	U
Acenaphthene	50000	U	U	U	U	U	4700
Acenaphthylene	41000	U	U	U	U	U	1500
Anthracene	50000	U	U	U	U	U	8500 D
Benzo(a)anthracene	224 or MDL	U	U	U	U	U	**17000** D
Benzo(a)pyrene	61 or MDL	U	U	U	U	U	**16000** D
Benzo(b)fluoranthene	1100	U	U	U	U	U	**21000** D
Benzo(g,h,i)perylene	50000	U	U	U	U	U	2900
Benzo(k)fluoranthene	1100	U	U	U	U	U	**6500** D
Bis(2-chloroethoxy)methane		U	U	U	U	U	U
Bis(2-chloroethyl)ether		U	U	U	U	U	U
Bis(2-ethylhexyl)phthalate		U	U	140 J	U	U	1600
Butyl benzyl phthalate	50000	U	U	U	U	U	U
Carbazole		U	U	U	U	U	4700
Chrysene	400	U	U	U	U	U	**17000** D
Dibenzo(a,h)anthracene	14 or MDL	U	U	U	U	U	**1700**
Dibenzofuran	6200	U	U	U	U	U	5100
Diethylphthalate	7100	U	83 J	1600	160 J	2600	1800
Dimethylphthalate	2000	U	U	U	U	U	U
Di-n-butyl phthalate	8100	U	U	J	U	U	U
Di-n-octyl phthalate	50000	U	U	U	U	U	U
Fluoranthene	50000	U	U	U	U	U	41000 D
Fluorene	50000	U	U	U	U	U	10000 D
Hexachlorobenzene	410	U	U	U	U	U	U
Hexachlorobutadiene		U	U	U	U	U	U
Hexachlorocyclopentadiene		UJ	UJ	UJ	UJ	UJ	UJ
Hexachloroethane		U	U	U	U	U	U
Indeno(1,2,3-cd)pyrene	3200	U	U	U	U	U	**4400**
Isophorone	4400	U	U	U	U	U	U
Naphthalene	13000	U	U	U	U	U	2300
Nitrobenzene	200 or MDL	U	U	U	U	U	U
N-Nitroso-di-n-propylamine		U	U	U	U	U	U
N-Nitrosodiphenylamine		U	U	U	U	U	U
Pentachlorophenol	1000 or MDL	UJ	UJ	UJ	UJ	UJ	UJ
Phenanthrene	50000	U	U	U	U	U	35000 D
Phenol	30 or MDL	U	U	U	U	U	**280** J
Pyrene	50000	U	U	U	U	U	35000 D
Total	500000	U	83	1740	160	2600	239,370

(1): New York State Department of Environmental Conservation (NYSDEC) Technical & Administrative Guidance Memorandum (TAGM) #4046.
U – Parameter was analyzed but was not detected.
J – Estimated value.

TABLE 4.2.4 (continued). SOIL SAMPLING RESULTS FOR SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS)

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	P-4	P-9	Q-4	Q-5	Q-6	Q-7
		8-10 ft	8-10 ft	8-10 ft	8-10 ft	8-10 ft	8-10 ft
	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)	(µg/kg)
1,2,4-Trichlorobenzene	3400	U	U	U	U	U	U
1,2-Dichlorobenzene		U	U	U	U	U	U
1,3-Dichlorobenzene	1600	U	U	U	U	U	U
1,4-Dichlorobenzene	8500	U	U	U	U	U	U
2,2'-oxybis(1-chloropropane)		U	U	U	U	U	U
2,4,5-Trichlorophenol	100	U	U	U	U	U	U
2,4,6-Trichlorophenol		U	U	U	U	U	U
2,4-Dichlorophenol	400	U	U	U	U	U	U
2,4-Dimethylphenol		U	U	U	U	U	U
2,4-Dinitrophenol	200 or MDL	U	U	U	U	U	U
2,4-Dinitrotoluene		U	U	U	U	U	U
2,6 Dinitrotoluene	1000	U	U	U	U	U	U
2-Chloronaphthalene		U	U	U	U	U	U
2-Chlorophenol	800	U	U	U	U	U	U
2-Methylnaphthalene	36400	U	U	U	U	U	U
2-Methylphenol	100 or MDL	U	U	U	U	U	U
2-Nitroaniline	430 or MDL	U	U	U	U	U	U
2-Nitrophenol	330 or MDL	U	U	U	U	U	U
3,3'-Dichlorobenzidine		U	U	U	U	U	U
3-Nitroaniline	500 or MDL	U	U	U	U	U	U
4,6-Dinitro-2-methylphenol		U	U	U	U	U	U
4-Bromophenyl-phenylether		U	U	U	U	U	U
4-Chloro-3-methylphenol	240 or MDL	U	U	U	U	U	U
4- Chloroaniline	220 or MDL	U	U	U	U	U	U
4-Chlorophenyl-phenylether		U	U	U	U	U	U
4-Methylphenol	900	U	U	U	U	U	U
4-Nitroaniline		U	U	U	U	U	U
4-Nitrophenol	100 or MDL	U	U	U	U	U	U
Acenaphthene	50000	160 J	U	U	U	130 J	U
Acenaphthylene	41000	U	U	U	U	U	U
Anthracene	50000	390	U	U	U	220 J	U
Benzo(a)anthracene	224 or MDL	1400	260 J	170 J	U	**600**	**240** J
Benzo(a)pyrene	61 or MDL	1200	230 J	160 J	U	**400**	**170** J
Benzo(b)fluoranthene	1100	1500	390	230 J	U	560	260 J
Benzo(g,h,i)perylene	50000	640	140 J	78 J	U	180 J	100 J
Benzo(k)fluoranthene	1100	730	130 J	86 J	U	250 J	86 J
bis(2-Chloroethoxy)methane		U	U	U	U	U	U
bis(2-chloroethyl)ether		U	U	U	U	U	U
bis(2-ethylhexyl)phthalate		130 J	230 J	200 J	120 J	110 J	U
Butyl benzyl phthlate	50000	U	U	U	U	U	U
Carbazole		150 J	U	U	U	140 J	U
Chrysene	400	1400	230 J	180 J	U	**450**	200 J
Dibenz(a,h)anthracene	14 or MDL	210 J	U	U	U	73 J	U
Dibenzofuran	6200	U	U	U	U	U	U
Diethylphthlate	7100	1800	1700	2200	2100	2000	1200
Dimethylphthlate	2000	U	U	U	U	340 U	U
Di-n-butyl phthalate	8100	U	U	140 J	100 J	94 J	U
Di-n-octyl phthlate	50000	U	U	U	U	U	U
Fluoranthene	50000	3100	440	300 J	70 J	1200	390
Fluorene	50000	170 J	U	U	U	100 J	U
Hexachlorobenzene	410	U	U	U	U	U	U
Hexachlorobutadiene		U	U	U	U	U	U
Hexachlorocyclopentadiene		UJ	UJ	UJ	UJ	UJ	UJ
Hexachloroethane		U	U	U	U	U	U
Indeno (1,2,3-cd)pyrene	3200	740	170 J	100 J	U	240 J	110 J
Isophorone	4400	U	U	U	U	U	U
Naphthalene	13000	U	U	U	U	88 J	U
Nitrobenzene	200 or MDL	U	U	U	U	U	U
N-Nitroso-di-n-propylamine		U	U	U	U	U	U
N-Nitrosodiphenylamine		U	U	U	U	U	U
Pentachlorophenol	1000 or MDL	UJ	UJ	UJ	UJ	UJ	UJ
Phenanthrene	50000	1800	340 J	170 J	U	910	210 J
Phenol	30 or MDL	U	U	U	U	U	U
Pyrene	50000	2500	420	300 J	72 J	830	370
Total	500000	18020	4680	4314	2462	8915	3336

(1): New York State Department of Environmental Conservation (NYSDEC) Technical & Administrative Guidance Memorandum (TAGM) #4046.
U – Parameter was analyzed but was not detected.
J – Estimated value.

TABLE 4.2.4 (continued). SOIL SAMPLING RESULTS FOR SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS)

Parameter	NYSDEC Recommended Soil Cleanup Objective[1]	Q-8	Q-9
		8-10 ft	8-10 ft
	(µg/kg)	(µg/kg)	(µg/kg)
1,2,4-Trichlorobenzene	3400	U	U
1,2-Dichlorobenzene		U	U
1,3-Dichlorobenzene	1600	U	U
1,4-Dichlorobenzene	8500	U	U
2,2'-oxybis(1-chloropropane)		U	U
2,4,5-Trichlorophenol	100	U	U
2,4,6-Trichlorophenol		U	U
2,4-Dichlorophenol	400	U	U
2,4-Dimethylphenol		U	U
2,4-Dinitrophenol	200 or MDL	U	U
2,4-Dinitrotoluene		U	U
2,6 Dinitrotoluene	1000	U	U
2-Chloronaphthalene		U	U
2-Chlorophenol	800	U	U
2-Methylnaphthalene	36400	U	U
2-Methylphenol	100 or MDL	U	U
2-Nitroaniline	430 or MDL	U	U
2-Nitrophenol	330 or MDL	U	U
3,3'-Dichlorobenzidine		U	U
3-Nitroaniline	500 or MDL	U	U
4,6-Dinitro-2-methylphenol		U	U
4-Bromophenyl-phenylether		U	U
4-Chloro-3-methylphenol	240 or MDL	U	U
4- Chloroaniline	220 or MDL	U	U
4-Chlorophenyl-phenylether		U	U
4-Methylphenol	900	U	U
4-Nitroaniline		U	U
4-Nitrophenol	100 or MDL	U	U
Acenaphthene	50000	U	U
Acenaphthylene	41000	U	U
Anthracene	50000	U	U
Benzo(a)anthracene	224 or MDL	U	U
Benzo(a)pyrene	61 or MDL	U	U
Benzo(b)fluoranthene	1100	U	U
Benzo(g,h,i)perylene	50000	U	U
Benzo(k)fluoranthene	1100	U	U
bis(2-Chloroethoxy)methane		U	U
bis(2-chloroethyl)ether		U	U
bis(2-ethylhexyl)phthalate		U	93 J
Butyl benzyl phthlate	50000	U	U
Carbazole		U	U
Chrysene	400	U	U
Dibenz(a,h)anthracene	14 or MDL	U	U
Dibenzofuran	6200	U	U
Diethylphthlate	7100	1400	1300
Dimethylphthlate	2000	U	U
Di-n-butyl phthalate	8100	U	U
Di-n-octyl phthlate	50000	U	U
Fluoranthene	50000	U	150 J
Fluorene	50000	U	U
Hexachlorobenzene	410	U	U
Hexachlorobutadiene		U	U
Hexachlorocyclopentadiene		UJ	UJ
Hexachloroethane		U	U
Indeno (1,2,3-cd)pyrene	3200	U	U
Isophorone	4400	U	U
Naphthalene	13000	U	U
Nitrobenzene	200 or MDL	U	U
N-Nitroso-di-n-propylamine		U	U
N-Nitrosodiphenylamine		U	U
Pentachlorophenol	1000 or MDL	UJ	UJ
Phenanthrene	50000	U	100 J
Phenol	30 or MDL	U	U
Pyrene	50000	U	130 J
Total	500000	1400	1773

(1): New York State Department of Environmental Conservation (NYSDEC) Technical & Administrative Guidance Memorandum (TAGM) #4046.
U – Parameter was analyzed but was not detected.
J – Estimated value.

TABLE 4.3.1. SOIL VAPOR SAMPLING RESULTS FOR VOLATILE ORGANIC COMPOUNDS (VOCS)

Parameter	Samples Collected on 9-27-2005	R1	R1	R1
	Ambient 9-27-2005	10-12 ft	28-30 ft	48-50 ft
	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)	($\mu g/m^3$)
1,1,1-Trichloroethane	U	U	U	U
1,1,2,2-Tetrachloroethane	U	U	U	U
1,1,2-Trichloroethane	U	U	U	U
1,1-Dichloroethane	U	U	U	U
1,1-Dichloroethene	U	U	U	U
1,2,4-Trichlorobenzene	U	U	U	U
1,2,4-Trimethylbenzene	U	U	U	U
1,2-Dibromoethane	U	U	U	U
1,2-Dichlorobenzene	U	U	U	U
1,2-Dichloroethane	U	U	U	U
1,2-Dichloroethene (total)	U	U	U	U
1,2-Dichloropropane	U	U	U	U
1,2-Dichlorotetrafluoroethane	U	U	U	U
1,3,5-Trimethylbenzene	U	U	U	U
1,3-Butadiene	U	U	U	U
1,3-Dichlorobenzene	U	U	U	U
1,4-Dichlorobenzene	U	U	U	U
1,4-Dioxane	U	U	U	U
2,2,4-Trimethylpentane	U	U	2800 D	4200 D
2-Chlorotoluene	U	U	U	U
3-Chloropropene	U	U	U	U
4-Ethyltoluene	U	U	U	U
Acetone	U	U	U	U
Benzene	U	U	U	U
Bromodichloromethane	U	U	U	U
Bromoethene	U	U	U	U
Bromoform	U	U	U	U
Bromomethane	U	U	U	U
Carbon Disulfide	U	U	U	690 D
Carbon Tetrachloride	U	U	U	U
Chlorobenzene	U	U	U	U
Chloroethane	U	U	U	U
Chloroform	U	U	U	U
Chloromethane	U	U	U	U
cis-1,2-Dichloroethene	U	U	U	U
cis-1,3-Dichloropropene	U	U	U	U
Cyclohexane	U	U	U	U
Dibromochloromethane	U	U	U	U
Dichlorodifluoromethane	3.1	590000 D	280000 D	44000 D
Ethylbenzene	U	U	U	U
Freon TF	U	U	U	U
Hexachlorobutadiene	U	U	U	U
Isopropyl Alcohol	U	U	U	U
Methyl Butyl Ketone	U	U	U	U
Methyl Ethyl Ketone	U	26000 D	U	1700 D
Methyl Isobutyl Ketone	U	U	U	U
Methyl tert-Butyl Ether	U	U	U	U
Methylene Chloride	U	U	U	U
n-Heptane	U	U	U	U
n-Hexane	U	19000 D	U	U
Styrene	U	U	U	U
tert-Butyl Alcohol	U	U	U	U
Tetrachloroethene	U	U	U	U
Tetrahydrofuran	U	U	U	U
Toluene	U	U	U	490 D
trans-1,2-Dichloroethene	U	U	U	U
trans-1,3-Dichloropropene	U	U	U	U
Trichloroethene	U	U	U	U
Trichlorofluoromethane	1.5	U	U	U
Vinyl Chloride	U	U	U	U
Xylene (m,p)	U	U	U	U
Xylene (o)	U	U	U	U
Xylene (total)	U	U	U	U

E – Parameter detected above the upper calibration range limit.
U – Parameter was analyzed but was not detected above the reporting limit.
J – Estimated value.

TABLE 4.3.1 (continued). SOIL VAPOR SAMPLING RESULTS FOR VOLATILE ORGANIC COMPOUNDS (VOCS)

Parameter	Samples Collected on 9-28-2005	R3	R3	R3	R6	R6	R6
	Ambient 9-28-2005	8-10 ft	28-30 ft	48-50 ft	8-10 ft	28-30 ft	48-50 ft
	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)	(µg/m³)
1,1,1-Trichloroethane	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	U	U	U	U	U	U	U
1,1,2-Trichloroethane	U	U	U	U	U	U	U
1,1-Dichloroethane	U	U	U	U	U	U	U
1,1-Dichloroethene	U	U	U	U	U	U	U
1,2,4-Trichlorobenzene	U	U	U	U	U	U	U
1,2,4-Trimethylbenzene	U	U	U	U	U	U	U
1,2-Dibromoethane	U	U	U	U	U	U	U
1,2-Dichlorobenzene	U	U	U	U	U	U	U
1,2-Dichloroethane	U	U	U	U	U	U	U
1,2-Dichloroethene (total)	U	U	U	U	U	U	U
1,2-Dichloropropane	U	U	U	U	U	U	U
1,2-Dichlorotetrafluoroethane	U	U	U	U	U	U	U
1,3,5-Trimethylbenzene	U	U	U	U	U	U	U
1,3-Butadiene	U	U	U	U	U	U	U
1,3-Dichlorobenzene	U	U	U	U	U	U	U
1,4-Dichlorobenzene	U	U	U	U	U	U	U
1,4-Dioxane	U	U	U	U	U	U	U
2,2,4-Trimethylpentane	0.98	1400	2800	3600	1300	2600	3900
2-Chlorotoluene	U	U	U	U	U	U	U
3-Chloropropene	U	U	U	U	U	U	U
4-Ethyltoluene	U	U	U	U	U	U	U
Acetone	U	U	U	U	7600	3100	3100
Benzene	0.77	U	U	U	U	U	U
Bromodichloromethane	U	U	U	U	U	U	U
Bromoethene	U	U	U	U	U	U	U
Bromoform	U	U	U	U	U	U	U
Bromomethane	U	U	U	U	U	U	U
Carbon Disulfide	U	1500	4000	4400	3700	1400	1300
Carbon Tetrachloride	U	U	U	U	U	U	U
Chlorobenzene	U	U	U	U	U	U	U
Chloroethane	U	U	U	U	U	U	U
Chloroform	U	U	U	U	U	U	U
Chloromethane	1.6	U	U	U	U	U	U
cis-1,2-Dichloroethene	U	U	U	U	U	U	U
cis-1,3-Dichloropropene	U	U	U	U	U	U	U
Cyclohexane	U	U	U	U	U	U	180
Dibromochloromethane	U	U	U	U	U	U	U
Dichlorodifluoromethane	19	48000	190000	110000	64000	10000	28000
Ethylbenzene	U	U	U	U	U	110	U
Freon TF	15	U	U	U	U	U	U
Hexachlorobutadiene	U	U	U	U	U	U	U
Isopropyl Alcohol	U	9800 J	21000 J	17000 J	17000 J	6900 J	7100
Methyl Butyl Ketone	U	U	U	U	U	U	U
Methyl Ethyl Ketone	U	830	6200	1800	1500	590	5900
Methyl Isobutyl Ketone	U	U	U	U	U	U	U
Methyl tert-Butyl Ether	U	U	U	U	U	U	U
Methylene Chloride	1.9	U	U	U	U	190	420
n-Heptane	U	U	U	U	U	U	U
n-Hexane	0.92	U	U	U	U	160	170
Styrene	U	U	U	U	U	100	U
tert-Butyl Alcohol	U	U	U	U	U	U	U
Tetrachloroethene	U	U	U	U	U	U	U
Tetrahydrofuran	U	U	U	U	U	U	U
Toluene	2.3	1100	2000	2000	2100	870	830
trans-1,2-Dichloroethene	U	U	U	U	U	U	U
trans-1,3-Dichloropropene	U	U	U	U	U	U	U
Trichloroethene	U	U	U	U	U	U	U
Trichlorofluoromethane	4.2	U	U	U	U	U	U
Vinyl Chloride	U	U	U	U	U	U	U
Xylene (m,p)	U	U	U	U	520	290	280
Xylene (o)	U	U	U	U	U	91	U
Xylene (total)	U	U	U	U	520	380	270

E – Parameter detected above the upper calibration range limit.
U – Parameter was analyzed but was not detected above the reporting limit.
J – Estimated value.

TABLE 4.4.1. GROUNDWATER SAMPLING RESULTS FOR PCBS

Parameter	NYSDEC Class GA Groundwater Standard[1]	CAMW-1		CAMW-2		CAMW-3		CAMW-4		CAMW-5	
	(µg/L)	(µg/L)		(µg/L)		(µg/L)		(µg/L)		(µg/L)	
Aroclor 1016		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Aroclor 1221		2.0	U	2.0	U	2.0	U	2.0	U	2.0	U
Aroclor 1232		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Aroclor 1242		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Aroclor 1248		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Aroclor 1254		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Aroclor 1260		1.0	U	1.0	U	1.0	U	1.0	U	1.0	U
Total	0.09		U		U		U		U		U

[1] 6 NYCRR Part 703

U – Compound was analyzed for but not detected, i.e., less than the IDL.

* Data for wells CAMW-1 through CAMW-4 reported from initial IRM field investigation.

TABLE 4.4.2. GROUNDWATER SAMPLING RESULTS FOR METALS

Parameter	NYSDEC Class GA Groundwater Standard[1]	CAMW-1		CAMW-2		CAMW-3		CAMW-4		CAMW-5	
	(µg/l)	(µg/l)		(µg/l)		(µg/l)		(µg/l)		(µg/l)	
Mercury	0.7	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U
Aluminum	2000[2]	74.6	BU	48.8	BU	56.8	BU	55.4	BU	350	JE
Antimony	3	3.3	U	3.3	U	3.3	U	3.3	U	2.1	U
Arsenic	25	5.6	U	5.6	U	5.6	U	5.6	U	1.7	U
Barium	1000	19.0	B	69.4	B	62.5	B	79.5	B	89.4	B
Beryllium		17.1	U	17.1	U	17.1	U	17.1	U	0.10	U
Calcium		15600		49200		95300		61400		18400	
Cadmium	5	0.37	U	0.37	U	0.52	B	0.37	U	0.26	U
Chromium	50	4.5	BU	2.5	BU	2.8	BU	4.0	BU	0.70	B
Cobalt		1.1	U	4.5	B	1.1	U	3.8	B	4.3	B
Copper	200	2.1	B	0.98	U	2.3	B	1.4	B	1.6	B
Iron	300	76.9	BU	44.7	BU	59.1	BU	62.1	BU	299	
Lead	25	1.2	U	1.2	U	1.2	U	1.2	U	1.3	U
Magnesium		1290	B	7880		5680		7620		4290	B
Manganese	300	12.7	B	16.3		11.3	B	77.1		152	
Nickel	100	2.0	U	2.0	U	2.0	U	3.7	B	2.1	B
Potassium		10100	EJ	7280	EJ	8640	EJ	15400	EJ	3280	B
Selenium	10	5.4	U	5.4	U	5.4	U	5.4	U	2.0	U
Silver	50	3.6	U	3.6	U	3.6	U	3.6	U	0.60	U
Sodium	20000	**30500**		**59800**		**105000**		**44200**	E	**44300**	E
Thallium		5.0	U	5.0	U	5.0	U	5.0	U	1.7	U
Vanadium		5.4	U	5.4	U	5.4	U	5.4	U	1.3	U
Zinc	5000	18.2	BU	17.5	BU	51.1	U	54.1	U	8.8	B
Chromium, hexavalent (mg/l)		1.1	U	0.02	U	0.02	U	0.02	U	0.02	U
Cyanide		0.57	U	10.0	U	10.0	U	10.0	U	10.0	U

[1] 6 NYCRR Part 703
[2] Effluent Limitation
B – Reported value is less than the Contract Required Detection Limit (CRDL) but greater than the Instrument Detection Limit (IDL).
E – Reported value is estimated due to the presence of interference.
U – Compound was analyzed for but not detected, i.e., less than the IDL.
* Data for wells CAMW-1 through CAMW-4 reported from initial IRM field investigation.

TABLE 4.4.3. GROUNDWATER SAMPLING RESULTS FOR VOLATILE ORGANIC COMPOUNDS (VOCS)

Parameter	NYSDEC Class GA Groundwater Standard[1]	CAMW-1	CAMW-2	CAMW-3	CAMW-4	CAMW-5
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
1,1,1 Trichloroethane	5.0	10 U	8 J	10 U	10 U	10 U
1,1,2,2-Tetrachloroethane	5.0	10 U	10 U	10 U	10 U	10 U
1,1,2 Trichloroethane	1.0	10 U	10 U	10 U	10 U	10 U
1,1-Dichloroethane	5.0	10 U	11	4 J	10 U	10 U
1,1-Dichloroethene	5.0	10 U	10	2 J	10 U	10 U
1,2-Dichloroethane	0.6	10 U	10 U	10 U	10 U	10 U
1,2-Dichloroethene	5.0	**20**	**590**	**1400**	**32**	10 U
1,2 Dichloropropane	1.0	10 U	10 U	10 U	10 U	10 U
2-Butanone	50	10 U	10 U	10 U	10 U	10 U
2-Hexanone	50	10 U	10 U	10 U	10 U	10 U
4-Methyl-2-Pentanone		10 U	10 U	10 U	10 U	10 U
Acetone	50	10 U	10 U	10 U	10 U	10 U
Benzene	1.0	10 U	10 U	10 U	10 U	10 U
Bromodichloromethane	50	10 U	10 U	10 U	10 U	10 U
Bromoform	50	10 U	10 U	10 U	10 U	10 UJ
Bromomethane	5.0	10 U	10 U	10 U	10 U	10 U
Carbon Disulfide		10 U	10 U	10 U	10 U	10 U
Carbon Tetrachloride	5.0	10 U	10 U	10 U	10 U	10 U
Chlorobenzene	5.0	10 U	10 U	10 U	10 U	10 U
Chloroethane	5.0	10 U	10 U	10 U	10 U	10 U
Chloroform	7.0	1 J	10 U	2 J	1 J	10 U
Chloromethane		10 U	10 U	10 U	10 U	10 U
cis-1,3 Dichloropropene	0.4	10 U	10 U	10 U	10 U	10 U
Dibromochloromethane	50	10 U	10 U	10 U	10 U	10 U
Ethylbenzene	5.0	10 U	10 U	10 U	10 U	10 U
Methyl-t-butyl ether	5.0	10 U	10 U	10 U	10 U	10 U
Methylene chloride	5.0	10 U	10 U	10 U	10 U	10 U
Styrene	5.0	10 U	2 J	3 J	10 U	10 U
Tetrachloroethene	5.0	10 U	10 U	10 U	10 U	10 U
Toluene	5.0	10 U	10 U	10 U	10 U	10 U
trans-1,3 Dichloropropene	0.4	**11**	**170**	**54**	**5** J	10 U
Trichloroethene	5.0	10 U	10 U	10 U	10 U	10 U
Vinyl chloride	2.0	10 U	10 U	10 U	10 U	10 U
Xylenes	5.0	10 U	8 J	10 U	10 U	10 U
Chlorodifluoromethane[2]	5.0	--	--	--	**200** J N	10 U

[1] 6 NYCRR Part 703.
[2] Tentatively Identified Compound (TIC).
D – Compound identified in an analysis at a secondary dilution factor.
J – Estimated value.
N – Indicates presumptive evidence of a TIC.
U – Compound analyzed for but not detected.
* Data for wells CAMW-1 through CAMW-4 reported from initial IRM field investigation.

TABLE 4.4.4. GROUNDWATER SAMPLING RESULTS SEMI-VOLATILE ORGANIC COMPOUNDS (SVOCS)

Parameter	NYSDEC Class GA Groundwater Standard[1]	CAMW-1		CAMW-2		CAMW-3		CAMW-4		CAMW-5	
	(µg/l)	(µg/l)		(µg/l)		(µg/l)		(µg/l)		(µg/l)	
1,2,4-Trichlorobenzene	5	10	U	10	U	10	U	10	U	10	U
1,2-Dichlorobenzene	3	10	U	10	U	10	U	10	U	10	U
1,3-Dichlorobenzene	3	10	U	10	U	10	U	10	U	10	U
1,4-Dichlorobenzene	3	10	U	10	U	10	U	10	U	10	U
2,2'-oxybis(1-chloropropane)	--	10	U	10	U	10	U	10	U	10	U
2,4,5-Trichlorophenol	--	25	U	25	U	25	U	25	U	25	U
2,4,6-Trichlorophenol	--	10	U	10	U	10	U	10	U	10	U
2,4-Dichlorophenol	5	10	U	10	U	10	U	10	U	10	U
2,4-Dimethylphenol	50	10	U	10	U	10	U	10	U	10	U
2,4-Dinitrophenol	10	25	U	25	U	25	U	25	U	25	U
2,4-Dinitrotoluene	50	10	U	10	U	10	U	10	U	10	U
2,6 Dinitrotoluene	5	10	U	10	U	10	U	10	U	10	U
2-Chloronaphthalene	10	10	U	10	U	10	U	10	U	10	U
2-Chlorophenol	--	10	U	10	U	10	U	10	U	10	U
2-Methylnaphthalene	--	10	U	10	U	10	U	10	U	10	U
2-Methylphenol	--	10	U	10	U	10	U	10	U	10	U
2-Nitroaniline	5	25	U	25	U	25	U	25	U	25	U
2-Nitrophenol	--	10	U	10	U	10	U	10	U	10	U
3,3'-Dichlorobenzidine	5	10	U	10	U	10	U	10	U	10	U
3-Nitroaniline	5	25	U	25	U	25	U	25	U	25	U
4,6-Dinitro-2-methylphenol	--	25	U	25	U	25	U	25	U	25	U
4-Bromophenyl-phenylether	--	10	U	10	U	10	U	10	U	10	U
4-Chloro-3-methylphenol	--	10	U	10	U	10	U	10	U	10	U
4- Chloroaniline	5	10	U	10	U	10	U	10	U	10	U
4-Chlorophenyl-phenylether	--	10	U	10	U	10	U	10	U	10	U
4-Methylphenol	--	10	U	10	U	10	U	10	U	10	U
4-Nitroaniline	5	25	U	25	U	25	U	25	U	25	U
4-Nitrophenol	--	25	U	25	U	25	U	25	U	25	U
Acenaphthene	20	10	U	10	U	10	U	10	U	10	U
Acenaphthylene	--	10	U	10	U	10	U	10	U	10	U
Anthracene	50	10	U	10	U	10	U	10	U	10	U
Benzo(a)anthracene	0.002	10	U	10	U	10	U	10	U	10	U
Benzo(a)pyrene	--	10	U	10	U	10	U	10	U	10	U
Benzo(b)fluoranthene	0.002	10	U	10	U	10	U	10	U	10	U
Benzo(g,h,i)perylene	--	10	U	10	U	10	U	10	U	10	U
Benzo(k)fluoranthene	0.002	10	U	10	U	10	U	10	U	10	U
bis(2-Chloroethoxy)methane	5	10	U	10	U	10	U	10	U	10	U
bis(2-chloroethyl)ether	5	10	U	10	U	10	U	10	U	10	U
bis(2-ethylhexyl)phthalate	5	10	U	10	U	10	U	10	U	10	U
Butyl benzyl phthlate	50	10	U	10	U	10	U	10	U	10	U
Carbazole	--	10	U	10	U	10	U	10	U	10	U
Chrysene	0.002	10	U	10	U	10	U	10	U	10	U
Dibenz(a,h)anthracene	--	10	U	10	U	10	U	10	U	10	U
Dibenzofuran	--	10	U	10	U	10	U	10	U	10	U
Diethylphthlate	50	10	U	10	U	10	U	10	U	10	U
Dimethylphthlate	50	10	U	10	U	10	U	10	U	10	U
Di-n-butyl phthalate	--	10	U	10	U	10	U	10	U	10	U
Di-n-octyl phthlate	50	10	UJ	10	UJ	10	UJ	10	UJ	10	U
Fluoranthene	50	10	U	10	U	10	U	10	U	10	U
Fluorene	50	10	U	10	U	10	U	10	U	10	U
Hexachlorobenzene	0.04	10	U	10	U	10	U	10	U	10	U
Hexachlorobutadiene	0.5	10	U	10	U	10	U	10	U	10	U
Hexachlorocyclopentadiene	5	10	U	10	U	10	U	10	U	10	U
Hexachloroethane	5	10	U	10	U	10	U	10	U	10	U
Indeno (1,2,3-cd)pyrene	0.002	10	U	10	U	10	U	10	U	10	U
Isophorone	50	10	U	10	U	10	U	10	U	10	U
Naphthalene	10	10	U	10	U	10	U	10	U	10	U
Nitrobenzene	0.4	10	U	10	U	10	U	10	U	10	U
N-Nitroso-di-n-propylamine	50	10	U	10	U	10	U	10	U	10	U
N-Nitrosodiphenylamine	50	10	U	10	U	10	U	10	U	10	U
Pentachlorophenol	5	25	U	25	U	25	U	25	U	25	U
Phenanthrene	50	10	U	10	U	10	U	10	U	10	U
Phenol	1.0	10	U	10	U	10	U	10	U	10	U
Pyrene	50	10	U	10	U	10	U	10	U	10	U

[1] 6 NYCRR Part 703.

U – Compound analyzed for but not detected.

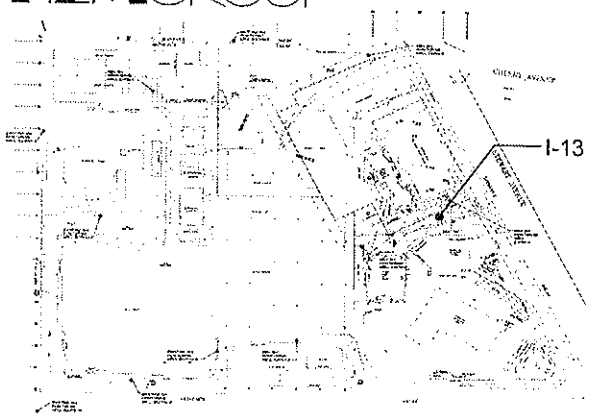
* Data for wells CAMW-1 through CAMW-4 reported from initial IRM field investigation.

Table 5.1.1. QA/QC TRIP BLANK SAMPLING RESULTS FOR VOLATILE ORGANIC COMPOUNDS

Parameter	TB-47	TB-51	TB-52	TB-53
	(µg/L)	(µg/L)	(µg/L)	(µg/L)
1,1,1 Trichloroethane	U	U	U	U
1,1,2,2-Tetrachloroethane	U	U	U	U
1,1,2 Trichloroethane	U	U	U	U
1,1-Dichloroethane	U	U	U	U
1,1-Dichloroethene	U	U	U	U
1,2-Dichloroethane	U	U	U	U
1,2-Dichloroethene	U	U	U	U
1,2 Dichloropropane	U	U	U	U
2-Butanone	U	U	U	U
2-Hexanone	U	U	U	U
4-Methyl-2-Pentanone	U	U	U	U
Acetone	U	U	U	U
Benzene	U	U	U	U
Bromodichloromethane	U	U	U	U
Bromoform	U	U	U	U
Bromomethane	U	U	U	U
Carbon Disulfide	U	U	U	U
Carbon Tetrachloride	U	U	U	U
Chlorobenzene	U	U	U	U
Chlorodifluoromethane	U	U	U	U
Chloroethane	U	U	U	U
Chloroform	U	U	U	U
Chloromethane	U	U	U	U
cis-1,3 Dichloropropene	U	U	U	U
Dibromochloromethane	U	U	U	U
Dichlorodifluoromethane	U	U	U	U
Ethylbenzene	U	U	U	U
Methylene chloride	U	U	U	U
Styrene	U	U	U	U
Tetrachloroethene	U	U	U	U
Toluene	U	U	U	U
trans-1,3 Dichloropropene	U	U	U	U
Trichloroethene	U	U	U	U
Vinyl chloride	U	U	U	U
Xylenes	U	U	U	U
Total	U	U	U	U

(1) 6 NYCRR Part 703.
U – Compound analyzed for but not detected.

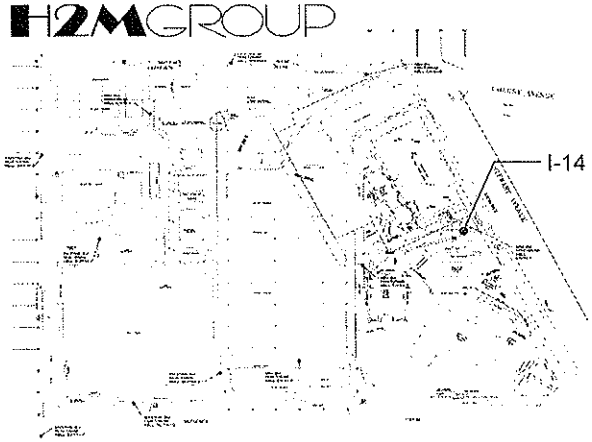
H2MGROUP



Boring # I-13	MW#	Page 1	of 1
PROJECT: **Bethpage Park, Construction Area**			
JOB # **TOBY 0402**			
LOGGED BY:	EVT	PRJ. MNGR.:	PRL
DRILLING CONTRACTOR: Universal Testing & Inspection Services			
DRILL METHOD: Geoprobe			
DRILLER:			
Borehole diameter/drill bit type:	total depth	10'	
	elevation		
HAMMER WT:	DROP:		
START TIME:	DATE: 9/22/05		
COMPLETION TIME:	DATE: 9/22/05		
BACKFILL TIME:	DATE:		
	Casing depth:		
	Screen depth:		

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes
0-4	4	3	Tan, sandy SW w/ cobble	PID: O.O
4-8	4	4	Tan/brown SW	PID: O.O
8-10	4	4	Tan, sandy Sw w/ cobble, crushed rock	PID: O.O

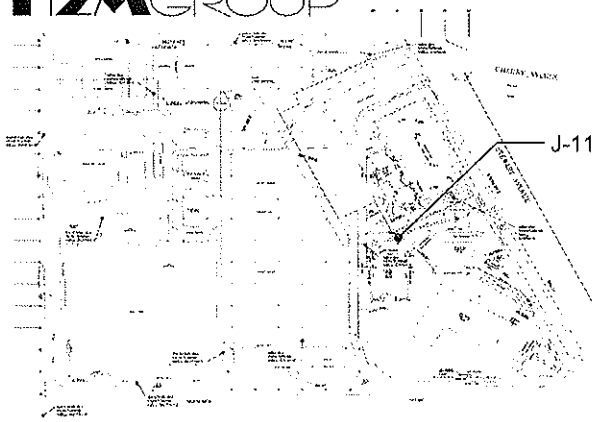
H2MGROUP



Boring # I-14	MW#	Page 1	of 1
PROJECT: **Bethpage Park, Construction Area**			
JOB # **TOBY 0402**			
LOGGED BY:	EVT	PRJ. MNGR.:	PRL
DRILLING CONTRACTOR: Universal Testing & Inspection Services			
DRILL METHOD: Geoprobe			
DRILLER:			
Borehole diameter/drill bit type:		total depth	10'
		elevation	
HAMMER WT:		DROP:	
START TIME:		DATE: 9/23/05	
COMPLETION TIME:		DATE: 9/23/05	
BACKFILL TIME:		DATE:	

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes	Casing depth: / Screen depth:
0-4	4	2	Tan, sandy Sw w/ cobble	PID: O.O MS/MSD (0'-2')	
4-8	4	4	Tan/brown SW	PID: O.O BD (4'-6')	
8-10	2'	1'6"	Tan, sandy Sw w/ cobble, crushed rock	PID: O.O	

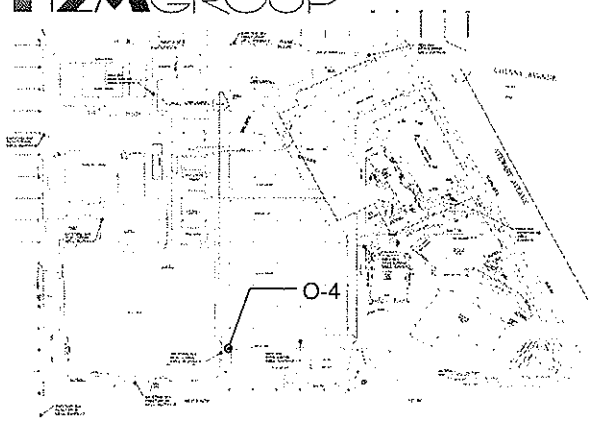
H2MGROUP



Boring # J-11	MW#	Page 1	of 1
PROJECT: **Bethpage Park, Construction Area**			
JOB # **TOBY 0402**			
LOGGED BY:	EVT	PRJ. MNGR.:	PRL
DRILLING CONTRACTOR: Universal Testing & Inspection Services			
DRILL METHOD: Geoprobe			
DRILLER:			
Borehole diameter/drill bit type:	total depth	10'	
	elevation		
HAMMER WT:	DROP:		
START TIME:	DATE: 9/22/05		
COMPLETION TIME:	DATE: 9/22/05		
BACKFILL TIME:	DATE:		

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes	Casing depth: / Screen depth:
0-4	4	2'6"	Tan, sandy Sw w/ cobble	PID: O.O	
4-8	4	3'	Tan/brown SW. Cobble, wood	PID: O.O	
8-10	2'	1'	Tan, sandy Sw	PID: O.O	

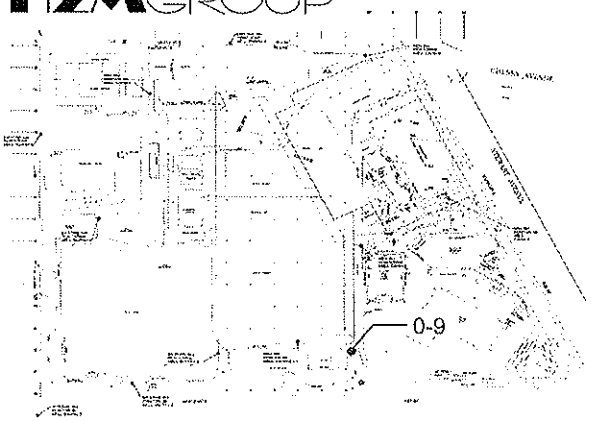
H2MGROUP



Boring # O-4	MW#	Page 1	of 1
PROJECT: **Bethpage Park, Construction Area**			
JOB # **TOBY 0402**			
LOGGED BY:	EVT	PRJ. MNGR.:	PRL
DRILLING CONTRACTOR: Universal Testing & Inspection Service			
DRILL METHOD: GEOPROBE			
DRILLER:			
Borehole diameter/drill bit type: 2"		total depth	10'
		elevation	
HAMMER WT:		DROP:	
START TIME:		DATE: 9/22/05	
COMPLETION TIME:		DATE: 9/22/05	
BACKFILL TIME:		DATE:	

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes	Casing depth: / Screen depth:
0-4	4'	4'	Refusal @ 2', moved 2' west	PID (0'-2'): 0.0	
			0'-6" Top soil, grass, roots		
			6"-1'9" Tan SW	PID (2'-4'): 3.4 BD	
			1'9"-1'10" Crushed rock		
			1'10"-3' Brown SW		
			Refusal @ 4', sampled up to 4'		

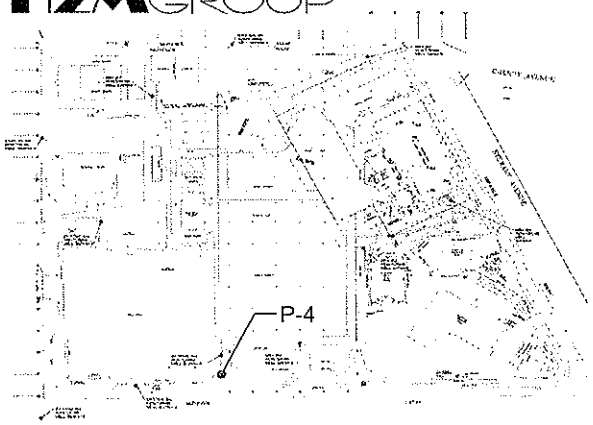
H2MGROUP



Boring # O-9	MW#	Page 1	of 1
PROJECT: **Bethpage Park, Construction Area**			
JOB # **TOBY 0402**			
LOGGED BY:	EVT	PRJ. MNGR.:	PRL
DRILLING CONTRACTOR: Universal Testing & Inspection Service			
DRILL METHOD: GEOPROBE			
DRILLER:			
Borehole diameter/drill bit type: 2"	total depth	10'	
	elevation		
HAMMER WT:	DROP:		
START TIME:	DATE: 9/22/05		
COMPLETION TIME:	DATE: 9/22/05		
BACKFILL TIME:	DATE:		

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes	Casing depth: / Screen depth:
0-4	4'	3'	0'-6" Top Soil	PID (0'-2'): 0.0	
			6"-2'6" Tan, Sandy SW		
			2'6"-3' Black SW	PID (2'-4') : 73.6	
4-8	4'	2'6"	4'-5' Tan SW w/ cobble	PID (4'-6'): 10.1	
			5'-6' Brown SW w/ cobble		
			6'-6'6" Brown SW w/ cobble, wood, debris	PID (6'-8') : 11.1	
8-10	2'	0'	Refusal @ 8'		

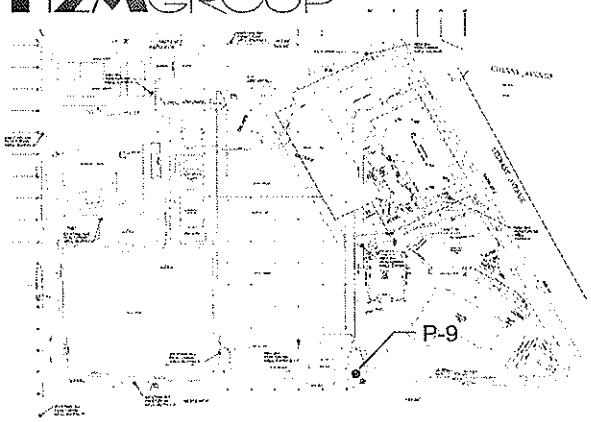
H2MGROUP



Boring # P-4	MW#	Page 1	of 1
PROJECT: **Bethpage Park, Construction Area**			
JOB # **TOBY 0402**			
LOGGED BY:	EVT	PRJ. MNGR.:	PRL
DRILLING CONTRACTOR: Universal Testing & Inspection Service			
DRILL METHOD: GEOPROBE			
DRILLER:			
Borehole diameter/drill bit type: 2"		total depth	10'
		elevation	
HAMMER WT:		DROP:	
START TIME:		DATE: 9/21/05	
COMPLETION TIME:		DATE: 9/22/05	
BACKFILL TIME:		DATE:	

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes	Casing depth: / Screen depth:
0-4	4'	3'6"	0'-6" Grass, roots, Top soil	PID (0'-2'): 0.0	
			6"-1'6" Tan SW		
			1'6"-3'6" Brown SW w/ cobble	PID (2'-4') :0.0	
4-8	4'	4'	4'-7'6" Tan sandy SW	PID (4'-6'): 0.0	
			7'6"-8' Black Clay		
			Refusal @ 8', completed on 9/22/05	PID (6'-8') : 0.0	
			Point moved 8' west		
8-10	2'	2'	8'-9' Tan, sandy SW	PID (8'-10'): 0.0	
			9'-10' Tan clay w/ low plasticity		

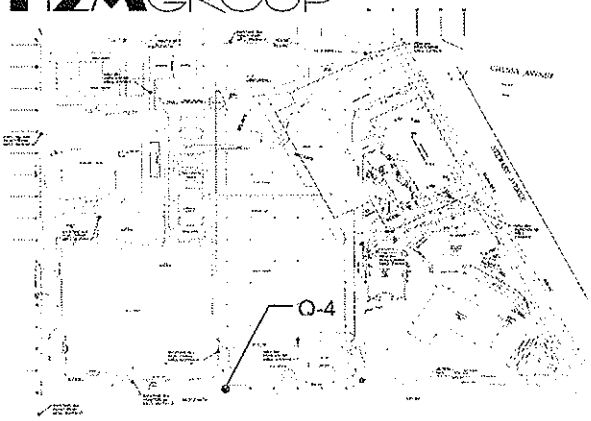
H2MGROUP



Boring # P-9	MW#	Page 1	of 1
PROJECT: **Bethpage Park, Construction Area**			
JOB # **TOBY 0402**			
LOGGED BY:	EVT	PRJ. MNGR.:	PRL
DRILLING CONTRACTOR: Universal Testing & Inspection Service			
DRILL METHOD: GEOPROBE			
DRILLER:			
Borehole diameter/drill bit type: 2"	total depth	10'	
	elevation		
HAMMER WT:	DROP:		
START TIME:	DATE: 9/21/05		
COMPLETION TIME:	DATE: 9/21/05		
BACKFILL TIME:	DATE:		

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes	Casing depth: / Screen depth:
0-4	4'	-	Refusal, moved point 6" to side	PID (0'-2'): 0.0	
0-4	4'	2'6"	0'-6" Top soil		
			6"-2'6" Tan SW w/ cobble	PID (2'-4') :0.0	
4-8	4'	2'	4'-5'6" Tan SW w/ cobble	PID (4'-6'): 0.0	
			5'6"-6' Brown SM w/ cobble, areas of copper color		
				PID (6'-8') : 0.0	
8-10	2'	2'	8'-10' Tan, sandy SW	PID (8'-10'): 0.0	

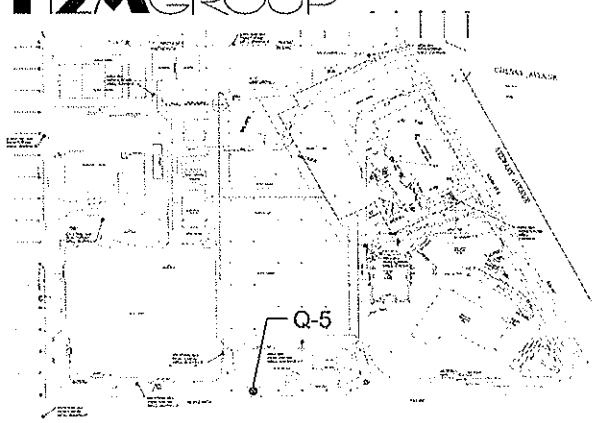
H2MGROUP



Boring # Q-4	MW#	Page 1	of 1
PROJECT: **Bethpage Park, Construction Area**			
JOB # **TOBY 0402**			
LOGGED BY:	EVT	PRJ. MNGR.:	PRL
DRILLING CONTRACTOR: Universal Testing & Inspection Service			
DRILL METHOD: GEOPROBE			
DRILLER:			
Borehole diameter/drill bit type: 2"		total depth	10'
		elevation	
HAMMER WT:		DROP:	
START TIME:		DATE: 9/21/05	
COMPLETION TIME:		DATE: 9/21/05	
BACKFILL TIME:		DATE:	

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes	Casing depth: / Screen depth:
0-4	4'	4'	0'-1' Top soil, roots, grass	PID (0'-2'): 0.0	
			1'-4' Brown SWw/ cobble, crushed rock		
				PID (2'-4') :0.0	
4-8	4'	1'6"	4'-5'6" Brown SW w/ cobble, small bits of unknown green substance	PID (4'-6'): 0.0	
				PID (6'-8') : 0.0	
8-10	2'	2'	8'-9' Brown SM	PID (8'-10'): 0.0	
			9'-10' Tan, sandy SW w/ cobble		

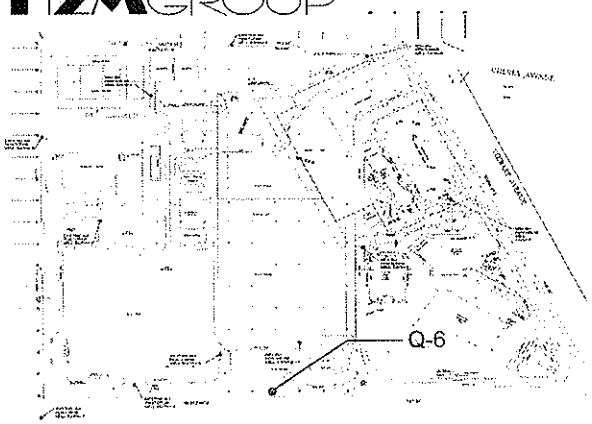
H2MGROUP



Boring # Q-5	MW#	Page 1	of 1
PROJECT: **Bethpage Park, Construction Area**			
JOB # **TOBY 0402**			
LOGGED BY:	EVT	PRJ. MNGR.:	PRL
DRILLING CONTRACTOR: Universal Testing & Inspection Service			
DRILL METHOD: GEOPROBE			
DRILLER:			
Borehole diameter/drill bit type: 2"	total depth	10'	
	elevation		
HAMMER WT:	DROP:		
START TIME:	DATE: 9/21/05		
COMPLETION TIME:	DATE: 9/21/05		
BACKFILL TIME:	DATE:		
	Casing depth:		
	Screen depth:		

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes
0-4	4'	3'6"	0'-6" Top soil, roots	PID (0'-2'): 0.0
			6"-3'6" Brown SM, w/ fine cobble	
				PID (2'-4') :0.0
4-8	4'	3'	4'-7' Tan SW w/ cobble	PID (4'-6'): 0.0
				PID (6'-8') : 0.0
8-10	2'	1'	8'-9' Brown SM	PID (8'-10'): 0.0

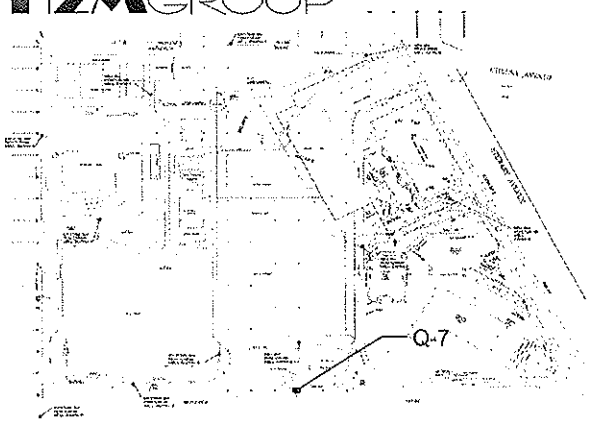
H2MGROUP



Boring # Q-6	MW#	Page 1	of 1
PROJECT: **Bethpage Park, Construction Area**			
JOB # **TOBY 0402**			
LOGGED BY:	EVT	PRJ. MNGR.:	PRL
DRILLING CONTRACTOR: Universal Testing & Inspection Services			
DRILL METHOD: GEOPROBE			
DRILLER:			
Borehole diameter/drill bit type: 2"		total depth	10'
		elevation	
HAMMER WT:		DROP:	
START TIME:		DATE: 9/21/05	
COMPLETION TIME:		DATE: 9/21/05	
BACKFILL TIME:		DATE:	

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes	Casing depth: / Screen depth:
0-4	4'	3'6"	0'-6" Top soil w/ roots	PID (0'-2'): 0.0 BD	
			6"-3'6" Brown SP w/ fine cobble		
				PID (2'-4') :0.0	
4-8	4'	3'	4'-7' Tan, sandy SW w/ cobble	PID (4'-6'): 0.0	
				PID (6'-8') : 0.0	
8-10	2'	2'	8'-10' Brown SM w/ cobble	PID (8'-10'): 0.0 MS/MSD	

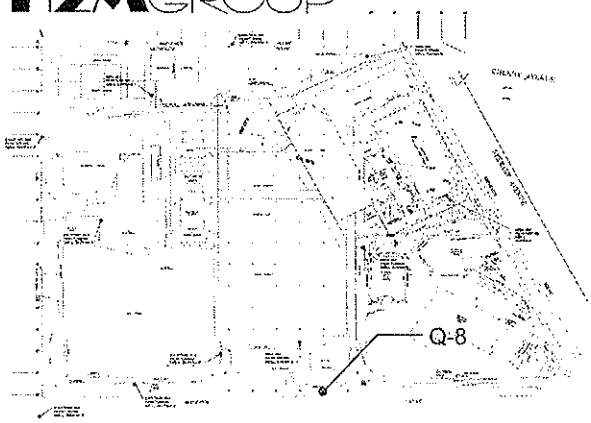
H2MGROUP



Boring # Q-7	MW#	Page 1	of 1
PROJECT: **Bethpage Park, Construction Area**			
JOB # **TOBY 0402**			
LOGGED BY:	EVT	PRJ. MNGR.:	PRL
DRILLING CONTRACTOR: Universal Testing & Inspection Services			
DRILL METHOD: GEOPROBE			
DRILLER:			
Borehole diameter/drill bit type: 2"		total depth	10'
		elevation	
HAMMER WT:		DROP:	
START TIME:		DATE: 9/21/05	
COMPLETION TIME:		DATE: 9/21/05	
BACKFILL TIME:		DATE:	

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes
0-4	4'	3'	0'-2'6" Brown Top soil, SW w/ cobble	PID (0'-2'): 0.0
			2'6"-3' Crushed rock	
				PID (2'-4') :0.0
4-8	4'	3'	4'-7' Tan, sandy SW w/ cobble	PID (4'-6'): 0.0
				PID (6'-8') : 0.0
8-10	2'	2'	8'-10' Brown SM w/ cobble	PID (8'-10'): 0.0

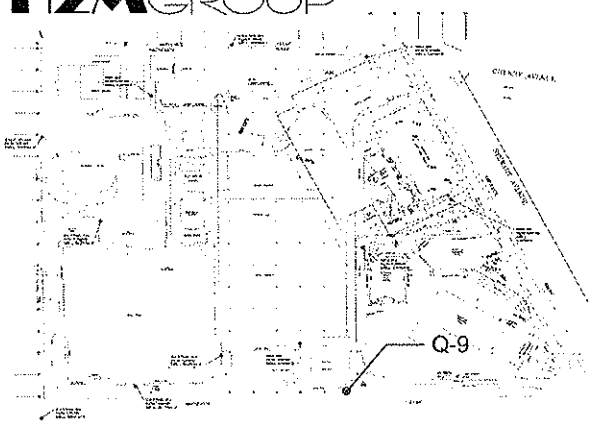
H2MGROUP



Boring # Q-8	MW#	Page 1	of 1
PROJECT: **Bethpage Park, Construction Area**			
JOB # **TOBY 0402**			
LOGGED BY:	EVT	PRJ. MNGR.:	PRL
DRILLING CONTRACTOR: Universal Testing & Inspection Service			
DRILL METHOD: GEOPROBE			
DRILLER:			
Borehole diameter/drill bit type: 2"		total depth	10'
		elevation	
HAMMER WT:		DROP:	
START TIME:		DATE: 9/21/05	
COMPLETION TIME:		DATE: 9/21/05	
BACKFILL TIME:		DATE:	

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes	Casing depth: / Screen depth:
0-4	4'	3'6"	0'-3' Top soil, SM	PID (0'-2'): 0.0 BD	
			3'-3'6" Rock		
				PID (2'-4') :0.0	
4-8	4'	2'	4'-6' Dark brown SM w/ cobble	PID (4'-6'): 0.0	
				PID (6'-8') : 0.0	
8-10	2'	2'	8'-10' Tan, sandy SW	PID (8'-10'): 0.0	

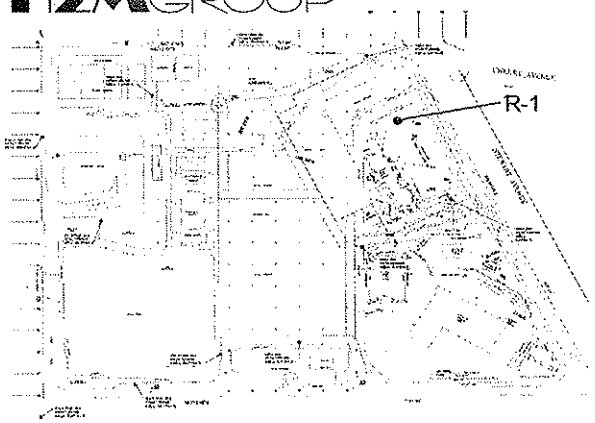
H2MGROUP



Boring # Q-9	MW#	Page 1	of 1
PROJECT: **Bethpage Park, Construction Area**			
JOB # **TOBY 0402**			
LOGGED BY:	EVT	PRJ. MNGR.:	PRL
DRILLING CONTRACTOR: Universal Testing & Inspection Service			
DRILL METHOD: GEOPROBE			
DRILLER:			
Borehole diameter/drill bit type: 2"		total depth	10'
		elevation	
HAMMER WT:		DROP:	
START TIME:		DATE: 9/21/05	
COMPLETION TIME:		DATE: 9/21/05	
BACKFILL TIME:		DATE:	

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes	Casing depth: / Screen depth:
0-4	4'	3'	0'-6" Top soil	PID (0'-2'): 0.0	
			6"-2'6" Brown SM		
			2'6"-3' Crushe rock	PID (2'-4') :0.0	
4-8	4'	2'6"	4'-6'6" Tan, sandy SW w/ cobble	PID (4'-6'): 0.0	
				PID (6'-8') : 0.0	
8-10	2'	2'	8'-10' Tan, sandy SW w/ cobble	PID (8'-10'): 0.0 MS/MSD	

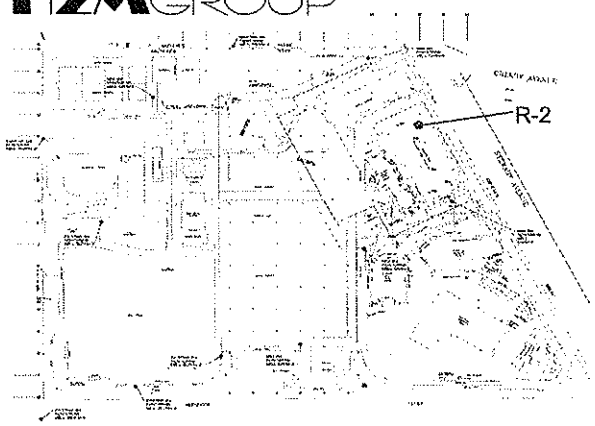
H2MGROUP



Boring # R-1	MW#	Page 1	of 1
PROJECT: **Bethpage Park, Construction Area**			
JOB # **TOBY 0402**			
LOGGED BY:	CJF	PRJ. MNGR.:	PRL
DRILLING CONTRACTOR: Universal Testing & Inspection Service			
DRILL METHOD: Hollow Stem Auger			
DRILLER:			
Borehole diameter/drill bit type:		total depth	60'
		elevation	
HAMMER WT:		DROP:	
START TIME:		DATE: 9/23/05	
COMPLETION TIME:		DATE:	
BACKFILL TIME:		DATE:	

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes	Casing depth: / Screen depth:
0-2	2'	2'	Coarse ro gravelly sands	PID (0'-2'): 0.0	
2-4	2'	2'	Medium sands	PID (2'-4'): 0.0	
4-6	2'	2'	Medium to coarse sands	PID (4'-6'): 0.0	
6-8	2'	2'	Refusal, boring terminated, mostly medium to coarse	PID (6'-8'): 0.0 BD	
8-10	2'	2'	Mostly medium to coarse	PID (8'-10'): 0.0.	
18-20	2'	2'	Mostly medium to coarse sands, some gravel	PID(18'-20'): 0.0	
28'-30'	2'	14"	Medium to coarse sands. Some gravel.	PID (28'-30'): 0.0	
38-40	2'	20"	Medium to coarse sands. Some gravel.	PID (38'-40'): 0.1	
48'-50'	2'	2'	Medium to coarse sands. Some gravel.	PID (48'-50'): 0.0	
58'-60'	2'	2'	Mostly fine sands. Wet at 59'.	PID (58'-60'): 0.0	

H2MGROUP

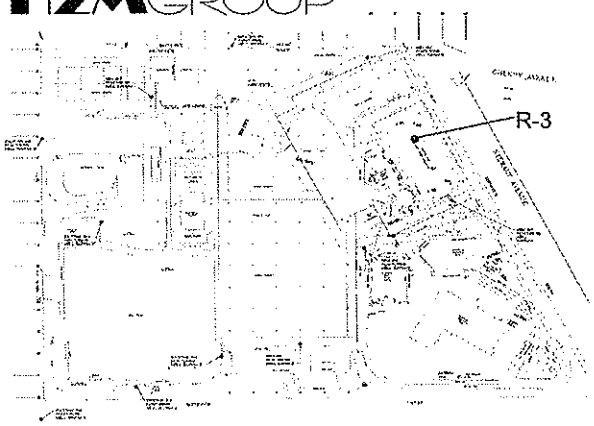


Boring # R-2	MW#	Page 1	of 1
PROJECT: **Bethpage Park, Construction Area**			
JOB # **TOBY 0402**			
LOGGED BY:	EVT	PRJ. MNGR.:	PRL
DRILLING CONTRACTOR: Universal Testing & Inspection Service			
DRILL METHOD: GEOPROBE			
DRILLER:			
Borehole diameter/drill bit type: 2"	total depth	10'	
	elevation		
HAMMER WT:	DROP:		
START TIME:	DATE: 9/23/05		
COMPLETION TIME:	DATE: 9/23/05		
BACKFILL TIME:	DATE:		

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes
0-4	4'	2'6"	0'-2'6" Tan, sandy SW w/ cobble, wet	PID (0'-2'): 0.3
				PID (2'-4') :1.2
4-8	4'	3'	4'-7' Wet, Tan SW	PID (4'-6'): 0.0
				PID (6'-8') : 0.4
8-10	2'	2'	8'-10' Tan, sandy SW w/ cobble, areas of copper color.	PID (8'-10'): 0.0

Casing depth:
Screen depth:

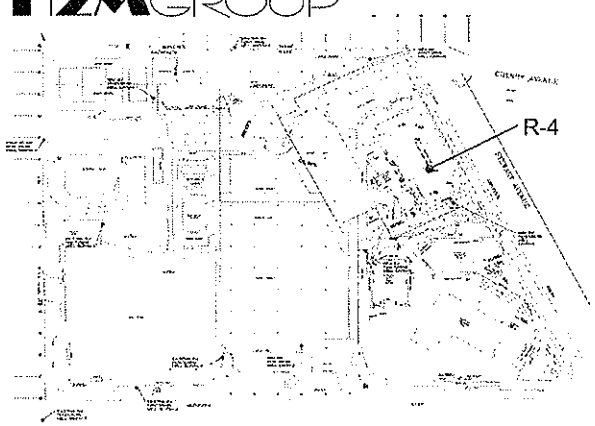
H2MGROUP



Boring # R-3	MW#	Page 1	of 1
PROJECT: **Bethpage Park, Construction Area**			
JOB # **TOBY 0402**			
LOGGED BY:	EVT	PRJ. MNGR.:	PRL
DRILLING CONTRACTOR: Universal Testing & Inspection Service			
DRILL METHOD:			
DRILLER:			
Borehole diameter/drill bit type:		total depth	10'
		elevation	
HAMMER WT:		DROP:	
START TIME:		DATE: 9/23/05	
COMPLETION TIME:		DATE: 9/23/05	
BACKFILL TIME:		DATE:	

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes	Casing depth: / Screen depth:
0-4	4'	3'	Mostly medium to coarse sands	PID (0'-2'): 0.0	
				PID (2'-4') :0.0	
4-8	4'	4'	4'-8' Brown/tan SW w/ cobble,	PID (4'-6'): 0.0	
				PID (6'-8') : 0.0	
8-10	2'	2'	8'-10' SW, lots of cobble, rock	PID (8'-10'): 0.0	
18-20	2	2	Coarse sands, some gravel.	PID (18'-20'): 0.0, BD	
28-30	2	2	Med-coarse sands w/ some cobble and crushed rock.		
38-40	2	2	Med-coarse sands w/some gravel. Brown and white in color.	PID (38'-40'): 0.0	
48-50	2	2	fine sands. Brown and white in color.	PID (48-50): 0.0, MS/MSD	
58-60	2	2	Med-fine sands, wet at 60'.	PID (58-60): 0.0	

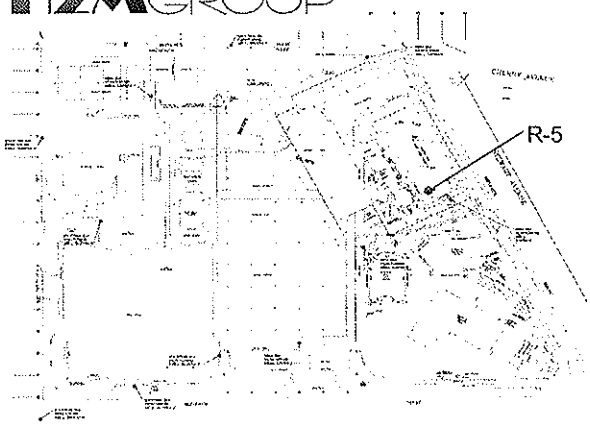
H2MGROUP



Boring # R-4	MW#	Page 1	of 1
PROJECT: **Bethpage Park, Construction Area**			
JOB # **TOBY 0402**			
LOGGED BY:	EVT	PRJ. MNGR.:	PRL
DRILLING CONTRACTOR: Universal Testing & Inspection Services			
DRILL METHOD: GEOPROBE			
DRILLER:			
Borehole diameter/drill bit type: 2"	total depth	10'	
	elevation		
HAMMER WT:	DROP:		
START TIME:	DATE: 9/23/05		
COMPLETION TIME:	DATE: 9/23/05		
BACKFILL TIME:	DATE:		

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes	Casing depth: / Screen depth:
0-4	4'	3'	0'-3' Tan/ gray SW , sandy w/ cobble	PID (0'-2'): 0.0	
				PID (2'-4') :0.0	
4-8	4'	4'	4'-8' Brown/tan SW w/ cobble, areas of crushed rock, moist	PID (4'-6'): 0.0	
				PID (6'-8') : 0.0	
8-10	2'	2'	8'-10' Tan/gray SW, lots of cobble, rock	PID (8'-10'): 0.0	

H2MGROUP

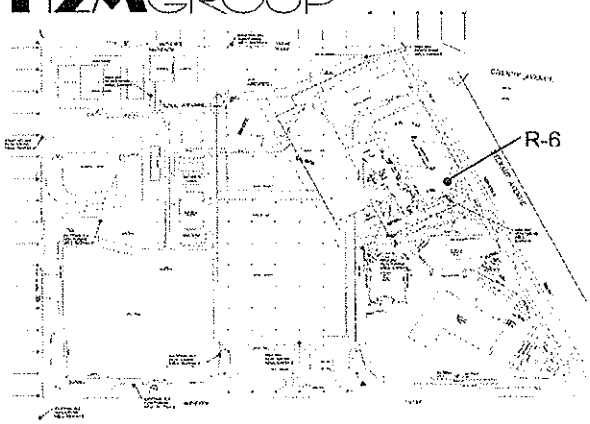


Boring # R-5	MW#	Page 1	of 1
PROJECT: **Bethpage Park, Construction Area**			
JOB # **TOBY 0402**			
LOGGED BY:	CJF	PRJ. MNGR.:	PRL
DRILLING CONTRACTOR: Universal Testing & Inspection Service			
DRILL METHOD: Hollow Stem Auger			
DRILLER:			
Borehole diameter/drill bit type:		total depth	60'
		elevation	
HAMMER WT:		DROP:	
START TIME:		DATE: 9/23/05	
COMPLETION TIME:		DATE: 9/26/05	
BACKFILL TIME:		DATE:	

Casing depth:
Screen depth:

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes
0-2	2'	2'	Mostly coarse to gravelly sands	PID (0'-2'): 0.0
				PID (2'-4'): 0.0
2-4	2'	2'	Mostly coarse to gravelly sands	PID (4'-6'): 0.0
4-6	2'	2'	Mostly course to gravelly sands	PID (6'-8'): 0.0. BD, MS/MSD
6-8	2'	2'	Refusal, Mostly rock, some gravel material	PID (8'-10'): 0.0
8-10	2'	2'	Mostly medium sands, some rock, sample depth 10'-12' due to refusal	PID(18'-20'): 0.0. Restart 9/26/05

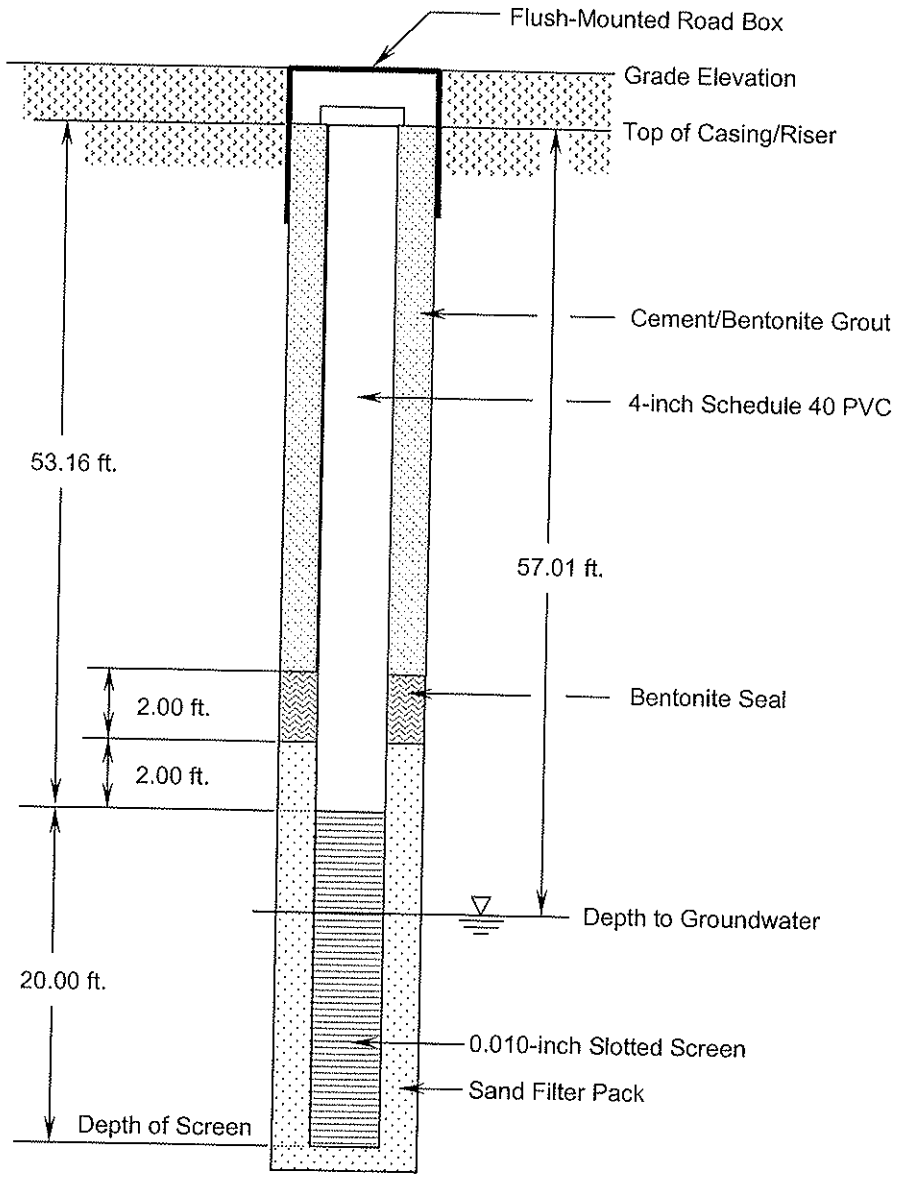
H2MGROUP



Boring # R-6	MW#	Page 1	of 1
PROJECT: **Bethpage Park, Construction Area**			
JOB # **TOBY 0402**			
LOGGED BY:	EVT	PRJ. MNGR.:	PRL
DRILLING CONTRACTOR: Universal Testing & Inspection Service			
DRILL METHOD: hollow-Stem Auger			
DRILLER:			
Borehole diameter/drill bit type:		total depth	10'
		elevation	
HAMMER WT:		DROP:	
START TIME:		DATE: 9/24/05	
COMPLETION TIME:		DATE: 9/24/05	
BACKFILL TIME:		DATE:	

Sample Depth	Advance (ft)	Recovered (ft)	Soil Description Unified Soil Classification System	Notes	Casing depth: / Screen depth:
0-2	2'	2'	Mostly coarse to gravelly sands	PID (0'-2'): 0.0	
2-4	2'	2'	Mostly coarse to gravelly sands		
				PID (2'-4'): 0.0	
4-6	2'	14"	Mosity medium to coarse sands, some gravel	PID (4'-6'): 0.0	
			Refusal @ 6'		
6-8	2'	2'	Mostly medium to coarse sands, some gravel	PID (6'-8'): 0.0	
8-10	2'	2	Mostly coarse sands, rock	PID (8'-10') : 0.0	
18-20	2'	2	Mostly coarse sands, rock	PID (18'-20') 0.0	
28-30	2'	2'	Mostly gravelly sands	PID (28'-30') 0.0	
38-40	2'	2'	Mostly medium to fine white sands	PID (38'-40') 0.0	
48-50	2'	2'	Medium to fine sands, some clay.	PID (48'-5-') 0.0	
58-60	2'	2'	Mostly medium to fine white sands, some clay.	PID (58'-60'): 0.0	

MONITORING WELL CAMW-5
CONSTRUCTION DIAGRAM
Installed: September 22, 2005



TOWN OF OYSTER BAY
BETHPAGE COMMUNITY PARK
BETHPAGE, NEW YORK

H2M GROUP
ENGINEERS • ARCHITECTS • SCIENTISTS • PLANNERS • SURVEYORS

Data Validation Services

120 Cobble Creek Road P. O. Box 208
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Phone 518-251-4429
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November 1, 2005

Paul Lageraaen
H2M Group
575 Broad Hollow Rd.
Melville, NY 11747

RE: **D**ata **U**sability **S**ummary **R**eport for Town of Oyster Bay, Bethpage site
H2M Laboratories SDG Nos. TOB0047 through TOB053
STL-VT SDG No. 110080

Dear Mr. Lageraaen:

Review has been completed for the data packages generated by H2M Laboratories that pertain to samples collected 9/21/05 through 10/04/05 at the Town of Oyster Bethpage site. Seventy-three soil samples and six blind field duplicates were analyzed for TCL PCBs and RCRA metals. Twenty soil samples and one aqueous sample were processed for TCL volatiles with two freon compounds, TCL semivolatiles, TCL PCBs, TAL metals/CN, and hexavalent chromium. Eleven air samples were analyzed for volatiles by USEPA method TO-15. Laboratory analytical methodologies utilized for the soil and aqueous samples are those of the NYSDEC ASP/SW846. Sample matrix spikes, and equipment and trip blanks were also processed.

The data packages submitted contained full deliverables for validation, but this usability report is generated from review of the summary form information, with review of sample raw data, and limited review of associated QC raw data. Full validation has not been performed. However, the reported summary forms have been reviewed for application of validation qualifiers, per the USEPA Region 2 validation SOPs and the USEPA National Functional Guidelines for Data Review, as affects the usability of the sample data. The following items were reviewed:

* Laboratory Narrative Discussion
* Case Narratives
* Custody Documentation
* Holding Times
* Surrogate and Internal Standard Recoveries
* Matrix Spike Recoveries/Duplicate Correlations
* Preparation/Calibration Blanks
* Control Spike/Laboratory Control Samples
* Instrumental Tunes and IDLs
* Calibration/CRI/CRA Standards
* ICP Interference Check Standards
* ICP Serial Dilution Correlations
* Method Compliance
* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR review level.

In summary, samples were processed in compliance with protocol, and results are usable as reported, or with minor edit or qualification of results as estimated. Some of the pesticide/PCB reporting limits (in samples with high Aroclor concentrations) are elevated.

Copies of the NYSDEC Sample Identification and Analytical Requirement Summary Forms are attached to this text, and should be reviewed in conjunction with this report. Included with this report are red-ink edited sample report forms that represent final qualified samples results.

The following text discusses quality issues of concern.

General

Blind field duplicate correlation was performed for PCBs and RCRA metals on the following samples: Q3(0-2), Q6(0-2), O4(4-6), I14(4-6), R1(4-6), and R3(18-20). All results fall within acceptable limits.

Discrepancies in custody entries were resolved at sample receipt.

No laboratory receipt signature was present on the custody for soil gas samples collected on 9/27/05. The associated sample log-in page is signed and shows receipt date.

TCL Volatiles by EPA8260B

The method blank and field blanks consistently show low levels of methylene chloride at concentrations similar to those in the project samples. Therefore, the sample detections of that compound are to be disregarded as sample components, and are edited to reflect non-detection ("U") at the CRDL, or the originally reported concentration, whichever is greater.

Due to poor spectral match, the low level result for chlorodifluoromethane in R3(2-4) is qualified as tentative in identification and estimated in value ("NJ").

Due to very poor spectral match, the low level result for chlorodifluoromethane in R3(8-10) is edited to reflect non-detection ("U") at the CRDL.

Calibrations standards showed responses within guidelines, with the following exceptions, results for which are qualified in the indicated associated samples:

- bromoform in the field blanks, trip blanks, and in CAMW-5
- dichlorodifluoromethane in O9(2-4) and P4(8-10), in all soils reported in SDG TOB050, and in all soils reported in SDG TOB051 except R5(6-8)

Holding times were met, and surrogate and internal standard responses are acceptable.

Matrix spikes of Q9(8-10), Q6(8-10), O9(2-4), I14(0-2), and R3(48-50) show acceptable accuracy and precision.

Tentatively Identified Compounds (TICs) flagged as "B" by the laboratory, or identified as siloxanes are considered external contamination (indicated by presence in associated blanks), and results should be rejected as sample components.

TICs flagged by the laboratory as "X" are analysis artifacts and are rejected from consideration as target analytes.

TCL Semivolatile Analyses by EPA8270C

Results for analytes initially reported with the "E" flag derived from the dilution analyses of those samples.

Detected values of benzo(b)fluoranthene and benzo(k)fluoranthene in P9(8-10) are qualified as estimated due to poor resolution.

Calibrations standards showed acceptable responses, or slightly outlying elevated responses not affecting the usability of the sample results, with the exception that results for the following, results of which are qualified as estimated in the associated, indicated samples:

- Hexachlorocyclopentadiene and pentachlorophenol (26%D to 47%D) in all samples reported in SDGs TOB047, TOB048, TOB049, TOB051, and TOB052, those at location "R" reported in TOB050,
- Pentachlorophenol (37%D) in samples at location "I14"

Holding times were met, and surrogate and internal standard responses are acceptable.

Matrix spikes of Q9(8-10), Q6(8-10), Q9(2-4), I14(0-2), R5(4-6), R3(48-50), and CAMW-5 produced acceptable accuracy and precision (or elevated recoveries or correlations for analytes not detected in the parent sample), with the exception of a low recovery for pentachlorophenol in one of the spikes of R5(4-6). Results for that analyte in the project samples are already qualified as estimated due to calibration standard responses.

Tentatively Identified Compounds (TICs) flagged as "B", "X", or "A" by the laboratory are considered external contamination (indicated by presence in associated blanks), and results should be rejected as sample components. Additionally, the TIC identified as "Erucylamide" (which is a poor match) appears in samples and field blanks. That TIC is also rejected in the samples. The TICs at about 3.6' and 3.7' in many of the soil samples are rejected due to presence of those unknowns in associated field blanks.

The dilution analysis of O9(2-4) is to be used for TIC quantitations due to interferences in the less dilute analysis.

Values for TICs flagged by the laboratory as "Y" may have a low bias due to matrix interference effect on the quantitative determinations.

TCL PCB Analyses by EPA8082

Surrogate standards show acceptable recoveries when not diluted (due to sample constituency) beyond detection.

Reporting limits for non-detected Aroclor mixtures that were reported with the "X" flag are qualified as estimated, with a possible low bias, due to responses from other mixtures present in the sample that may mask those detections.

Aroclor results flagged as "Z" by the laboratory are qualified as estimated due to matrix interferences.

Results for sample analytes initially reported with the "E" flag are to be derived from the dilution ("-DL") analyses of the samples.

Due to interferences from the high PCB constituency of samples O4, O4(2-4), P2(2-4), Q9(8-10), Q9(0-2), and Q9(2-4) only the dilution analyses are to be used. This results in elevated reporting limits for non-detected Aroclor mixtures.

The results for Aroclor 1260 in Q6, for Aroclor 1254 in P4(0-2), Q4(0-2), and Q6, and for Aroclor 1242 in Q7(2-4), P4(0-2), and Q4(0-2) are qualified as estimated in value ("J") due to poor dual column correlations and pattern match.

Due to outlying calibration standard responses, detected results for Aroclor 1254 are qualified as estimated in J11(0-2) and J11(2-4).

The sample Aroclor 1242 detections show a weathered pattern, and the laboratory therefore worked to optimize the quantitative accuracy. Although not qualified, these values may have a bias.

Matrix spikes of Aroclors 1016 and 1260 in Q9 (8-10), Q6(8-10), O9(2-4), I14(0-2), R5(4-6)., R3(48-50), and CAMW5 show acceptable recoveries and duplicate correlations. In some cases, the sample concentrations of Aroclor 1242 are too high to accurately evaluate the spiked Aroclor 1016 recoveries (due to similarity in pattern).

Volatile Analyses by EPA TO-15

Results for sample analytes initially reported with the "E" flag are to be derived from the dilution ("-DL") analyses of the samples.

The LCSs show outlying elevated recoveries for isopropyl alcohol, 1,4-dioxane, t-butyl alcohol, and acetone. Detected results for those analytes in associated samples have been qualified as estimated.

Calibration standards show elevated responses for acetone (33%D to 39%D on 10/11/05 and 10/12/05) and isopropyl alcohol (37%D on 10/16/05). Detected results of those compounds in the associated samples are qualified as estimated ("J").

Holding times were met, and blanks show no contamination. Internal standard responses are within required limits.

RCRA and TAL Metals/CN by 6010B, 7470, and 7471

Sample matrix spike recovery/duplicate correlation values were within validation guidelines for M9 (4-6) and CAMW5. The following validation action outliers were observed in soil matrix spike recoveries and laboratory duplicate correlations. Results for the indicated analytes are qualified estimated in all samples associated with the spike and duplicate:

Sample Spiked	Analyte	Rec Outlier	Dup Outlier	Associated Samples
Q9(8-10)	Antimony	62 %		TOB047
	Manganese	343		"
	Selenium	131		only Q9(0-2) affected
Q6(8-10)	Antimony	50		TOB048
	Chromium	52		"
	Manganese	2		"
O9(2-4)	arsenic	195		TOB049
	Cadmium	30		"
	Chromium	279		"
	Copper	665		"
	Calcium		101%RPD	"
R6(0-2)	manganese	264		TOB051
	Zinc		>±2XCRDL	"
R3(48-50)	Antimony	71		TOB052
	Selenium	54		"

ICP serial dilution correlation evaluations were performed on Q9(8-10), Q6(8-10), O9(2-4), Q9(2-4), I14(0-2), R6(0-2), R3(58-60), and CAMW5 Results for the following detected sample analytes are qualified estimated due to outlying correlations:

- Potassium (12%D) in TOB047
- Copper and potassium (12%D to 13%D) in TOB048
- Calcium, magnesium, and zinc (23%D to 29%D) in TOB050
- Aluminum (140%D), potassium (60%D), and zinc (14%D) in TOB052
- Aluminum (24%D) in CAMW-5

Sample processing was compliant, and reported results are substantiated by the raw data.

Wet Chemistry Analyses-Cr+6 by SW7196

Review was conducted for method compliance, transcription, calculations, standard and blank acceptability, accuracy and precision, etc., as applicable to each procedure. All were found acceptable unless noted specifically within this text.

The matrix spike and duplicate of Q6(8-10), O9(2-4), I14(0-2)R3(48-50), and CAMW5 show acceptable accuracy and precision.

Please do not hesitate to contact me if you have comments or questions regarding this report.

Very truly yours,

Judy Harry

VALIDATION QUALIFIER DEFINITIONS

DATA QUALIFIER DEFINITIONS

The following definitions provide brief explanations of the national qualifiers assigned to results in the data review process. If the Regions choose to use additional qualifiers, a complete explanation of those qualifiers should accompany the data review.

U - **The analyte was analyzed for, but was not detected above the reported sample quantitation limit.**

J - **The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.**

N - **The analysis indicates the present of an analyte for which there is presumptive evidence to make a "tentative identification."**

NJ - **The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.**

UJ - **The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.**

R - **The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.**

LABORATORY SAMPLE IDs AND CASE NARRATIVES

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: TOB047

Customer Sample Code	Laboratory Sample Code	Analytical Requirements				
		GCSEMI	ME	MSSEMI	MSVOA	WC
P9 (0-2)	0509683-001	X	X			
P9 (2-4)	0509683-002	X	X			
P9 (4-6)	0509683-003	X	X			
P9 (8-10)	0509683-004	X	X	X	X	X
Q7 (0-2)	0509683-005	X	X			
Q7 (2-4)	0509683-006	X	X			
Q7 (4-6)	0509683-007	X	X			
Q7 (8-10)	0509683-008	X	X	X	X	X
Q8	0509683-009	X	X			
Q8 (0-2)	0509683-010	X	X			
Q8 (2-4)	0509683-011	X	X			
Q8 (4-6)	0509683-012	X	X			
Q8 (8-10)	0509683-013	X	X	X	X	X
Q9 (0-2)	0509683-014	X	X			
Q9 (2-4)	0509683-015	X	X			
Q9 (4-6)	0509683-016	X	X			
Q9 (8-10)	0509683-017	X	X	X	X	X
FB47	0509683-018	X	X	X	X	X
TB47	0509683-019				X	

CLP, Non-CLP (Please indicate year of protocol) ASP B 10/95
TCL/TAL, HSL, Priority Pollutant,

(KJS 10/12/05)

TOB047 S4

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: TOB048

Customer Sample Code	Laboratory Sample Code	Analytical Requirements				
		GCSEMI	ME	MSSEMI	MSVOA	WC
P4 (0-2)	0509695-001	X	X			
P4 (2-4)	0509695-002	X	X			
P4 (4-6)	0509695-003	X	X			
Q4 (0-2)	0509695-004	X	X			
Q4 (2-4)	0509695-005	X	X			
Q4 (4-6)	0509695-006	X	X			
Q4 (8-10)	0509695-007	X	X	X	X	X
Q5 (0-2)	0509695-008	X	X			
Q5 (2-4)	0509695-009	X	X			
Q5 (4-6)	0509695-010	X	X			
Q5 (8-10)	0509695-011	X	X	X	X	X
Q6	0509695-012	X	X			
Q6 (0-2)	0509695-013	X	X			
Q6 (2-4)	0509695-014	X	X			
Q6 (4-6)	0509695-015	X	X			
Q6 (8-10)	0509695-016	X	X	X	X	X
FB48	0509695-017	X	X	X	X	X

CLP, (Non-CLP) (Please indicate year of protocol) ASP B 10/95
TCL/TAL, HSL, Priority Pollutant,

(KJS 10/10/05)

TOB048 S4

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: TOB049

Customer Sample Code	Laboratory Sample Code	Analytical Requirements				
		GCSEMI	ME	MSSEMI	MSVOA	WC
I13 (0-2)	0509742-001	X	X			
I13 (2-4)	0509742-002	X	X			
I13 (4-6)	0509742-003	X	X			
I13 (8-10)	0509742-004	X	X	X	X	X
J11 (0-2)	0509742-005	X	X	X	X	X
J11 (2-4)	0509742-006	X	X			
J11 (4-6)	0509742-007	X	X			
J11 (8-10)	0509742-008	X	X			
O4	0509742-009	X	X			
O4 (0-2)	0509742-010	X	X			
O4 (2-4)	0509742-011	X	X			
O9 (0-2)	0509742-012	X	X			
O9 (2-4)	0509742-013	X	X	X	X	X
O9 (4-6)	0509742-014	X	X			
O9 (8-10)	0509742-015	X	X			
P4 (8-10)	0509742-016	X	X	X	X	X
FB49	0509742-017	X	X	X	X	X

CLP (Non-CLP) (Please indicate year of protocol) ASP B 6/95
TCL/TAL, HSL, Priority Pollutant,

TCL 6/95

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: TOB050

Customer Sample Code	Laboratory Sample Code	Analytical Requirements				
		GCSEMI	ME	MSSEMI	MSVOA	WC
I14	0509757-001	X	X			
I14 (0-2)	0509757-002	X	X	X	X	X
I14 (2-4)	0509757-003	X	X			
I14 (4-6)	0509757-004	X	X			
I14 (8-10)	0509757-005	X	X			
R2 (0-2)	0509757-006	X	X			
R2 (2-4)	0509757-007	X	X	X	X	X
R2 (4-6)	0509757-008	X	X			
R2 (8-10)	0509757-009	X	X			
R4 (0-2)	0509757-010	X	X			
R4 (2-4)	0509757-011	X	X			
R4 (4-6)	0509757-012	X	X			
R4 (6-8)	0509757-013	X	X	X	X	X
R4 (8-10)	0509757-014	X	X			
FB50	0509757-015	X	X	X	X	X

CLP, ~~Non-CLP~~ (Please indicate year of protocol) ASP B 10/95
TCL/~~TAL, HSL~~, Priority Pollutant,

KJS 10/30/09

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: TOB051

Customer Sample Code	Laboratory Sample Code	Analytical Requirements				
		GCSEMI	ME	MSSEMI	MSVOA	WC
R1	0509772-001	X	X			
R1 (0-2)	0509772-002	X	X			
R1 (2-4)	0509772-003	X	X		X	
R1 (4-6)	0509772-004	X	X			
R1 (6-8)	0509772-005	X	X	X	X	X
R1 (8-10)	0509772-006	X	X		X	
R1 (18-20)	0509772-007	X	X			
R5 (0-2)	0509772-008	X	X			
R5 (2-4)	0509772-009	X	X			
R5 (4-6)	0509772-010	X	X	X	X	X
R6 (0-2)	0509772-011	X	X			
R6 (2-4)	0509772-012	X	X		X	
R6 (4-6)	0509772-013	X	X			
FB051	0509772-014	X	X	X	X	X
TB051	0509772-015				X	
R3 (0-2)	0509827-001	X	X			
R3 (2-4)	0509827-002	X	X	X	X	X
R3 (4-6)	0509827-003	X	X			
R3 (8-10)	0509827-004	X	X		X	
5 (6-8)	0509827-005	X	X	X	X	X
R5 (8-10)	0509827-006	X	X			
TB51	0509827-007				X	

CLP, (Non-CLP) (Please indicate year of protocol) ASP B 10/95
TCL/TAL, HSL, Priority Pollutant,

RJS 10/12/05

TOB051 A3

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: TOB052

Customer Sample Code	Laboratory Sample Code	Analytical Requirements				
		GCSEMI	ME	MSSEMI	MSVOA	WC
28-30 R1	0509883-001	X	X		X	
38-40 R1	0509883-002	X	X			
48-50 R1	0509883-003	X	X		X	
58-60 R1	0509883-004	X	X			
FB52	0509883-005	X	X	X	X	X
TB	0509883-006				X	
R3	0509947-001	X	X			
R3 (18-20)	0509947-002	X	X			
R3 (30-32)	0509947-003	X	X		X	
R3 (38-40)	0509947-004	X	X			
R3 (48-50)	0509947-005	X	X	X	X	X
R3 (58-60)	0509947-006	X	X			
R6 (6-8)	0509947-007	X	X	X	X	X
R6 (8-10)	0509947-008	X	X		X	
R6 (20-22)	0509947-009	X	X			
R6 (28-30)	0509947-010	X	X		X	
R6 (38-40)	0509947-011	X	X			
R6 (48-50)	0509947-012	X	X		X	
R6 (58-60)	0509947-013	X	X			
B52	0509947-014				X	

CLP, (Non-CLP) (Please indicate year of protocol) ASP B10195
TCL/TAL, HSL, Priority Pollutant,

JSW 10/12/05

TOB052 S3

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

SDG: TOB053

Customer Sample Code	Laboratory Sample Code	Analytical Requirements				
		GCSEMI	ME	MSSEMI	MSVOA	WC
CAMW5	0510109-001	X	X	X	X	X
FB53	0510109-002	X	X	X	X	X
TB	0510109-003				X	

CLP, (Non-CLP) (Please indicate year of protocol) ASP B 10195
TCL/TAL, HSL, Priority Pollutant,

SW 10 3/14/05

TOB053 S3

SEVERN TRENT STL

STL Burlington
208 South Park Drive, Suite 1
Colchester, VT 05446

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October 19, 2005

Mr. Paul Lageraaen
H2M Group
575 Broad Hollow Road
Melville, NY 11747

Re: Laboratory Project No. 25000
Case: 25000; SDG: 110080

Dear Mr. Lageraaen:

Enclosed are the analytical results for samples received by STL Burlington on September 29 and 30, 2005. This report is sequentially numbered starting with page 1 and ending with page 0546.

Laboratory identification numbers were assigned, and designated as follows:

Lab ID	Client Sample ID	Sample Date	Sample Matrix
	Received: 09/29/05 ETR No: 110080		
640303	R1 10-12	09/27/05	Air
640304	Ambient 9-27-05	09/27/05	Air
640305	R1 28-30	09/27/05	Air
640306	R1 48-50	09/27/05	Air
	Received: 09/30/05 ETR No: 110081		
640307	R-3 8-10	09/28/05	Air
640308	Ambient 9-28-05	09/28/05	Air
640309	R3 28-30	09/28/05	Air
640310	R3 48-50	09/28/05	Air
640311	R6 8-10	09/28/05	Air
640312	R6 28-30	09/28/05	Air
640313	R6 48-50	09/28/05	Air

Documentation of the condition of the samples at the time of their receipt and any exception to the laboratory's Sample Acceptance Policy is documented in the Sample Handling section of this submittal.

Method TO-15 – Volatile Organics:
The analyses of the field samples R3 8-10, R3 28-30, R3 48-50, R6 8-10, R6 28-30 and R6 48-50 were accomplished at dilutions in order to provide quantification of all target analytes within the calibrated range of instrument response. The results were within the calibration range of the instrument.

The original analyses of the field samples R1 28-3, R1 10-12 and R1 48-50 were accomplished at dilutions in order to provide quantification of all target analytes within the calibrated range of instrument response. The results of the original dilution analyses exhibited concentrations of select target compounds that exceeded the calibration range. Consequently, further dilution analyses were performed for these samples, yielding results that were within the calibration range of the instrument. Both sets of data have been presented in this case submittal.

The analyses of the blank spike samples designated BDWE LCS, BDWF LCS and VHEA LCS and the associated blank spike duplicate samples exhibited percent recoveries for select target compounds that were outside of the control limits. The results for relative percent differences in the interanalysis comparisons for all blank spike duplicate samples were within the established control limits in each case. All outliers are presented on the analytical Form 3.

The responses for the target compounds tert-Butyl Alcohol, Acetone and Isopropyl Alcohol in select continuing calibration check acquisitions exceeded the maximum percent difference criterion. Acetone was detected in the sample R1 48-50. Isopropyl Alcohol was detected in R2 8-10, R3 28-30, R3 48-50, R6 8-10, R6 28-30 and R6 48-50.

An additional qualifier was utilized in several of the analyses of the samples in this delivery group.

Z = Freon 22 co-eluted with Dichlorodifluoromethane. The laboratory suspects that the estimated value that was reported for Freon 22 may be biased high. The quantitation process uses the area of the peak to calculate the result, which, in these cases also includes Dichlorodifluoromethane.

The analytical results associated with the samples presented in this test report were generated under a quality system that adheres to requirements specified in the NELAC standard. Release of the data in this test report and any associated electronic deliverables is authorized by the Laboratory Director's designee as verified by the following signature.

If there are any questions regarding this submittal, please contact me at 802 655-1203.

Sincerely,

Ron Pentkowski
Project Manager

Enclosure

H2M LABS, INC.

SDG NARRATIVE FOR PCB ANALYSES
SAMPLES RECEIVED: 10/4/05
SDG NO.: TOB053

For Samples:

CAMW5 MS/MSD
FB53

The above water sample and a field blank were prepared and analyzed for PCBs by EPA methods 3520C and 8082.

All QC data and calibrations met the requirements of the method, and no problems were encountered with sample analysis. The following should be noted:

- The samples were cleaned up with concentrated sulfuric acid.
- Sample CAMW5was analyzed as the matrix spike/matrix spike duplicate.
- Positives are reported to the practical detection limit of ½ of the reporting limits.
- A table of codes used for corrections and manual integration is presented before the sample reports.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 12, 2005

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* *
* *
****

Ursula Middel
Technical Manager

TOB053 S23

H2M LABS, INC.

SDG NARRATIVE FOR METALS ANALYSIS
SAMPLES RECEIVED: 10/4/05
SDG NO.: TOB053

For Samples:

CAMW5 MS/MSD
FB53

The above samples were received by H2M Labs, Inc. on 10/4/05 for select metals and cyanide analysis.

Samples were prepared and analyzed using EPA methods 6010B with a TJA61E Trace ICP instrument, method 245.1 with a Leeman HYDRA mercury analyzer, and cyanide method 335.2.

Sample CAMW5 was utilized for QC analysis and reporting.

ICP serial dilution analysis of sample CAMW5 did not meet acceptance criteria for aluminum and sodium. Results for these metals were reported with the qualifier "E" on Forms 1 and 9.

No other problems were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 12, 2005

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Ursula Middel
Technical Manager

TOB053 S24

H2M LABS, INC.

SDG NARRATIVE FOR WET CHEMISTRY
SAMPLES RECEIVED: 10/4/05
SDG NO.: TOB053

For Samples:

CAMW5 MS/MSD
FB53

Two water samples were received by H2M Labs, Inc. on 10/4/05 for select wet chemistry analysis.

Samples were prepared and analyzed using the following method:

Hexavalent chromium	EPA SW7196

Sample CAMW5 was utilized for duplicate and spike QC analysis and reporting.

No problems were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 12, 2005

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* V Stancampiano *
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Vincent Stancampiano
Vice President

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TOB053 S25

H2M LABS, INC.

SDG NARRATIVE FOR VOLATILES ANALYSES
SAMPLES RECEIVED: 9/21/05
SDG #: TOB047

For Samples:

P9 (8-10)
Q7 (8-10)
Q8 (8-10)
Q9 (8-10) MS/MSD
TB47
FB47

The above samples and blanks were analyzed for a specific list of volatile organics by EPA method 8260B in accordance with the NYSDEC ASP, Rev. 10/95.

All QC data and calibrations met the requirements of the protocol, and no problems were encountered with sample analysis.

Sample Q9 (8-10) was analyzed as the matrix spike/matrix spike duplicate (MS/MSD).

Low levels (under the PQL) of methylene chloride was present in the method blank. A "B" qualifier is applied to this analyte if present in the samples associated with the blank.

Carbon tetrachloride and bromoform had RSD's greater than 20.5% in the unheated initial calibration of 9/23/05. Vinyl chloride and 4-bromofluorobenzene had % D's greater than 25% in the unheated continuing calibration of 9/23/05 (HP 5973-1) and the heated continuing calibration of 9/23/05 (HP 5970-3), respectively.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 4, 2005

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Joann M. Slavin
Senior Vice President

H2M LABS, INC.

SDG NARRATIVE FOR SEMIVOLATILES ANALYSES
SAMPLES RECEIVED: 9/21/05
SDG #: TOB047

For Samples:

FB47
P9 (8-10)
Q7 (8-10)
Q8 (8-10)
Q9 (8-10) MS/MSD

The above water samples and field blank were analyzed for the TCL list of semivolatile analytes by EPA method 8270C in accordance with the NYSDEC ASP, Rev. 10/95.

All QC data and calibrations met the requirements of the method, and no problems were encountered with sample analysis. The following should be noted:

- Sample Q9 (8-10) was analyzed as the matrix spike/matrix spike duplicate (MS/MSD).
- 2,4-dinitrotoluene had a high recovery in both the matrix spike and the matrix spike duplicate. 4-nitrophenol and pentachlorophenol had a high recovery in the matrix spike blank. These recoveries were however within our in-house limits. Sample Q9 (8-10) had a high surrogate recovery for 2,4,6- tribromophenol. All recoveries were acceptable in the matrix spike and the matrix spike duplicate.
- The soil method blank of 9/23/05 contained TIC's, which were a secondary contamination from the GPC system. These analytes are flagged with a "B" qualifier if present in the associated samples. TIC's identified as "unknown alkanes" are presented on the TIC form 1 but are not included in the total number of TIC"s found.
- Pentachlorophenol exceeded 25.6 % D in the continuing calibration of 9/26/05.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: September 30, 2005

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Joann M. Slavin
Senior Vice President

TOB047 S23

H2M LABS, INC.

SDG NARRATIVE FOR PCB ANALYSES
SAMPLES RECEIVED: 9/21/05
SDG NO.: TOB047

For Samples:

FB47	Q7 (2-4)	Q8 (4-6)
P9 (0-2)	Q7 (4-6)	Q8 (8-10)
P9 (2-4)	Q7 (8-10)	Q9 (0-2)
P9 (4-6)	Q8	Q9 (2-4)
P9 (8-10)	Q8 (0-2)	Q9 (4-6)
Q7 (0-2)	Q8 (2-4)	Q9 (8-10) MS/MSD

The above soil samples and a field blank were prepared and analyzed for PCBs by EPA methods 3545 / 3510B and 8082.

All QC data and calibrations met the requirements of the method, unless listed below. The following should be noted:

- All soil samples were cleaned up with concentrated sulfuric acid and were subjected to sulfur cleanup with TBA.
- Sample Q9 (8-10) was analyzed as the matrix spike/matrix spike duplicate. The sample contained AR1242, which has a pattern very similar to the AR1016 spike that was added for MS/MSD spiking. The AR1242 concentration in the sample is subtracted for computation of the spike recovery.
- On form 1 of the MS and MSD, the sum of the two aroclors is reported as AR1016, and the result of AR1242 is flagged with the qualifier "Y" to indicate the concentration is included in the AR1016 result.
- QC limits for AR1016 and AR1260 do not apply, because the spiking level was not a multiple of the sample concentration.
- The surrogate recovery for DCB in sample Q8 (0-2)DL is above the advisory QC limit on both analytical columns.
- Since only aroclors were analyzed, the initial calibrations and continuous calibrations for pesticides required by the ASP, were replaced by calibrations with AR1660. %D for all continuous calibrations were under 25%.
- The ASP protocol mandates an analysis of the standards for all positive aroclors within 72 hours, but does not specify any mandatory %D for the response. The analysis of AR125402 shows a high %D of 31.6% on column RTX-CLP1. Based on that, data for AR1254 on that column are believed to be biased high. All quantifications reported for that aroclor were derived from the other column, RTX-CLP2.
- %D is above 25% for TCX in AR166015 on column RTX-CLP1 and for DCB in AR124202 on column RTX-CLP2.

H2M LABS, INC.

SDG NARRATIVE FOR METALS ANALYSIS
SAMPLES RECEIVED: 9/21/05
SDG NO.: TOB047

For Samples:

FB47	Q8
P9 (0-2)	Q8 (0-2)
P9 (2-4)	Q8 (2-4)
P9 (4-6)	Q8 (4-6)
P9 (8-10)	Q8 (8-10)
Q7 (0-2)	Q9 (0-2)
Q7 (2-4)	Q9 (2-4)
Q7 (4-6)	Q9 (4-6)
Q7 (8-10)	Q9 (8-10) MS/MSD

One water sample and seventeen soil samples were received by H2M Labs, Inc. on 9/21/05 for select metals analysis.

Samples were prepared and analyzed using EPA methods 6010B with a TJA61E Trace ICP instrument, 245.1/245.5 with a Leeman HYDRA mercury analyzer and cyanide method 335.2.

Sample Q9 (8-10) was utilized for QC analysis and reporting.

Spike analysis did not recover within 75-125% for iron. Since the sample value was greater than four times the spike concentration, post spikes and data qualifiers were not required.

Spike analysis did not recover within acceptance ranges for selenium, antimony and manganese. The sample was post-spiked, reanalyzed recovering at 125.7% for antimony, 98.5% for manganese and 154.6% for selenium. Associated data were reported flagged "N" on forms 1 and 5A.

ICP serial dilution analysis did not reproduce within acceptance ranges for potassium. Potassium data was reported flagged "E" on forms 1 and 9.

ICP run of 9/22/05 was not used for iron reporting due to continuous calibration recoveries. Samples were reanalyzed for iron on 10/3/05 and reported.

No other problems were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

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Date Reported: October 5, 2005

Vincent Stancampiano
Vice President

TOB047 S25

H2M LABS, INC.

SDG NARRATIVE FOR WET CHEMISTRY
SAMPLES RECEIVED: 9/21/05
SDG NO.: TOB047

For Samples:

P9 (0-2)	Q8
P9 (2-4)	Q8 (0-2)
P9 (4-6)	Q8 (2-4)
P9 (8-10)	Q8 (4-6)
Q7 (0-2)	Q8 (8-10)
Q7 (2-4)	Q9 (0-2)
Q7 (4-6)	Q9 (2-4)
Q7 (8-10)	Q9 (4-6)
FB47	Q9 (8-10) MS/MSD

One water sample and seventeen soil samples were received by H2M Labs, Inc. on 9/21/05 for select wet chemistry analysis.

Samples were prepared and analyzed using the following methods:

Percent Moisture	ASTM D2216
Hexavalent Chromium	EPA 7196

Sample Q9 (8-10) was utilized for duplicate and spike QC analysis and reporting.

Samples were diluted as required to keep instrument readings within calibration ranges.

No problems were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 4, 2005

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VStancampiano
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Vincent Stancampiano
Vice President

TOB047 S26

H2M LABS, INC.

SDG NARRATIVE FOR VOLATILES ANALYSES
SAMPLES RECEIVED: 9/21/05
SDG #: TOB048

For Samples:

Q4 (8-10)
Q5 (8-10)
Q6 (8-10) MS/MSD
FB48

The above samples and blanks were analyzed for a specific list of volatile organics by EPA method 8260B in accordance with the NYSDEC ASP, Rev. 10/95.

All QC data and calibrations met the requirements of the protocol, and no problems were encountered with sample analysis.

Sample Q6 (8-10) was analyzed as the matrix spike/matrix spike duplicate (MS/MSD).

Low levels (less than the PQL) of methylene chloride were present in the method blanks. A "B" qualifier is applied to this analyte if present in the samples associated with this blank.

Carbon tetrachloride and bromoform had RSD's greater than 20.5% in the unheated initial calibration of 9/23/05. Vinyl chloride and 4-bromofluorobenzene had percent D's greater than 25% in the continuing calibration of (HP5973-1) 9/23/05 unheated and (HP5970-3) 9/23/05 heated, respectively.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 4, 2005

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Joann M. Slavin
Senior Vice President

TOB048 S22

H2M LABS, INC.

SDG NARRATIVE FOR SEMIVOLATILES ANALYSES
SAMPLES RECEIVED: 9/21/05
SDG #: TOB048

For Samples:

FB48
Q4 (8-10)
Q5 (8-10)
Q6 (8-10) MS/MSD

The above water samples and field blank were analyzed for the TCL list of semivolatile analytes by EPA method 8270C in accordance with the NYSDEC ASP, Rev. 10/95.

All QC data and calibrations met the requirements of the method, and no problems were encountered with sample analysis. The following should be noted:

- Sample Q6 (8-10) was analyzed as the matrix spike/matrix spike duplicate (MS/MSD). 2,4-dinitrotoluene had a high recovery in both the matrix spike and the matrix spike duplicate. Phenol had a high recovery in the matrix spike duplicate. 4 nitrophenol and pentachlorophenol had a high recovery in the matrix spike blank. These recoveries were however within our in-house recovery limits.

- All samples had a high surrogate recovery for 2,4,6-tribromophenol.

- The soil method blank of 9/23/05 contained TIC's, which were a secondary contamination from the GPC system. These analytes are flagged with a "B" qualifier if present in the associated sample.

- TIC's identified as "unknown alkanes" are presented on the TIC form I but are not included in the total number of TIC's found.

- A "Z" qualifier is applied to the TIC erucylamide in the aqueous samples. This analyte was present in the water method blank however under the reportable level.

- Pentachlorophenol exceeded in the initial calibration of 9/26/05.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 4, 2005

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Joann M. Slavin
Senior Vice President

H2M LABS, INC.

SDG NARRATIVE FOR PCB ANALYSES
SAMPLES RECEIVED: 9/26/05
SDG NO.: TOB048

For Samples:

FB48	Q4 (4-6)	Q6
P4 (0-2)	Q4 (8-10)	Q6 (0-2)
P4 (2-4)	Q5 (0-2)	Q6 (2-4)
P4 (4-6)	Q5 (2-4)	Q6 (4-6)
Q4 (0-2)	Q5 (4-6)	Q6 (8-10) MS/MSD
Q4 (2-4)	Q5 (8-10)	

The above soil samples and a field blank were prepared and analyzed for PCBs by EPA methods 3545 / 3510B and 8082.

All QC data and calibrations met the requirements of the method, unless listed below. The following should be noted:

- All soil samples were cleaned up with concentrated sulfuric acid and were subjected to sulfur cleanup with TBA.
- Sample Q6 (8-10) was analyzed as the matrix spike/matrix spike duplicate. The sample contained AR1242, which has a pattern very similar to the AR1016 spike that was added for MS/MSD spiking. The AR1242 concentration in the sample is subtracted for computation of the spike recovery.
- On form 1 of the MS and MSD, the sum of the two aroclors is reported as AR1016, and the result of AR1242 is flagged with the qualifier "Y" to indicate the concentration is included in the AR1016 result.
- Since only aroclors were analyzed, the initial calibrations and continuous calibrations for pesticides required by the ASP, were replaced by calibrations with AR1660. %D for all continuous calibrations were under 25%.
- The ASP protocol mandates an analysis of the standards for all positive aroclors within 72 hours, but does not specify any mandatory %D for the response. The analysis of AR125403 in sequence 9/22/05 shows a high %D of 38 % on column RTX-CLP1. Based on that, data for AR1254 on that column are believed to be biased high. All quantifications reported for that aroclor in that sequence were derived from the other column, RTX-CLP2.
- %D is above 25% for TCX in AR124203 on column RTX-CLP1.

SDG NARRATIVE FOR PCB ANALYSES
SAMPLES RECEIVED: 9/26/05
SDG NO.: TOB048

- One sample exceeded the calibration range for targeted analytes and was reanalyzed at a dilution. Both sets of data are reported.
- In dilutions of 1:10 and above, no surrogate recoveries are reported, because the surrogate spike is diluted out.
- AR1242 in the samples showed ratios of congeners different from those found in the standards, due to weathering. This bias has been taken into account for the selection of the quantification peaks, to obtain a representative average result.
- In samples with positive aroclors, low levels of other aroclors could be masked due to the overlap of patterns. These other aroclors are flagged with the qualifier X.
- The qualifier "Z" is used for AR1254 in presence of higher levels of AR1242 to indicate that the result for AR1254 is biased high due to the overlap of patterns.
- Positives are reported to the practical detection limit of ½ of the reporting limits.
- A table of codes used for corrections and manual integration is presented before the sample reports.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 8, 2005

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Ursula Middel
Technical Manager

H2M LABS, INC.

SDG NARRATIVE FOR METALS ANALYSIS
SAMPLES RECEIVED: 9/21/05
SDG NO.: TOB048

For Samples:

P4 (0-2)	Q5 (4-6)
P4 (2-4)	Q5 (8-10)
P4 (4-6)	Q6
Q4 (0-2)	Q6 (0-2)
Q4 (2-4)	Q6 (2-4)
Q4 (4-6)	Q6 (4-6)
Q4 (8-10)	Q6 (8-10) MS/MSD
Q5 (0-2)	FB48
Q5 (2-4)	

One water sample and sixteen soil samples were received by H2M Labs, Inc. on 9/21/05 for select cyanide and metals analysis.

Samples were prepared and analyzed using EPA methods 6010B with a TJA61E Trace ICP instrument, 245.1/245.5 with a Leeman HYDRA mercury analyzer and cyanide method 335.2.

Sample Q6 (8-10) was utilized for QC analysis and reporting.

Spike analysis did not recover within 75-125% for iron and lead. Since the sample value was greater than four times the spike concentration, post spikes and data qualifiers were not required.

Spike analysis did not recover within acceptance ranges for chromium, antimony and manganese. The sample was post-spiked, reanalyzed and recovered acceptably. Antimony, chromium and manganese data were reported flagged "N" on forms 1 and 5A.

Duplicate analysis did not reproduce within acceptance ranges for chromium and copper. Chromium and copper data were reported flagged "*" on forms 1 and 6.

ICP serial dilution analysis did not reproduce within acceptance ranges for copper and potassium. Copper and potassium data were reported flagged "E" on forms 1 and 9.

No other problems were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

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* V Stancampiano jms*
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Date Reported: October 4, 2005

Vincent Stancampiano
Vice President

TOB048 S26

H2M LABS, INC.

SDG NARRATIVE FOR WET CHEMISTRY
SAMPLES RECEIVED: 9/21/05
SDG NO.: TOB048

For Samples:

FB48	Q5 (2-4)
P4 (0-2)	Q5 (4-6)
P4 (2-4)	Q5 (8-10)
P4 (4-6)	Q6
Q4 (0-2)	Q6 (0-2)
Q4 (2-4)	Q6 (2-4)
Q4 (4-6)	Q6 (4-6)
Q4 (8-10)	Q6 (8-10) MS/MSD
Q5 (0-2)	

One water sample and sixteen soil samples were received by H2M Labs, Inc. on 9/21/05 for select wet chemistry analysis.

Samples were prepared and analyzed using the following methods:

Percent Moisture	ASTM D2216
Hexavalent Chromium	EPA 7196

Sample Q6 (8-10) was utilized for duplicate and spike QC analysis and reporting.

LCS analysis of 9/27/05 did not recover within 80-120%. LCS analysis recovered within H2M in-house calculated limits of 56.3-126%.

No problems were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 6, 2005

Vincent Stancampiano
Vice President

TOB048 S27

H2M LABS, INC.

SDG NARRATIVE FOR VOLATILES ANALYSES
SAMPLES RECEIVED: 9/22/05
SDG #: TOB049

For Samples:

I13 (8-10)
J11 (0-2)
O9 (2-4) MS/MSD
P4 (8-10)
FB49

The above samples and blanks were analyzed for a specific list of volatile organics by EPA method 8260B in accordance with the NYSDEC ASP, Rev. 10/95.

All QC data and calibrations met the requirements of the protocol, and no problems were encountered with sample analysis.

Sample O9 (2-4) was analyzed as the matrix spike/matrix spike duplicate (MS/MSD). The internal standard area count for d5-chlorobenzene was low in the matrix spike sample. All area counts were acceptable in the parent sample and the matrix spike duplicate.

Low levels (under the PQL) of methylene chloride were present in the method blanks associated with these samples. A "B" qualifier is applied to this analyte if present in a sample associated with the blank.

An "X" qualifier is applied to TIC's, which appear to be due to column bleed. TIC's identified as "unknown alkanes" are listed on the TIC form I. These TIC's are however not counted in the number of TIC's found.

Carbon tetrachloride and bromoform had an RSD greater than 20.5% in the unheated initial calibration of 9/23/05.

Vinyl chloride and 4-bromofluorobenzene had % D's greater than 25% in the unheated continuing calibration of 9/23/05 (HP5973-1) and the heated continuing calibration of 9/23/05 (HP5970-3), respectively.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 4, 2005

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Joann M. Slavin
Senior Vice President

H2M LABS, INC.

SDG NARRATIVE FOR SEMIVOLATILES ANALYSES
SAMPLES RECEIVED: 9/22/05
SDG #: TOB049

For Samples:

FB49
I13 (8-10)
J11 (0-2)
O9 (2-4) MS/MSD
P4 (8-10)

The above water samples and field blank were analyzed for the TCL list of semivolatile analytes by EPA method 8270C in accordance with the NYSDEC ASP, Rev. 10/95.

All QC data and calibrations met the requirements of the method, and no problems were encountered with sample analysis. The following should be noted:

- Sample O9 (2-4) was analyzed as the matrix spike/matrix spike duplicate (MS/MSD). 4-chloro-methylphenol, 2,4-dinitrotoluene and pyrene have high percent recoveries in both the matrix spike and the matrix spike duplicate. 4 nitrophenol and pentachlorophenol had a high recovery in the matrix spike blank. These recoveries were however within our in-house recovery limits.

- Sample P4 (8-10) had a high surrogate recovery for 2,4,6-tribromophenol.

- The soil method blank of 9/23/05 contained TIC's, which were secondary contamination from the GPC system. These analytes are flagged with a "B" qualifier if present in the associated samples. TIC's identified as "unknown alkanes" are presented on the TIC form I but are not included in the total number of TIC's found.

- A "Z" qualifier is applied to the TIC erucylamide in the aqueous sample. This analyte was present in the water method blank however under the reportable level.

- A "Y" qualifier is applied to TIC's whose concentration level may be biased low due to interference with the total area count of the internal standard used to quantify the peak.

- An "X" qualifier is applied to TIC's, which appear to be due to column bleed.

- Sample O9 (2-4) was reanalyzed at a dilution due to concentration levels of targeted analytes above the calibration range. Both sets of data are submitted.

- Pentachlorophenol exceeded 25% D in the continuing calibrations of 9/26/05 and 9/27/05.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 4, 2005

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Joann M. Slavin
Senior Vice President

H2M LABS, INC.

SDG NARRATIVE FOR PCB ANALYSES
SAMPLES RECEIVED: 9/22/05
SDG NO.: TOB049

For Samples:

FB49	J11 (2-4)	O9 (0-2)
I13 (0-2)	J11 (4-6)	O9 (2-4) MS/MSD
I13 (2-4)	J11 (8-10)	O9 (4-6)
I13 (4-6)	O4	O9 (8-10)
I13 (8-10)	O4 (0-2)	P4 (8-10)
J11 (0-2)	O4 (2-4)	

The above soil samples and a field blank were prepared and analyzed for PCBs by EPA methods 3545 / 3510B and 8082.

All QC data and calibrations met the requirements of the method, unless listed below. The following should be noted:

- All soil samples were cleaned up with concentrated sulfuric acid and were subjected to sulfur cleanup with TBA.
- Sample O9 (2-4) was analyzed as the matrix spike/matrix spike duplicate. The sample contained AR1242, which has a pattern very similar to the AR1016 spike that was added for MS/MSD spiking. The AR1242 concentration in the sample is subtracted for computation of the spike recovery.
- On form 1 of the MS and MSD, the sum of the two aroclors is reported as AR1016, and the result of AR1242 is flagged with the qualifier "Y" to indicate the concentration is included in the AR1016 result.
- QC limits for AR1016 and AR1260 do not apply, because the spiking level was not a multiple of the sample concentration.
- Since only aroclors were analyzed, the initial calibrations and continuous calibrations for pesticides required by the ASP, were replaced by calibrations with AR1660. %D for all continuous calibrations were under 25%.
- %D is above 25% for TCX in AR124203 on column RTX-CLP.
- Four samples exceeded the calibration range for targeted analytes and were reanalyzed at a dilution. Both sets of data are reported.
- In dilutions of 1:10 and above, no surrogate recoveries are reported, because the surrogate spike is diluted out.
- AR1242 in the samples showed ratios of congeners different from those found in the standards, due to weathering. This bias has been taken into account for the selection of the quantification peaks, to obtain a representative average result.

H2M LABS, INC.

SDG NARRATIVE FOR PCB ANALYSES
SAMPLES RECEIVED: 9/22/05
SDG NO.: TOB049

- In samples with positive aroclors, low levels of other aroclors could be masked due to the overlap of patterns. These other aroclors are flagged with the qualifier X.
- In samples with high concentrations of AR1242, late AR1242 congeners are quantified "as" AR1254 and AR1260 due to the overlap of congeners. Unless the amount detected for AR1254 and AR1260 exceeds the amount of the anticipated AR1242 contribution, AR1254 and AR1260 are reported as not found with the qualifier "U" and "X".
- The qualifier "Z" is used for AR1254 in presence of higher levels of AR1242 to indicate that the result for AR1254 is biased high due to the overlap of patterns.
- Positives are reported to the practical detection limit of ½ of the reporting limits.
- A table of codes used for corrections and manual integration is presented before the sample reports.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 11, 2005

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Ursula Middel
Technical Manager

TOB049 S26

H2M LABS, INC.

SDG NARRATIVE FOR METALS ANALYSIS
SAMPLES RECEIVED: 9/22/05
SDG NO.: TOB049

For Samples:

I13 (0-2)	O4
I13 (2-4)	O4 (0-2)
I13 (4-6)	O4 (2-4)
I13 (8-10)	O9 (0-2)
J11 (0-2)	O9 (2-4) MS/MSD
J11 (2-4)	O9 (4-6)
J11 (4-6)	O9 (8-10)
J11 (8-10)	P4 (8-10)
	FB49

One water sample and sixteen soil samples were received by H2M Labs, Inc. on 9/22/05 for select metals analysis.

Samples were prepared and analyzed using EPA methods 6010B with a TJA61E Trace ICP instrument, 245.1/245.5 with a Leeman HYDRA mercury analyzer and cyanide method 335.2.

Sample O9 (2-4) was utilized for QC analysis and reporting.

ICP run of 9/26/05 was utilized for all analysis except thallium. Thallium ICS A STD did not meet eptance criteria. Samples were reanalyzed for thallium on 9/30/05.

ICP run of 9/27/05 did not meet acceptance criteria and was not utilized for reporting.

ICP post spike samples were analyzed on 10/30/05.

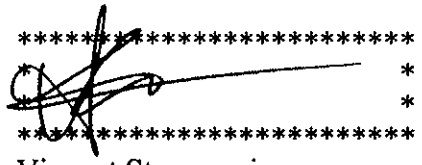
Spike analysis did not reproduce within 75-125% for iron, lead, mercury and zinc. Since the sample value was greater than four times the spike concentration, post spikes and data qualifiers were not required.

Spike analysis did not recover within acceptance ranges for arsenic, cadmium, chromium and copper. The samples were post spiked, reanalyzed and recovered at 119.4% for arsenic, -10.4% for cadmium, 73% for chromium and 50.6% for copper. Associated data were reported flagged "N" on forms 1 and 5A.

Duplicate analysis did not reproduce within acceptance ranges for aluminum, barium, cadmium, calcium, chromium, copper, lead, nickel and zinc. Associated results were reported flagged "*" on forms 1 and 6.

No other problems were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.



Date Reported: October 6, 2005

Vincent Stancampiano
Vice President

TOB049 S27

H2M LABS, INC.

SDG NARRATIVE FOR WET CHEMISTRY
SAMPLES RECEIVED: 9/22/05
SDG NO.: TOB049

For Samples:

I13 (0-2)	O4
I13 (2-4)	O4 (0-2)
I13 (4-6)	O4 (2-4)
I13 (8-10)	O9 (0-2)
J11 (0-2)	O9 (2-4) MS/MSD
J11 (2-4)	O9 (4-6)
J11 (4-6)	O9 (8-10)
J11 (8-10)	P4 (8-10)
	FB49

One water sample and sixteen soil samples were received by H2M Labs, Inc. on 9/22/05 for select wet chemistry analysis.

Samples were prepared and analyzed using the following methods:

Percent Moisture	ASTM D2216
Hexavalent Chromium	EPA 7196

Sample O9 (2-4) was utilized for duplicate and spike QC analysis and reporting.

Laboratory control standard (LCS) recovered within H2M in-house acceptance limits of 53.6-126%.

No problems were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 6, 2005

Vincent Stancampiano
Vice President

TOB049 S28

H2M LABS, INC.

SDG NARRATIVE FOR VOLATILES ANALYSES
SAMPLES RECEIVED: 9/23/05
SDG #: TOB050

For Samples:

I14 (0-2) MS/MSD
R2 (2-4)
R4 (6-8)
FB50

The above samples and blanks were analyzed for a specific list of volatile organics by EPA method 8260B in accordance with the NYSDEC ASP, Rev. 10/95.

All QC data and calibrations met the requirements of the protocol, and no problems were encountered with sample analysis.

Sample I14 (0-2) was analyzed as the matrix spike/matrix spike duplicate (MS/MSD).

Low levels (less than the PQL) of methylene chloride was present in the soil method blank. This analyte was flagged with a "B" qualifier if present in the associated samples.

An "X" qualifier is applied to TIC's, which appear to be due to column bleed.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 7, 2005

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Joann M. Slavin
Senior Vice President

H2M LABS, INC.

SDG NARRATIVE FOR SEMIVOLATILES ANALYSES
SAMPLES RECEIVED: 9/23/05
SDG #: TOB050

For Samples:

FB50
I14 (0-2) MS/MSD
R2 (2-4)
R4 (6-8)

The above samples and field blank were analyzed for the TCL list of semivolatile analytes by EPA method 8270C in accordance with the NYSDEC ASP, Rev. 10/95.

All QC data and calibrations met the requirements of the method, and no problems were encountered with sample analysis. The following should be noted:

- Sample I14 (0-2) was analyzed as the matrix spike/matrix spike duplicate (MS/MSD). All percent recoveries and RPD's were within QC limits.
- Pentachlorophenol exceeded 25% D in the continuing calibrations of 9/29/05 and 10/3/05.
- The matrix spike/matrix spike duplicate sample was re-extracted within holding times due to high percent recovery for the LCS for pentachlorophenol. Pentachlorophenol is still high in the LCS at 118% recovery. This recovery is however within in-house QC limits. 2,4- dinitrotoluene is above the QC limits in the MSD. 2,4,6- tribromophenol is above the QC limits in the MSD. d14-4- terphenyl is low in the FB50.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 7, 2005

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Joann M. Slavin
Senior Vice President

TOB050 S23

H2M LABS, INC.

SDG NARRATIVE FOR PCB ANALYSES
SAMPLES RECEIVED: 9/23/05
SDG NO.: TOB050

For Samples:

FB50	I14 (8-10)	R4 (0-2)
I14	R2 (0-2)	R4 (2-4)
I14 (0-2) MS/MSD	R2 (2-4)	R4 (4-6)
I14 (2-4)	R2 (4-6)	R4 (6-8)
I14 (4-6)	R2 (8-10)	R4 (8-10)

The above soil samples and a field blank were prepared and analyzed for PCBs by EPA methods 3545 / 3510B and 8082.

All QC data and calibrations met the requirements of the method, and no problems were encountered with sample analysis. The following should be noted:

- All soil samples were cleaned up with concentrated sulfuric acid and were subjected to sulfur cleanup with TBA.
- Sample I14 (0-2) was analyzed as the matrix spike/matrix spike duplicate.
- Positives are reported to the practical detection limit of ½ of the reporting limits.
- A table of codes used for corrections and manual integration is presented before the sample reports.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 7, 2005

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Ursula Middel
Technical Manager

H2M LABS, INC.

SDG NARRATIVE FOR METALS ANALYSIS
SAMPLES RECEIVED: 9/23/05
SDG NO.: TOB050

For Samples:

FB50	R2 (4-6)
I14	R2 (8-10)
I14 (0-2) MS/MSD	R4 (0-2)
I14 (2-4)	R4 (2-4)
I14 (4-6)	R4 (4-6)
I14 (8-10)	R4 (6-8)
R2 (0-2)	R4 (8-10)
R2 (2-4)	

One water sample and fourteen soil samples were received by H2M Labs, Inc. on 9/23/05 for select metals analysis.

Samples were prepared and analyzed using EPA methods 6010B with a TJA61E Trace ICP instrument, 245.1/245.5 with a Leeman HYDRA mercury analyzer and cyanide method 335.2.

Sample I14 (0-2) was utilized for QC analysis and reporting.

Spike analysis did not recover within 75-125% for iron. Since the sample value was greater than four times the spike concentration, post spikes and data qualifiers were not required.

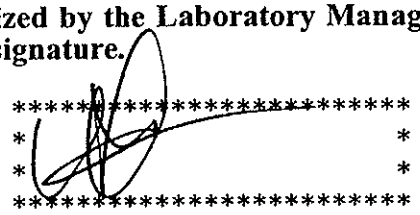
Duplicate analysis did not reproduce within acceptance ranges for chromium. Chromium data was reported flagged "*" on forms 1 and 6.

ICP serial dilution analysis did not reproduce within acceptance ranges for calcium, magnesium and zinc. Associated data were reported flagged "E" on forms 1 and 9.

The initial ICP run of 9/27/05 did not meet acceptance criteria. The samples were reanalyzed on 9/28/05 and utilized for reporting.

No other problems were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.



Date Reported: October 7, 2005

Vincent Stancampiano
Vice President

TOB050 S25

H2M LABS, INC.

SDG NARRATIVE FOR WET CHEMISTRY
SAMPLES RECEIVED: 9/23/05
SDG NO.: TOB050

For Samples:

I14	R2 (4-6)
I14 (0-2) MS/MSD	R2 (8-10)
I14 (2-4)	R4 (0-2)
I14 (4-6)	R4 (2-4)
I14 (8-10)	R4 (4-6)
R2 (0-2)	R4 (6-8)
R2 (2-4)	R4 (8-10)
FB50	

One water sample and fourteen soil samples were received by H2M Labs, Inc. on 9/23/05 for select wet chemistry analysis.

Samples were prepared and analyzed using the following methods:

Percent Moisture	ASTM D2216
Hexavalent Chromium	EPA 7196

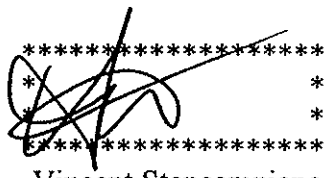
Sample I14 (0-2) was utilized for duplicate and spike QC analysis and reporting.

Hexavalent chromium laboratory control standard (LCS) recovery was not within 80-120%. The LCS recovery was within H2M in-house control limits of 53.6-126%.

No problems were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 7, 2005



Vincent Stancampiano
Vice President

H2M LABS, INC.

SDG NARRATIVE FOR VOLATILES ANALYSES
SAMPLES RECEIVED: 9/23/05 & 9/26/05
SDG #: TOB051

For Samples:

FB051
R1 (2-4)
R1 (6-8)
R1 (8-10)
R3 (2-4)
R3 (8-10)
R5 (4-6) MS/MSD
R5 (6-8)
R6 (2-4)
TB051
TB51

The above samples and blanks were analyzed for a specific list of volatile organics by EPA method 8260B in accordance with the NYSDEC ASP, Rev. 10/95.

All QC data and calibrations met the requirements of the protocol, and no problems were encountered with sample analysis.

Sample R5 (4-6) was analyzed as the matrix spike/matrix spike duplicate (MS/MSD).

Low levels (less than the PQL) of methylene chloride was present in the soil method blank. This analyte was flagged with a "B" qualifier if present in the associated samples.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 10, 2005

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Joann M. Slavin
Senior Vice President

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TOB051 A10

H2M LABS, INC.

SDG NARRATIVE FOR SEMIVOLATILES ANALYSES
SAMPLES RECEIVED: 9/23/05 & 9/26/05
SDG #: TOB051

For Samples:

FB051
R1 (6-8)
R3 (2-4)
R5 (4-6) MS/MSD
R5 (6-8)

The above water samples and field blank were analyzed for the TCL list of semivolatile analytes by EPA method 8270C in accordance with the NYSDEC ASP, Rev. 10/95.

All QC data and calibrations met the requirements of the method, and no problems were encountered with sample analysis. The following should be noted:

- Sample R5 (4-6) was analyzed as the matrix spike/matrix spike duplicate (MS/MSD). The matrix spike / matrix spike duplicate sample was re-extracted, within holding times, due to high percent recovery for the LCS for pentachlorophenol. Pentachlorophenol is still high in the LCS at 118% recovery. This recovery is however within in-house Q.C. limits. Pentachlorophenol had a low percent recovery in the matrix spike duplicate sample hence a high RPD.

- Pentachlorophenol exceeded 25% D in the continuing calibrations of 9/29/05 and 10/3/05.

- The surrogate standard 4-terphenyl-d14 was low in sample FB051.

- The TIC erucylamide was present in the water method blank. This analyte was flagged with a "B" qualifier if present in the associated samples.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 10, 2005

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Joann M. Slavin
Senior Vice President

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TOB051 A11

H2M LABS, INC.

SDG NARRATIVE FOR PCB ANALYSES
SAMPLES RECEIVED: 9/23/05 & 9/26/05
SDG NO.: TOB051

For Samples:

FB051	R1 (8-10)	R5 (4-6) MS/MSD
R1	R3 (0-2)	R5 (6-8)
R1 (0-2)	R3 (2-4)	R5 (8-10)
R1 (18-20)	R3 (4-6)	R6 (0-2)
R1 (2-4)	R3 (8-10)	R6 (2-4)
R1 (4-6)	R5 (0-2)	R6 (4-6)
R1 (6-8)	R5 (2-4)	

The above soil samples and a field blank were prepared and analyzed for PCBs by EPA methods 3545 / 3510B and 8082.

All QC data and calibrations met the requirements of the method, unless listed below. The following should be noted:

- All soil samples were cleaned up with concentrated sulfuric acid and were subjected to sulfur cleanup with TBA.
- Sample R5 (4-6) was analyzed as the matrix spike/matrix spike duplicate.
- Since only aroclors were analyzed, the initial calibrations and continuous calibrations for pesticides required by the ASP, were replaced by calibrations with AR1660. %D for all continuous calibrations were under 25%.
- In samples with positive aroclors, low levels of other aroclors could be masked due to the overlap of patterns. These other aroclors are flagged with the qualifier X.
- Positives are reported to the practical detection limit of ½ of the reporting limits.
- A table of codes used for corrections and manual integration is presented before the sample reports.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 8, 2005

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Ursula Middel
Technical Manager

TOB051 A12

H2M LABS, INC.

SDG NARRATIVE FOR METALS ANALYSIS
SAMPLES RECEIVED: 9/23/05 & 9/26/05
SDG NO.: TOB051

For Samples:

FB051	R3 (4-6)
R1	R3 (8-10)
R1 (0-2)	R5 (0-2)
R1 (18-20)	R5 (2-4)
R1 (2-4)	R5 (4-6) MS/MSD
R1 (4-6)	R5 (6-8)
R1 (6-8)	R5 (8-10)
R1 (8-10)	R6 (0-2)
R3 (0-2)	R6 (2-4)
R3 (2-4)	R6 (4-6)

One water sample and nineteen soil samples were received by H2M Labs, Inc. on 9/23/05 and 9/26/05 for select cyanide and metals analysis.

Samples were prepared and analyzed using EPA methods 6010B with a TJA61E Trace ICP instrument, 245.1/.5 with a Leeman HYDRA mercury analyzer and cyanide method 335.2.

Sample R5 (4-6) was utilized for QC analysis and reporting.

Spike analysis did not recover within 75-125% for iron. Since the sample value was greater than four times the spike concentration, post spike and data qualifiers were not required.

Spike analysis did not recover within acceptance ranges for manganese. The sample was post spiked, reanalyzed and recovered at 102.7%. Manganese data was reported flagged "N" on Forms 1 and 5A.

Duplicate analysis did not reproduce within acceptance ranges for chromium, iron and zinc. Associated data were reported flagged "*" on Forms 1 and 6.

No other problems were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 10, 2005

Vincent Stancampiano
Vice President

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TOB051 A13

H2M LABS, INC.

SDG NARRATIVE FOR WET CHEMISTRY
SAMPLES RECEIVED: 9/23/05 & 9/26/05
SDG NO.: TOB051

For Samples:

FB051	R3 (4-6)
R1	R3 (8-10)
R1 (0-2)	R5 (0-2)
R1 (18-20)	R5 (2-4)
R1 (2-4)	R5 (4-6) MS/MSD
R1 (4-6)	R5 (6-8)
R1 (6-8)	R5 (8-10)
R1 (8-10)	R6 (0-2)
R3 (0-2)	R6 (2-4)
R3 (2-4)	R6 (4-6)

One water sample and nineteen soil samples were received by H2M Labs, Inc. on 9/23/05 & 9/26/05 for select wet chemistry analysis.

Samples were prepared and analyzed using the following methods:

Hexavalent chromium	EPA SW7196
Percent Moisture	ASTM D2216

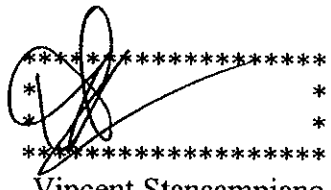
Sample R5 (4-6) was utilized for duplicate and spike QC analysis and reporting.

Hexavalent chromium laboratory control sample (LCS) recovered within calculated acceptance limits of 53.6 – 126%.

No problems were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 10, 2005



Vincent Stancampiano
Vice President

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TOB051 A14

H2M LABS, INC.

SDG NARRATIVE FOR VOLATILES ANALYSES
SAMPLES RECEIVED: 9/27/05 & 9/29/05
SDG #: TOB052

For Samples:

28-30 R1
48-50 R1
FB52
R3 (30-32)
R3 (48-50) MS/MSD
R6 (6-8)
R6 (8-10)
R6 (28-30)
R6 (48-50)
TB
TB52

The above samples and blanks were analyzed for a specific list of volatile organics by EPA method 8260B in accordance with the NYSDEC ASP, Rev. 10/95.

All QC data and calibrations met the requirements of the protocol, and no problems were encountered with sample analysis.

Sample R3 (48-50) was analyzed as the matrix spike/matrix spike duplicate (MS/MSD).

Low levels (less than the PQL) of methylene chloride was present in the soil method blank. This analyte was flagged with a "B" qualifier if present in the associated samples.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 12, 2005

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Joann M. Slavin
Senior Vice President

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TOB052 S34

H2M LABS, INC.

SDG NARRATIVE FOR SEMIVOLATILES ANALYSES
SAMPLES RECEIVED: 9/27/05 & 9/29/05
SDG #: TOB052

For Samples:

FB52
R3 (48-50) MS/MSD
R6 (6-8)

The above samples and field blank were analyzed for the TCL list of semivolatile analytes by EPA method 8270C in accordance with the NYSDEC ASP, Rev. 10/95.

All QC data and calibrations met the requirements of the method, and no problems were encountered with sample analysis. The following should be noted:

- Sample R3 (48-50) was analyzed as the matrix spike/matrix spike duplicate (MS/MSD). 2,4-dinitrotoluene is above the Q.C. limits in both the matrix spike and the matrix spike duplicate.
- Pentachlorophenol is above the Q.C. limits in LCS-14932 but within in-house Q.C. limits.
- Pentachlorophenol exceeded 25%D in the continuing calibration of 9/30/05 and 10/3/05. 4-methylphenol exceeded 25% D in the continuing calibration of 9/30/05
- An "X" qualifier is applied to TIC's which appear to be due to column bleed. The water method blank contained two TIC's. These analytes are flagged with a "B" qualifier if present in the associated sample.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 12, 2005

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Joann M. Slavin
Senior Vice President

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TOB052 S35

H2M LABS, INC.

SDG NARRATIVE FOR PCB ANALYSES
SAMPLES RECEIVED: 9/27/05 & 9/29/05
SDG NO.: TOB052

For Samples:

28-30 R1	R3 (18-20)	R6 (28-30)
38-40 R1	R3 (30-32)	R6 (38-40)
48-50 R1	R3 (38-40)	R6 (48-50)
58-60 R1	R3 (48-50) MS/MSD	R6 (58-60)
FB52	R3 (58-60)	R6 (6-8)
R3	R6 (20-22)	R6 (8-10)

The above soil samples and a field blank were prepared and analyzed for PCBs by EPA methods 3545 / 3510B and 8082.

All QC data and calibrations met the requirements of the method, and no problems were encountered with sample analysis. The following should be noted:

- All soil samples were cleaned up with concentrated sulfuric acid and were subjected to sulfur cleanup with TBA.
- Sample R3 (48-50) was analyzed as the matrix spike/matrix spike duplicate.
- Positives are reported to the practical detection limit of ½ of the reporting limits.
- A table of codes used for corrections and manual integration is presented before the sample reports.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 7, 2005

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Ursula Middel
Technical Manager

TOB052 S36

H2M LABS, INC.

SDG NARRATIVE FOR METALS ANALYSIS
SAMPLES RECEIVED: 9/27/05 & 9/29/05
SDG NO.: TOB052

For Samples:

28-30 R1	R3 (48-50) MS/MSD
38-40 R1	R3 (58-60)
48-50 R1	R6 (20-22)
58-60 R1	R6 (28-30)
FB52	R6 (38-40)
R3	R6 (48-50)
R3 (18-20)	R6 (58-60)
R3 (30-32)	R6 (6-8)
R3 (38-40)	R6 (8-10)

One water sample and seventeen soil samples were received by H2M Labs, Inc. on 9/27/05 and 9/29/05 for select cyanide and metals analysis.

Samples were prepared and analyzed using EPA methods 6010B with a TJA61E Trace ICP instrument, 245.1/.5 with a Leeman HYDRA mercury analyzer and cyanide method 335.2.

Sample R3 (48-50) was utilized for QC analysis and reporting.

Spike analysis did not recover within 75-125% for iron. Since the sample value was greater than four times the spike concentration, post spike and data qualifiers were not required.

Spike analysis did not recover within acceptance ranges for antimony and selenium. The sample was post spiked, reanalyzed and recovered acceptably. Antimony and selenium data was reported flagged "N" on Forms 1 and 5A.

Duplicate analysis did not reproduce within acceptance ranges for aluminum, arsenic, chromium, iron, lead and zinc. Associated data were reported flagged "*" on Forms 1 and 6.

ICP run of 10/4/05 was utilized for reporting all analytes except thallium. Continuous calibration verification (CCV4) did not meet acceptance criteria for thallium. Samples were reanalyzed for thallium along with the post spike samples on 10/5/05.

ICP serial dilution analysis of sample R3 (58-60) did not meet acceptance criteria for aluminum, potassium and zinc. Associated data were reported flagged "E" on Forms 1 and 9.

No other problems were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 12, 2005

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* V Stancampiano *
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Vincent Stancampiano
Vice President

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TOB052 S37

H2M LABS, INC.

SDG NARRATIVE FOR WET CHEMISTRY
SAMPLES RECEIVED: 9/27/05 & 9/29/05
SDG NO.: TOB052

For Samples:

28-30 R1	R3 (48-50) MS/MSD
38-40 R1	R3 (58-60)
48-50 R1	R6 (20-22)
58-60 R1	R6 (28-30)
FB52	R6 (38-40)
R3	R6 (48-50)
R3 (18-20)	R6 (58-60)
R3 (30-32)	R6 (6-8)
R3 (38-40)	R6 (8-10)

One water sample and seventeen soil samples were received by H2M Labs, Inc. on 9/27/05 & 9/29/05 for select wet chemistry analysis.

Samples were prepared and analyzed using the following methods:

Hexavalent chromium	EPA SW7196
Percent Moisture	ASTM D2216

Sample R3 (48-50) was utilized for duplicate and spike QC analysis and reporting.

No problems were noted during the analysis of this sample group.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 12, 2005

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Vincent Stancampiano
Vice President

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TOB052 S38

H2M LABS, INC.

SDG NARRATIVE FOR VOLATILES ANALYSES
SAMPLES RECEIVED: 10/4/05
SDG NO.: TOB053

For Samples:

CAMW5 MS/MSD
FB53
TB

The above sample and blanks were analyzed for a specific list of volatile organics by EPA method 8260B in accordance with the NYSDEC ASP, Rev. 10/95.

All QC data and calibrations met the requirements of the protocol, and no problems were encountered with sample analysis. The following should be noted:

- Sample CAMW5 was analyzed as the matrix spike/matrix spike duplicate (MS/MSD).
- The RSD of the initial calibration exceeded 20.5% for one analyte, but met the limit of 40%.
- %D for one analyte in the CCV of 10/7/05 exceeded 25%, but met the acceptance limit of 40%.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 12, 2005

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Ursula Middel
Technical Manager

H2M LABS, INC.

SDG NARRATIVE FOR SEMIVOLATILES ANALYSES
SAMPLES RECEIVED: 10/4/05
SDG #: TOB053

For Samples:

CAMW5 MS/MSD
FB53

The above sample and field blank were analyzed for the TCL list of semivolatile analytes by EPA method 8270C in accordance with the NYSDEC ASP, Rev. 10/95.

All QC data and calibrations met the requirements of the method, and no problems were encountered with sample analysis. The following should be noted:

- Sample CAMW5 was analyzed as the matrix spike/matrix spike duplicate (MS/MSD). Acenaphthene had a high RPD.
- Phenol had a 23% recovery (lower limit 25%) and 4-nitrophenol had a 19% recovery (lower limit 22%) in the LFB-14991.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Date Reported: October 12, 2005

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Joann M. Slavin
Senior Vice President

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TOB053 S22