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SITE CHARACTERIZATION REPORT

Glen Head Groundwater Plume
Glen Head, Township of Oyster Bay,
Nassau County, New York
NYSDEC Site No. 1-30-098
NYSDEC Work Assignment No. D003970-25

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Prepared for:

New York State Department of Environmental Conservation
Division of Environmental Remediation
Remedial Bureau A
625 Broadway
Albany, New York 12233-7015

Prepared by:

Environmental Resources Management
520 Broad Hollow Road, Suite 210
Melville, New York 11747

TABLE OF CONTENTS

1.0 INTRODUCTION 1-1

1.1 PURPOSE AND OBJECTIVES OF THE SITE CHARACTERIZATION 1-1

1.2 SITE LOCATION AND BACKGROUND 1-2

1.3 PREVIOUS INVESTIGATION 1-2

1.4 ONGOING INVESTIGATION OF FORMER FRESH & CLEAN LAUNDRY SITE 1-5

1.4.1 *Purpose* 1-5

1.4.2 *Potential Environmental Concerns* 1-5

1.4.3 *Scope of Voluntary Investigation and Interim Remedial Measure (IRM)* 1-5

2.0 INVESTIGATION ACTIVITIES 2-9

2.1 GENERAL 2-9

2.2 SITE CHARACTERIZATION ACTIVITIES 2-10

2.2.1 *Site Access* 2-10

2.2.2 *Drywell and Cesspool Sampling* 2-10

2.2.3 *Soil Borings* 2-11

2.2.4 *Groundwater Sampling* 2-11

2.2.5 *Permanent Multilevel Soil Gas Sampling Points* 2-12

2.2.6 *Soil Gas Sampling* 2-12

2.2.7 *Surface Water and Sediment* 2-13

2.2.8 *Site Survey* 2-14

2.2.9 *Management of Investigative Derived Wastes* 2-14

2.2.10 *Analytical Data Quality Evaluation* 2-15

2.2.11 *Reliability of Laboratory Analytical Data* 2-15

2.2.11.1 Analytical Laboratory 2-15

2.2.11.2 Analytical Procedures 2-15

2.2.11.3 Data Validation 2-16

3.0 ENVIRONMENTAL SETTING 3-1

3.1 GEOLOGIC SETTING 3-1

3.2 HYDROGEOLOGY 3-1

3.2.1 *Ground Water Elevation and Flow* 3-3

3.2.2 *Topography* 3-4

3.2.3 *Water Supply Wells* 3-4

3.2.4 *Drainage Pattern and Surface Water Bodies* 3-4

3.2.5 *Soils* 3-4

3.2.6 *Potable Water Supply and Sanitary/Sewer Systems* 3-5

4.0 FIELD INVESTIGATION RESULTS *4-6*

4.1 GENERAL *4-6*

4.2 SOIL INVESTIGATION RESULTS *4-6*
4.2.1 *Manhole Sampling Results* *4-6*
4.2.2 *Soil Boring Results* *4-8*

4.3 GROUNDWATER INVESTIGATION RESULTS *4-9*
4.3.1 *Groundwater Sampling Results* *4-9*

4.4 AIR INVESTIGATION RESULTS *4-10*
4.4.1 *Soil Vapor Sampling Results* *4-10*

4.5 SURFACE WATER SAMPLING RESULTS *4-11*

4.6 SEDIMENT INVESTIGATION RESULTS *4-11*

5.0 SUMMARY AND CONCLUSIONS *5-1*

6.0 RECOMMENDATIONS *6-1*

7.0 REFERENCES *7-7-1*

LIST OF FIGURES

1-1	*Site Area Location Map*
1-2	*Study Area Plan*
1-3	*PSA Groundwater Results Summary Map*
2-1	*Manhole Sample Locations*
2-2	*Soil Boring Sample Locations*
2-3	*Monitoring Well Locations*
2-4	*Permanent Soil Gas Implant Locations*
2-5	*Spring Surface Water and Spring Sediment Sample Locations*
3-1	*Geological Cross Section*
3-2	*Groundwater Table Elevation Contour Map*
4-1	*Summary of Manhole Sampling Results*
4-2	*Summary of Soil Boring Sample Results*
4-3	*Summary of Groundwater Sampling Results*
4-4	*PCE Groundwater Plume Map*
4-5	*Summary of Soil Gas Sampling Results*
4-6	*Summary of Spring Sediment and Surface Water Sample Results*

LIST OF TABLES

2-1	*Summary of Manhole and Soil Boring Samples Collected*
2-2	*Summary of Monitoring Well Construction Information*
3-1	*Summary of Glen Head Groundwater Elevation Data*
4-1	*Summary of Manhole Sampling Analytical Results*
4-2	*Summary of Soil Boring Sample Analytical Results*
4-3	*Summary of Groundwater Sampling Analytical Results*
4-4	*Summary of Soil Gas Sampling Analytical Results*
4-5	*Summary of Spring Surface Water Sampling Results*
4-6	*Summary of Spring Sediment Sampling Results*

LIST OF APPENDICES

Appendix A	*Soil Boring, Groundwater Sampling, Soil Gas Implant Construction and Soil Gas Sampling Logs*
Appendix B:	*Waste Manifest*
Appendix C:	*Data Validation Reports [DVR] (CD-ROM)*
Appendix D:	*Laboratory Analytical Data Packages (CD-ROM)*

1.0 INTRODUCTION

Environmental Resources Management (ERM), submits this Site Characterization Report (SCR) for the Groundwater Contaminant Plume in Glen Head, Township of Oyster Bay, Nassau County, New York (the Site), see Figure 1-1, Site Location Map.

The Site Characterization (SC) was performed as Work Assignment No. D003970-25 under the New York State Department of Environmental Conservation (NYSDEC) State Superfund Engineering Services Standby Contract. The August 2005 Site Characterization Work Plan, Site-Specific Quality Assurance Project Plan (QAPP), Standard Operation Procedures (SOP), and Health and Safety Plan (HASP) were approved for implementation by NYSDEC letter, dated September 2, 2005. The field work portion of the SC was conducted by ERM from November 2005 through April 2006.

The purpose of this Site Characterization Report (SCR) is to summarize the activities conducted as part of the field investigation and to present an interpretation of the results.

1.1 PURPOSE AND OBJECTIVES OF THE SITE CHARACTERIZATION

A Preliminary Site Assessment (PSA) of this portion of Glen Head revealed a widespread area of groundwater contaminated by tetrachloroethene (PCE). Numerous potential sources of the PCE were identified in the PSA. The goals of the SC were:

- investigate identified facilities with past operations and/or disposal practices within the plume area;
- evaluate whether chemical constituents of concern (i.e., PCE) are present in environmental media (i.e., soil, groundwater and soil vapor);
- confirm the general groundwater flow direction at the Site; and,
- evaluate data collected to determine if any impacts from past operations and/or disposal practices contributed to the existing groundwater plume in the Site area.

1.2 SITE LOCATION AND BACKGROUND

The Glen Head Groundwater Plume underlies an area that includes several former and active dry cleaning and industrial facilities located in Glen Head. There is mixed land usage in the portion of Glen Head overlying the plume including industrial, commercial and residential properties. The commercial properties in the study area are primarily located along Glen Head Road and Glen Cove Avenue. The study area is approximately 88 acres, bounded by Brookwood Street to the west, Todd Drive North to the north, Wall Street to the east, and Walnut Street to the south. The coordinates of the center of the Study Area are 40.833648 (latitude) and 73.627223 (longitude). See Figure 1-1 for Study Area Location and Figure 1-2 for Study Area Plan.

Two additional inactive hazardous waste disposal sites are located in the Study Area: Trans Technology (Site No.1-30-101), a Class 2, State Superfund site is located in the northern section of the Study Area; and the former Fresh & Clean Cleaners (Site No. 1-30-111) also a Class 2 site is located on the up gradient side of the currently defined plume. The former Fresh & Clean Cleaners has entered the Voluntary Cleanup Program as a result of the PSA findings (V00606).

1.3 PREVIOUS INVESTIGATION

The Glen Head Groundwater Plume lies beneath the area immediately south of the Trans Technology site where groundwater contamination, presumably resulting from past disposal activities, has been detected. According to the PSA conducted for the NYSDEC by Lawler, Matusky & Skelly Engineers LLP (LMS), until 1978, the Trans Technology site (Tax Section No. 21, Block N3, Lot 21) located north of Glen Head Road (at 1 Roberts Lane) was used by Lundy Electronics Company (Lundy) as a machine shop and electronics manufacturing facility. In the early 1980s, Lundy was acquired by Trans Technology, an electronics assembler. Since that time, portions of the site have been leased by Trans Technology to various tenants whose activities have reportedly included woodworking, metals fabrication, and warehousing. Until 1994, Trans Technology assembled electronic components on-site, and a waste manifest from as recently as 1997 shows that TCE and PCE wastes were generated on-site. Previous investigations at Trans Technology indicated that on-site groundwater contained up to 16,000 micrograms per liter (ug/l) of PCE.

The PSA was carried out from September to October 1999, up-gradient of the Trans Technology site in an attempt to determine the source(s) of PCE detected in Glen Head groundwater and define local groundwater flow conditions.

The initial phase of the PSA field work performed in 1999 and 2000 included installation of four (4) monitoring wells and hydro punch groundwater sampling: one (1) monitoring well was located along Station Plaza (MW- 01), one (1) along Railroad Avenue (MW-02), one (1) was placed along Maple Place (MW-03), and one (1) was installed along Dumond Place (MW-04). The wells were installed by CT&E Environmental Services (CT&E) of West Creek, New Jersey. The four (4) monitoring wells were surveyed by YEC, Inc. (YEC) of Valley Cottage, New York, and water levels were collected. In addition to the monitoring wells, CT&E conducted hydro punch groundwater sampling at four (4) additional locations. One (1) hydro punch sample was collected along Station Place (HP- 1) and three (3) hydro punch samples (HP-2, -3, and -4) were collected on Dumond Place.

The groundwater samples collected from the four (4) monitoring wells and four (4) hydro punch locations contained elevated concentrations of VOCs, particularly PCE. The monitoring wells were installed to a depth of 129 ft below ground surface (bgs), and shallow groundwater samples (hydro punch) were collected at depths ranging from approximately 111 to 120 ft bgs at the well installation locations. In addition, two (2) to three (3) groundwater samples were collected at each of the four (4) hydro punch locations. The hydro punch groundwater samples were collected from depths ranging from approximately 120 to 160 ft bgs. All groundwater samples were analyzed for 'Target Compound List (TCL) VOCs by H2M Labs, Inc. (H2M) of Melville, New York, according to NYSDEC Analytical Services Protocol (ASP) Method 95-1. Figure 1-3 depicts the locations of the monitoring wells and hydro punch borings as well as a summary of groundwater sampling results from the 1999 PSA field activities.

In April 2000, a second PSA phase of investigatory work was carried out, including the installation of monitoring wells to better characterize the site and the potential sources of groundwater contamination. Seven (7) additional monitoring well locations were identified and the monitoring wells installed by American Auger & Ditching (American Auger) of Constantia, New York, to better characterize the local hydrogeology and groundwater contamination potentially associated with up to five (5) active and former dry cleaning facilities in the site vicinity. The seven (7) new monitoring wells were surveyed by YEC. In addition, existing observation wells previously installed at gasoline service stations on the northwest and southeast corners of the intersection of Glen Cove Avenue and Glen Head Road (western portion of Glen Head Groundwater Plume site) were surveyed and used to collect water level data. The Phase II PSA groundwater sampling again detected elevated levels of PCE and VOCs in groundwater.

In November of 2004, NYSDEC staff collected an additional round of groundwater samples from all remaining serviceable wells at the site. The groundwater analytical results confirmed the presence of PCE in the plume, at a maximum concentration of 18,000 ug/l (MW-01).

The continued detection of PCE in the Glen Head Groundwater Plume, suggests that multiple releases of PCE may have occurred within the 40 acre Study Area. Possible sources of PCE contamination, identified during the PSA (i.e., five (5) active/former dry cleaning facilities located in the site area) include:

- Glen Head Cleaners [GH Cleaners], located on the northwest corner of the intersection of Glen Head Road and Dumond Place (an active dry cleaning facility);
- The former Charrell Cleaners [C Cleaners], located at 36 Glen Head Road, about 250 ft west of GH Cleaners;
- A former dry cleaners [unnamed] located on the northeast corner of the intersection of Glen Head Road and Dumond Place, about 50 ft east of GH Cleaners;
- Station Valet Cleaners [SV Cleaners], historically no active dry cleaning activities (drop off only) located along Station Place, about 50 ft south of Glen Head Road; and
- The former Fresh and Clean Dry Cleaners [FC Cleaners], located along Railroad Avenue near the eastern portion of the site, see Figure 1-2.

Additional facilities also considered potential sources of contamination including;

- The former Hotel [Hotel] located on Glen Head Road, with possible dry cleaning activities, located about 200 ft east of Railroad Ave., about 600 ft east of GH Cleaners;
- An Auto Body repair facility [Auto Body] currently occupied by an auto repair facility located 50 ft east of the northeast corner of the intersection of Glen Head Road and Dumond Place, about 125 ft east of GH Cleaners;
- Soundview Cleaners [Soundview] along Glen Cove Ave., west of the site; and
- Glenco Cleaners [Glenco] along Glen Cove Ave., west of the site, see Figure 1-2.

The Glen Head Groundwater Plume SC was therefore focused on collecting samples from these potential source facilities to identify contributions to the observed groundwater contamination.

1.4 *ONGOING INVESTIGATION OF FORMER FRESH & CLEAN LAUNDRY SITE*

This section provides a summary of the scope and status of the Former Fresh & Clean Laundry Site (Fresh and Clean) investigation. The summary is based on information provided to ERM by the NYSDEC regarding the Investigation and Interim Remedial Measure (IRM) Work Plan prepared by Environmental Services Inc. (ESI). Fresh and Clean is located at 22-26 Railroad Avenue, Town of Oyster Bay, City of Glen Head, New York 11545 fully described as Section 20, Block 13, Lot Nos. 319-320.

1.4.1 *Purpose*

The goals of the ESI Fresh and Clean Investigation and Interim Remedial Measure Work Plan are to:

- Determine the nature and delineate the areal and vertical extent of contamination in all media for each area of potential environmental concern.
- Delineate the surface and subsurface environmental media, including topography and depth to groundwater;
- Identify the source(s) of contamination, migration paths and actual or potential receptors of contamination on or through air, soil, sediment, groundwater, surface water, utilities and structures at the site without regard to property boundaries.
- Collect and evaluate all necessary data to evaluate the actual and potential impact to public health and environment.
- Collect data to facilitate selection and design of remedial action alternatives.
- Identify collected data needed for monitoring natural attenuation, potential feasible cleanup technologies and presumptive remedies.
- Conduct an Interim Remedial Measure to prevent further vertical movement of the contaminants previously identified to be present.

1.4.2 *Potential Environmental Concerns*

The primary environmental concerns at Fresh & Clean are the potential for on- and off-site soil gas migration and the potential impacts to groundwater from contaminated bottom sediments residing in the on-site sanitary system from prior discharge of wastewaters.

1.4.3 *Scope of Voluntary Investigation and Interim Remedial Measure (IRM)*

The scope of the Voluntary Investigation and IRM have been defined as a series of specific tasks, including:

Task 1 - On-Site Sanitary System Evaluation

ESI conducted an investigation that uncovered each of the drainage structures (CP-1 though CP-4) via grade level openings and determined and uncovered any associated subgrade overflow pools or septic leaching fields. Overflow drainage pipes were traced and all subsurface covers were opened.

The influent and effluent discharge piping leaving the main septic tank was evaluated to determine the relationship of overflow cesspool structures to each other. As feasible, subgrade pools were identified and verified through intrusive means. These pools were opened/uncovered and snaked, to confirm site relationships.

This investigation confirmed the configurations of the former and current wastewater (sanitary and other) systems at the former Fresh and Clean site. Supplemental samples were collected at the previously identified CP-1, CP-2, CP-3 and CP-4 for disposal characterization, which were approved by the disposal facility. Newly identified structures consisting of stormwater drywells (SD), a cesspool (CP) and a distribution box (DB) (identified as SD-1, SD-2, CP-5 and DB, respectively) were exposed and/or sampled. Other than SD-1, other drywells (inclusive of SD-2) were confirmed to be located on the Glen Head School property and were not sampled. It was further determined that only SD-1 and SD-2 have the potential to have receive influences from the prior or current operations at the Fresh and Clean site. Samples were analyzed for Target Compound List (TCL), VOCs using USEPA SW-846 Method 8260.

Tasks 2 & 3 - Interim Remedial Measure (IRM)/Soil Boring Delineation Program

The IRM included the removal of liquids and sludge/sediments from each of the cesspools and the contents of their associated septic tanks. Liquids from the septic tank and the cesspools were removed via vacuum truck. Impacted sludge/soils were excavated from each cesspool using an industrial vacuum loader truck. Endpoint samples taken from CP-1 through CP-4 were analyzed for TCL VOCs using USEPA SW-846 Method 8260. ESI took bottom samples of structures CP-5, DB, SD-1 and SD-2 for screening purposes. These samples were analyzed for Nassau County List (NCL) Parameters - Nassau County List Volatile Organic Compounds (VOCs) by EPA Method 8260, Semi-volatile Organic Compounds (SVOCs) by EPA Method 8270, NCL total metals (EPA 6000 Series) and Total Petroleum Hydrocarbons (TPH) by EPA Method 801 5.

Following the implementation and approval of the IRM, one (1) soil boring was installed through the center of each subsurface drainage structure identified as previously impacted screened for the presence of non-aqueous phase liquids (NAPLs) in the subsurface soils beneath the previously impacted cesspools (CP-1 through CP-4).

A GeoProbe was used to collect soil/sludge samples. After collection, each sample was opened and logged to document subsurface conditions including soil types and description of non-soil materials. A portion of each sample was pre-screened for VOCs using a PID. Each soil boring began at the remediated base in each structure and samples were collected continuously (at four (4) foot intervals). If field measurement readings were detected above background, the coring was extended until PID readings were consistent with ambient air (background). After vertical profiling, a total of three (3) soil samples (remediated base, intermediate depth and deepest PID screened interval) were submitted for laboratory analysis. Soil sampling in drainage structure "CP-2" was continued at four (4) foot intervals to 60 ft bgs. All samples collected from this structure were submitted to the Laboratory for TCL VOC analysis by USEPA SW-846 Method 8260.

Task 4 - Soil Gas Investigation

The objective for determining concentrations of volatile organic compounds in soil gas is to assist in an evaluation of the potential for migration of vapors into off-site and on-site structures.

Soil gas samples were proposed to be collected in the Voluntary Scope of Work from below the pavement at the site in order to make a determination of soil vapor conditions near building foundations or property perimeters.

According to information provided by the NYSDEC this task was not completed at the time of this report submittal.

Task 5 - Indoor Air Testing

As both the NYSDOH and NCDOH have recently sampled indoor air at Fresh & Clean, no additional indoor air testing is proposed. It is also noted that tetrachloroethylene is currently being used by one of the tenants in the building.

Task 6 - Groundwater Investigation

At the completion of the IRM and the Soil Boring Program, ESI proposed to install three (3) groundwater monitoring wells to assess up gradient and down gradient water quality conditions at the site. This groundwater

investigation was proposed to delineate the lateral and vertical extent of the contaminant plume. ESI also proposed to collect the necessary data to evaluate the feasibility of Monitored Natural Attenuation (MNA), potential cleanup technologies and presumptive remedies. Additionally the proposed installation of these wells would allow for a more accurate and site-specific calculation of the direction and velocity of groundwater flow. One (1) up-gradient well to the easternmost portion of the site and two (2) down gradient monitoring wells down gradient (west) of the drainage structures were proposed.

According to information provided by the NYSDEC this task was not completed at the time of this report submittal.

2.0 INVESTIGATION ACTIVITIES

2.1 GENERAL

The PSA identified historic and current dry cleaner facilities in Glen Head as potential sources of PCE. PCE is the primary constituent found in the Glen Head Groundwater Plume. The primary goal of this SC was to determine whether these potential sources were contributing or had contributed to the current groundwater plume. The facilities that were investigated within the Glen Head Groundwater Plume Study Area during the SC include:

- Glen Head Cleaners [GH Cleaners], located on the northwest corner of the intersection of Glen Head Road and Dumond Place (an active dry cleaning facility);
- The former Charrell Cleaners [C Cleaners], located at 36 Glen Head Road, about 250 ft west of GH Cleaners;
- A former dry cleaners [unnamed] located on the northeast corner of the intersection of Glen Head Road and Dumond Place, about 50 ft east of GH Cleaners;
- Station Valet Cleaners [SV Cleaners], historically no active dry cleaning activities (drop off only) located along Station Place, about 50 ft south of Glen Head Road; and
- The former Fresh and Clean Dry Cleaners [FC Cleaners], located along Railroad Avenue near the eastern portion of the site, see Figure 1-2.

Additional facilities were also considered potential sources of contamination;

- The former Hotel [Hotel] located on Glen Head Road, with possible dry cleaning activities, located about 200 ft east of Railroad Ave., about 600 ft east of GH Cleaners;
- An Auto Body repair facility [Auto Body] currently occupied by an auto repair facility located 50 ft east of the northeast corner of the intersection of Glen Head Road and Dumond Place, about 125 ft east of GH Cleaners;
- Soundview Cleaners [Soundview] along Glen Cove Ave., west of the site; and
- Glenco Cleaners [Glenco] along Glen Cove Ave., west of the site, see Figure 1-2.

2.2 *SITE CHARACTERIZATION ACTIVITIES*

2.2.1 *Site Access*

Prior to the initiation of field work, a list of property owners, addresses and section, block and lot information was compiled. With this information the NYSDEC case manager mailed out access letters providing ERM with authorization to perform the field work tasks.

Additionally ERM performed some site investigative activities in the public street right-of-way (ROW). ERM's drilling subcontractors obtained the necessary road opening permits and/or other authorizations as required by the Town of Oyster Bay, Nassau County, State of New York or Federal authority to lawfully perform the work, including the payment of any required fees, posting of any bonds, or acquisition of any required additional insurance coverage and providing certificates/proof of the same.

2.2.2 *Drywell and Cesspool Sampling*

To assess potential source contributors to the Glen Head Groundwater Plume ERM performed an inventory of drywells and cesspool drainage structures with flush grade manhole covers and visually identified the primary pool of each system. A total of thirteen bottom samples were collected from identified primary drywell and cesspool drainage structures (MH-01 through MH-13) across the Glen Head Groundwater Plume Study Area. Figure 2-1 illustrates the manhole sample locations and associated target property. Table 2-1 provides a summary of targeted properties and manhole samples collected from each.

Sediment bottom structure samples were collected from the top one (1) foot of sediment with a stainless steel hand auger. The hand auger was brought to the surface and laid upon aluminum foil. Sample jars were filled using a stainless steel spoon and filled to minimize head space in the sample jars. Immediately following sample collection the sample jars were placed in a laboratory supplied cooler and placed on ice. Samples were handled according to chain of custody procedures. Between sample locations the hand auger and sampling tools were decontaminated with alconox and water and subsequently rinsed with deionized water.

Samples collected from each primary pool were analyzed by Severn Trent Laboratories, Shelton , Connecticut (STL-CT) a New York State Department of Health (NYSDOH) Environmental Laboratory Accreditation Program (ELAP)-certified laboratory for TCL, VOCs using Contract Laboratory Program (CLP) Method OLM04.2.

2.2.3 *Soil Borings*

Direct push methods were utilized to collect soil samples as close as possible to suspected areas of disposal (i.e., cesspools and drywells). A total of eight (8) soil borings were installed (SB-01 through SB-08), as identified in the PSA. Macrocore soil samples were collected continuously from ground surface to approximately 32 ft below ground surface. In the areas where a geoprobe could not be utilized (behind Former Unnamed Cleaners), the subcontractor used a tripod with split spoons to collect soil samples. The completion depth using the tripod-drilling method was 16 ft. Figure 2-2 presents the sample locations where soil borings were performed. Table 2-1 provides a summary of the targeted properties and soil borings collected from each targeted property. Each soil sample was screened using a photo ionization detector (PID) instrument for the presence of VOCs. Two (2) soil samples were collected from each soil boring, the first soil sample corresponding to the soil interval with the highest PID response and the second corresponding to the deepest soil sample. Samples collected from each soil boring were analyzed by STL-CT for TCL VOCs using CLP Method OLM04.2. The results of this investigation are presented in Section 4.2.2.

Each soil core was geologically characterized using the Unified Soil Classification System (USCS). All geologic descriptions, PID measurements, soil recovery and visual identification of soil contaminants, etc. were recorded in the soil boring log and cross referenced in the Site field log book. The soil boring logs are presented in Appendix A.

2.2.4 *Groundwater Sampling*

From 8 through 13 December 2005, groundwater samples were collected from existing wells installed during the PSA, including MW-01, MW-02, MW-03, MW-04, MW-05, MW-06, MW-07, MW-08 and MW-11. Monitoring wells MW-09 and MW-10 could not be located and have either been buried or destroyed. In addition, ERM requested access to the monitoring wells associated with the Trans Technology Site and access was granted. Groundwater samples were also collected from the Trans Technology Site (TT) monitoring wells and designated TT-MW-01, TT-MW-02, TT-MW-03, TT-MW-04, TT-MW-05, TT-MW-09, TT-MW-10 and TT-MW-11. The locations of the monitoring wells sampled are presented on Figure 2-3.

USEPA low-flow well sampling techniques were utilized to purge the monitoring wells. Well purging continued until the turbidity of the recovered well water was less than 50 Nephelometric Turbidity Units (NTUs), and the pH, conductivity and temperature measurements of the purge water had stabilized within 10% for a minimum of three (3) consecutive measurements. Upon stabilization of the field parameters

samples were collected and each groundwater sample was analyzed for TCL VOCs using CLP Method OLC02.1 by STL-CT. A summary of monitoring well construction information is provided in Table 2-2 and groundwater sampling logs are provided in Appendix A.

2.2.5 *Permanent Multilevel Soil Gas Sampling Points*

Permanent multi-level soil gas sampling points were installed at three (3) locations (SGI-01, SGI-02 and SGI-03) along the anticipated plume axis using the direct push drilling; see Figure 2-4 for permanent multilevel soil gas locations.

The soil gas implants were installed by driving the direct push rods to the desired installation depth(s). The implant was threaded onto Teflon lined tubing and lowered within the direct push rods to depth. Once the implant was installed the Geoprobe rods were withdrawn and filled with glass beads in the annular space around the implant to a depth of six (6) inches above the implant screen. Washed sand filled the borehole to within one (1) ft of the ground surface. Tamped, and hydrated bentonite pellets were used to seal the borehole around the Teflon tubing at the surface. Each implant was finished at grade with a flush mount well cover.

At each location, three (3) soil gas implants were installed. At SGI-01 located at 7 School Street in Glen Head (Section 20, Block 019 Lot 200, Glen Head Elementary School Property/North Shore Central School District) the depths of the soil gas implants are 12, 35 and 60 ft bgs. The shallowest implant at this location had to be reinstalled due to tight soils encountered during the installation. A temporary soil vapor sample (SVI-01-006) was also collected from the vicinity of SGI-01 to assess soil vapor concentrations in the shallow subsurface. No permanent sampling device remained in the ground from SVI-01-006.

SGI-02 is located on the Trans Technology Site (Section 21, Block N03, Lot 21) and was installed in the driveway of the building facing Dumond Place. The depths of soil gas points at SGI-02 are 12, 60 and 100 ft bgs. The third soil gas implant cluster SGI-03 was installed in the Elin Place Right-of-Way (ROW) in front of 21 Elin Place Road, Glen Head. The soil gas implants were installed at depths of 12, 60 and 100 ft bgs. Soil gas implant construction logs are provided in Appendix A.

2.2.6 *Soil Gas Sampling*

To assess the potential for migration of VOCs, volatilizing from impacted groundwater, soil gas samples were collected from each of the three (3) newly installed multilevel soil gas clusters.

Prior to collecting the first soil gas sample, a tracer gas test was performed to ensure that ambient air was not infiltrating into the sample(s). The asphalt ground surface around the first implant was covered with plastic sheeting, and helium was injected under the sheeting as the air in the implant was purged. A sample of the purge air was collected in a Tedlar bag, and a portable helium detector was used to monitor for the presence of helium in the sample. The helium testing confirmed that helium (therefore, ambient air) was not infiltrating the shallow sample and collection of the soil gas samples commenced. Based on verification, at the first implant, that the method of implant installation prevented ambient air short circuiting, ERM concluded that it was unnecessary to continue the use of tracer gas testing at the remaining implant locations. Since each location was installed on asphalt surface and an impermeable seal was installed above each glass bead pack, ERM had confidence that each of the remaining implants were constructed competently.

The soil gas samples were collected using Summa canisters equipped with timed sample acquisition regulators set for 2-hour collection period. Each sample was submitted to STL Burlington, VT (STL-VT) an, ELAP-certified laboratory, for VOC analyses using USEPA Method TO-15. Soil gas sampling logs are provided in Appendix A.

2.2.7 *Surface Water and Sediment*

There is a natural spring/groundwater discharge on the North Shore Country Club (NSCC) golf course. Past investigations and sampling of the natural spring indicated that groundwater discharging at this location contained VOCs, primarily PCE and TCE. The SC included resampling of the natural spring discharge to confirm previous results and to collect current data. The sample was designated SPRING. The groundwater discharge sample was analyzed for VOCs using CLP Method OLC02.1.

In addition to the groundwater sample, a sediment sample was collected from the primary pool where the groundwater discharges and collects before flowing into Scudders Pond (located west of the discharge point). This sample was designated SPRING SED. Sediment was collected with a stainless steel spoon and jarred in laboratory supplied glassware. The sample was labeled and placed immediately into a cooler with ice. The collected samples were packaged and shipped to STL-CT following chain of custody procedures. The spring sediment sample collected from this location was analyzed for VOC analysis by CLP Method OLM04.2. The locations of these samples are presented on Figure 2-5.

2.2.8 *Site Survey*

At the conclusion of SC field activities, a New York State-licensed surveyor A. James de Bruin & Sons, LLP surveyed the Study Area to locate all sampling points including existing monitoring wells, manhole/drywells, soil borings and soil vapor implant locations. The elevations of all monitoring well casings were established to within +/- 0.01 feet based on the NGVD 86 datum. A notch was placed in all interior casings to provide the reference point from which to collect future groundwater elevation measurements.

All surveyor collected latitude, longitude and elevation data was provided to ERM in an ASCII file and imported in to GISKEY database for the purpose of mapping data and evaluating data.

2.2.9 *Management of Investigative Derived Wastes*

ERM requested access to the nearby town highway yard of Oyster Bay property to temporarily stage drums of investigative derived waste (IDW) decontamination water, and groundwater monitoring well development/purge water, however access was not granted. As a result access was granted to temporarily stage IDW at the Trans Technology Site in a secure location until further waste characterization of the drums was performed.

The following section describes the general protocol followed during the handling and disposal of liquid investigative derived waste (IDW) generated during the implementation of the SC. Waste generated during the investigation consisted of trash (boxes, paper, etc.), decontamination wash water, and groundwater monitoring well purge water.

Accordingly, handling and disposal was as follows:

- Cuttings from soil borings and the tailings from the unused portion of the samples was placed back down the borehole. The remainder of the borehole was filled with bentonite by hand. If necessary, the borehole was sealed at or near the water table with a non-shrinking impermeable material to prevent the hole from acting as a conduit for surface runoff.
- Liquids generated from equipment decontamination and permanent groundwater monitoring well purging was collected in drums at the point of generation. The collected water was transported and stored in 55-gallon drums that were staged on the property owned by the Trans Technology. The water was sampled for the necessary waste characterization analyses and then disposed off accordingly.
- All generated drums were labeled according to the well number and staged in a neat and orderly fashion with labels properly visible to all.

- ERM procured waste transport and disposal subcontractor services to properly dispose of all IDW in accordance with all local, State and Federal regulations. A copy of the waste manifest is presented in Appendix B.
- Non-contaminated trash, debris and protective clothing was placed in a trash dumpster and disposed of by a local garbage hauler.

2.2.10 *Analytical Data Quality Evaluation*

The Data Quality Objectives (DQO) and the analytical requirements are detailed in the QAPP. QA protocols followed are provided in this section. As required, the selected analytical laboratories utilized for the analysis of the samples from the SC have maintained NYSDOH ELAP certification for the duration of the project. NYSDEC ASP "Category B" deliverables were provided for all samples collected during the SC. A data validation report was prepared for each sample delivery group (SDG). These validated results from each validation report have been transferred to each applicable analytical results summary table.

2.2.11 *Reliability of Laboratory Analytical Data*

The following section summarizes the results of the laboratory analysis QA. Included in this section is the discussion of the analytical procedures performed for the analysis of all environmental samples of various media collected during the SC. A discussion pertaining to the validation and qualification of the analytical results is also provided

2.2.11.1 *Analytical Laboratory*

All groundwater and soil samples collected during the SC activities were submitted to Severn Trent Laboratories of Shelton, Connecticut (STL-CT). STL-CT is a NYSDOH ELAP certified laboratory meeting specifications for documentation, data reduction and reporting (ELAP certification number 10602).

All soil vapor samples collected during the SC activities were submitted to Severn Trent Laboratories in Burlington, Vermont (STL-VT). STL-VT is also a NYSDOH ELAP certified laboratory meeting specifications for documentation, data reduction and reporting (ELAP certification number 10391).

2.2.11.2 *Analytical Procedures*

The samples taken during the SC were analyzed following the NYSDEC ASP and USEPA CLP protocols. These protocols provide the technical and contractual background for environmental laboratories to conduct analytical methods for the preparation, detection, and quantitative

measurements of organic target compounds and inorganic target analytes in various matrices. The ASP supports the EPA's Superfund effort originally under the CERCLA and the Superfund Amendments and Reauthorization Act (SARA). The NYSDEC developed the ASP for Superfund site investigations and its intent was to produce legally defensible results supported by a high level of quality assurance and documentation. The reported analytical results were consistent with ASP deliverable requirements.

The specific analyses and analytical methodologies employed for investigation of these media are:

Sample Type	**Analysis/Reporting List**	**Analytical Method**
Aqueous Samples	TCL VOC's	OLC02.1 TCL VOC's
Soil/Sediment Samples	TCL VOC's	OLM04.2 TCL VOC's
Soil Vapor Samples	Full Method List	USEPA Method TO-15A

2.2.11.3 *Data Validation*

Objective

Data validation is the assessment of data quality with respect to method requirements and technical performance of the analytical laboratory. The overall objective of the data validation process is to determine the degree of confidence that may be placed on the analytical results. The validation process identifies deviations from the ASP, poor QC results, matrix interference, and other analytical problems that may compromise the potential uses of the data. Analytical data packages were examined to ensure that all required laboratory components are included, all QA/QC requirements were performed, and the data use restrictions were well defined. The analytical data were qualified and appropriately qualified by the data validator. This information was taken into account during the interpretation of the data.

Procedures

Third-party data validation was performed by Environmental Data Services (EDS), Concord, New Hampshire. The review of the sampling data was performed in accordance with the protocols and procedures of the following:

- the Analytical methods;
- the NYSDEC ASP;

- the USEPA CLP National Functional Guidelines for Organic Data Review (October 1999);
- the USEPA CLP National Functional Guidelines for Low Concentration Organic Data Review (June 2001);
- the USEPA Region II Data Review Standard Operating Procedure (SOP) Number HW-6, Revision 12, March 1993: CLP Organics Data Review and Preliminary Review;
- the USEPA Region II Data Review SOP Number HW-13, Revision 3.2, July 2001: Organic Data Review for Low Concentration Water;
- the USEPA Region II Data Review SOP Number HW-18, Revision 0, August 1994: Validating Canisters of Volatile Organics in Ambient Air;
- and the reviewer's professional judgment.

The order in which the aforementioned guidance documents and/or criteria were listed as being used for validation does not imply a hierarchy of reliance on a particular document, but rather, as applicable to the specific analytical methods employed for the various matrices. The most comprehensive reference sources of criteria were used to perform a complete data validation.

A preliminary review of the data was performed to verify that all of the necessary paperwork, such as chain-of-custody forms, traffic reports, analytical reports, and deliverable packages were present. A qualified third-party chemist then performed a detailed quality assurance review to verify the qualitative and quantitative reliability of the data as provided by the laboratory.

The following items or criteria were reviewed:

- Case narrative and deliverables compliance
- Holding times both technical and procedural and sample preservation
- Surrogate Compound recoveries, summary and data
- Matrix Spike/Matrix Spike Duplicate (MS/MSD) results, recoveries, summary and data
- Blank Spike Sample (BSS) recoveries, summary and data
- Method blank summary and data
- Gas Chromatography (GC)/Mass Spectroscopy (MS) tuning and performance
- Initial and continuing calibration summaries and data
- Internal standard areas, retention times, summary and data

- Field Blank results
- Trip Blank results
- Blind Field Duplicate results
- Organic analysis data sheets (Form I)
- GC/MS chromatograms, mass spectra and quantitation reports
- Quantitation/detection limits
- Qualitative and quantitative compound identification

Based upon the results of the data review, detailed data validation summary reports were prepared by the third party validator for each SDG. The reports consist of a section that contains an assessment of the deliverables, followed by a section that describes, on an item-by-item basis, the analytical results, and any qualifications that should be considered when using the data. The qualifications were made by assessing the results submitted by the laboratory in terms of the technical requirements of the analytical methods (QA/QC criteria) and the data validation requirements. The reports highlight the data results that did not meet QC limits and therefore may have required data qualification. The validation results are presented in tables when possible, which summarize the quality control data as compared to the QC limits. These tables include information such as, blank contamination, surrogate recoveries, and internal standard area counts that did not meet QC criteria. The reports also indicate the data qualification action taken as a result of these criteria.

Based upon the validation process, the qualifications of data are made by the use of qualifier codes. These qualifiers serve as an indication of the qualitative and quantitative reliability of the data. The qualifier codes utilized for the most recent sampling events are as follows.

- no qualifier - The compound was positively identified at the reported numerical value.
- U – Non-Detect. The compound was analyzed for, but not detected. The associated numerical value is the detection limit. The value is usable as a non-detect at the detection limit.
- J – Estimated Value. The compound was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample. The value was designated as estimated as either a result of the data validation or by the laboratory to indicate the compound is present (mass spectral identification criteria are met), but the concentration is less than the Contract Required Quantitation Limit (CRQL). The value is usable as an estimated result.
- UJ – The compound was analyzed for, but not detected above the reported sample quantitation limit. The reported quantitation limit is

approximate and may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample. The value is usable as a non-detect at the estimated detection limit.

- R – Rejected. 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.

Results

The analytical results for samples collected during the SC are valid and usable except for a limited number of compounds that were rejected. All data qualifiers were taken into account during the interpretation of the analytical results. The rejected results are not considered to be a serious issue. In summary, the data validation results indicate that there were no significant problems that impact the usability of the results. Copies of the data validation reports are presented in Appendix C.

3.0 ENVIRONMENTAL SETTING

3.1 GEOLOGIC SETTING

The Laurentide continental ice sheet deposited two major terminal moraines on Long Island during the Wisconsinan stage of the Pleistocene Epoch (Cadwell, 1989). These moraines formed two lines of hills that trend generally east/west along the island. The Glen Head Groundwater Plume Study Area lies north of the Harbor Hill moraine. See Figure 3-1 for a geologic cross section of Glen Head, New York.

3.2 HYDROGEOLOGY

A concise and accurate description of the geology, physiography and drainage of Nassau County is presented in the Soil Survey of Nassau County, New York (USDA). Relevant excerpts of this study are presented below.

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

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

Nassau County is underlain by bedrock, but most of it is at a depth of several hundred feet. The closest surficial bedrock is to the west in the boroughs of Bronx and Queens in New York City and areas to the northwest in Westchester County near Long Island Sound. From these areas of surface exposure, the rock surface dips to the southeast to form a

solid basement below Nassau County. Most of the bedrock consists of Cretaceous sedimentary layers. Some of the older rocks in the area are the 200 million year old Triassic red beds and lava flows off New Jersey and Connecticut and Cambrian metamorphic rocks in the New York City area that are 450 million years old.

During the late Cretaceous Period the sediments from the eroding Appalachian Highlands were carried by streams and rivers to low-lying coastal areas. The sand, silt and clay of the Raritan and Magothy formations, which form the foundation of Long Island, were deposited as deltas in areas of shallow water. The Raritan formation is below sea level and the Magothy formation is at the surface of several sites along the north shore. The Magothy is the primary potable water supply aquifer on Long Island.

In the Tertiary Period, Long Island was uplifted above sea level and the Cretaceous sediments were eroded and dissected by streams and rivers. The valley now occupied by Long Island Sound was cut by a major river and smaller tributary streams formed valleys which are now the north shore bays.

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

The Wisconsinan glacial advance reached a position represented on Long Island that created the Ronkonkoma terminal moraine. In the latter part of this stage, the ice sheet receded from a point east of Lake Success and established a new position along the north shore marked by the Harbor Hill terminal moraine. West of Lake Success this lobe of ice overrode the Ronkonkoma moraine and pushed as far south as Staten Island. This caused the terminal moraine/deposits in Nassau County to form a wide band of irregular topography occupying the northern half of the county, while in adjacent Suffolk County the terminal moraine deposits were far enough apart to be two (2) distinct landforms separated by a flat plain. During the Wisconsinan advance, sea level dropped about 350 feet below its current elevation to expose a broad, flat coastal plain.

As the climate again warmed about 11,000 years ago, the Wisconsinan period ended and the Holocene, or present, period began. The ice sheet

receded to its present polar limits and sea level rose to its present level. Currents and wave action modified the outwash plain to create the present-day shoreline.

These overlying Pleistocene deposits are referred to as the Upper Glacial aquifer, a highly prolific aquifer and consists of three distinct units. The oldest and deepest unit is a sand and gravel layer associated with the Ronkonkoma ice sheet. After the recession of the ice sheet, sea level rose to near its' present level. During this interstitial period, marine and lacustrine sediments were deposited over the Ronkonkoma deposits, a clay bed at the base, separated from an upper clay bed by a band of silty, sandy beds. Overlying the clay is a terminal moraine and adjacent outwash deposits associated with the Harbor Hill ice sheet.

The aquifers in the study area include both the Upper Glacial and the Magothy. Previous work performed in the study area has determined the depth to groundwater is approximately 110 ft bgs, topographic grade dependent. Groundwater levels on Long Island generally follow a seasonal pattern, in which they are highest in March and April. The water table elevation in the vicinity of the site (measured in March and April 1997) was between 50 and 60 ft above mean sea level (msl). The elevation of the water table, measured in the vicinity of the site in May 2000, was approximately 50 ft msl.

3.2.1 *Ground Water Elevation and Flow*

Groundwater flow within the Site study area is shown on Figure 3-2. The groundwater elevation contour map was generated using data collected during the synoptic water level measurements collected on 7 December 2005. Collected synoptic groundwater elevation data are presented in Table 3-1.

As depicted in Figure 3-2, groundwater is at its highest elevation at MW-06. Immediately leaving MW-06 the groundwater gradient shows a strong westerly component with a minor northerly component of flow. At approximately Glen Head Road and Dummond Place the direction of flow takes a more northerly flow path. Generally the groundwater flow direction from the Glen Head Groundwater Plume Study Area is to the northwest.

The depth to water at the Site ranges from approximately 99 feet to approximately 129 feet below grade depending on the land surface elevation of the monitoring well.

3.2.2 *Topography*

The site area is located at approximately 150-155 feet msl relative to the National Geodetic Vertical Datum (NGVD) of 1929 (USGS Hicksville Quadrangle). The land surface is significantly sloped toward the east.

3.2.3 *Water Supply Wells*

The site area is serviced by a municipal potable water supply system (Aquarion Water Company of Sea Cliff, New York). The nearest public water supply well (GH-N-5792) is located about 1,500 ft to the north of Glen Head Road. Based on data collected during the SC, the Aquarion operated well is up- or side gradient on to the Glen Head Groundwater Plume. The well is constructed to a depth of 300 ft bgs and is screened from 255 to 295 ft bgs in the Magothy. The static water level was measured at 93 ft bgs on May 24, 1989. There is also a public supply well located approximately 1.5 miles to the north-northwest (down gradient) of the Glen Head Groundwater Plume site. Both wells are owned and operated by Aquarion. Elevated levels of VOCs have not been reported in the downgradient potable supply well.

3.2.4 *Drainage Pattern and Surface Water Bodies*

Nearest surface water body is an unnamed pond located approximately 1,700 feet northeast of the site. The pond is a Town of Oyster Bay recharge basin and is classified as POWFx (a retention basin). The closest New York State freshwater wetland, Scudders Pond, (HV-1) is located approximately 6,800 feet east-northwest of the study area. Hempstead Harbor is approximately 6,000 ft west of the study area and is known to support commercial and recreational fishing. Although the harbor appears to influence the local groundwater patterns it does not apparently affect drainage patterns at the site.

3.2.5 *Soils*

According to the United States Department of Agriculture Soil Conservation Service and the Soil Survey of Nassau County, New York, the soils at the subject site are classified as Urban Land. This unit consists of areas where at least 85 percent of the surface is covered with asphalt, concrete or other impervious building material. These areas mostly are parking lots, shopping centers, industrial parks or institutional sites. Many are in the business centers in the villages and cities. Most areas are nearly level, and some are generally sloping. Many areas are rectangular or long and narrow and are mainly adjacent to local main thoroughfares. Included with this unit in mapping are small areas of soil that have not been appreciably altered or that are not under an impervious cover (see figure 1-2). These areas are mainly in lawns or other landscaped areas. Most of the included open areas are well drained Riverhead, Hempstead,

or Enfield soils or excessively drained Udipsamments. In many areas rapid or very rapid runoff prevents adequate discharge of runoff from intense rainstorms to safe outlets. A few areas are in low spots where seasonal wetness sometimes causes temporary flooding of the surface or frost heaving and subsequent breakup of surface pavements.

3.2.6 *Potable Water Supply and Sanitary/Sewer Systems*

The Sea Cliff system, operated by Aquarion, serves a population of about 15,000 people in the Village of Sea Cliff and parts of Old Brooksville, Roslyn Harbor, Glen Head, Glenwood Landing and Glen Cove. The distribution system is supplied by groundwater drawn from the Sea Cliff Well and the Glen Head Well (see section 3.2.3 above). The Sea Cliff Well withdraws water from the Lloyd aquifer and the Glen Head Well withdraws water from the Magothy aquifer. In 2005, 542 million gallons of water was produced. All of the water is treated with chlorine for disinfection , sodium hydroxide, and a phosphate compound to reduce corrosion before being pumped to the distribution system. Water quality compliance testing conducted in 2005, revealed no exceedences when compared to local and federal drinking water quality requirements.

According to a file review performed during the PSA of available village records, a municipal sanitary sewer system does not exist in the section of the Village of Glen Head in which the Glen Head Groundwater Plume is located. Thus, sanitary septic systems which include septic tanks and leach pool structures as well as drywell drainage structures exist within the Site area. As observed during site investigations, storm water within the site area is generally collected by a system of drywells that discharge to groundwater.

4.0 FIELD INVESTIGATION RESULTS

4.1 GENERAL

The SC results are discussed in the following sections. Analytical results are broken out into specific media and tabulated summaries are presented in Tables 4-1 through 4-6. Validation/data usability summaries are presented in Appendix C (CD-ROM). The analytical results are compared to NYSDEC recommended guidance values and/or standards. Soil concentrations were reviewed against the soil clean-up objectives recommended in the NYSDEC Division of Technical and Administrative Guidance Memorandum HWR-94-4046, Determination of Soil Clean-up Objectives and Clean-up Levels (April 1995) [hereafter referred to as NYSDEC TAGM 4046 levels]. Groundwater analytical results were compared with levels specified in 6 New York Code of Rules and Regulations (6NYCRR) Part 703 for Class 6A Groundwater as summarized in NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1, Ambient Water Quality Values and Guidance Values (June 1998).

To assist in the evaluation of results, the applicable guidance criteria used for comparison are also presented on the corresponding data summary Tables 4-1 through 4-6. Compound concentrations exceeding these guidance values are bracketed (i.e., [xxx]).

4.2 SOIL INVESTIGATION RESULTS

4.2.1 *Manhole Sampling Results*

A total of 13 bottom samples were collected from primary drywell and cesspool drainage structures (MH-01 through MH-13) identified in the Glen Head Groundwater Plume Study Area. Sediment bottom samples were collected from the top one (1) foot of sediment and analyzed for VOCs by Method OLM04.2. The analytical results for manhole sampling are summarized on Table 4-1 and a summary of detections from each sample location is illustrated on Figure 4-1.

Former Glen Co. Cleaners

Former Glen Co. Cleaners is an inactive drycleaner located at 674 Glen Cove Avenue. One (1) manhole sample was collected from this inactive

facility, MH-01. Analytical data collected from this location indicate that VOC concentrations do not exceed the NYSDEC TAGM 4046 levels.

Soundview Cleaners

Soundview Cleaners is an active drycleaner facility located at 673 Glen Cove Avenue. Two (2) manhole samples (MH-02 and MH-03) were collected behind the facility, see Figure 4-1 for locations and posted analytical detections. Data from the samples collected from MH-02 and MH-03, reveal no exceedences to the NYSDEC TAGM 4046 Recommended Soil Cleanup Objectives (RSCOs). Low concentrations of PCE and cis-1-2-DCE were observed in the sample collected from MH-03.

Former Charrell Cleaners

The Former Charrell Cleaners is an inactive drycleaner located at 36 Glen Head Road. Two (2) manhole samples, MH-04 and MH-05, were collected from structures that receive discharge from the associated building. The analytical results for sample MH-05 revealed elevated concentrations for seven (7) compounds. The compound detected at highest concentration in MH-05 was 1, 2-dichlorobenzene at a concentration of 1,300,000 ug/kg. The NYSDEC TAGM 4046 RSCO for 1,2-dichlorobenzene is 7,900 ug/kg. Other compounds detected above NYSDEC criteria in MH-05 include, methylene chloride, toluene, chlorobenzene, 1,3-dichlorobenzene, 1,4-dichlorobenzene and 1,2,4-trichlorobenzene, see Table 4-1 for a complete summary of manhole sampling analytical results. The compounds detected MH-05 are likely from the use and/or disposal of cleaning products. At the time of sample collection the building was unoccupied however signage on the building indicated that it had formerly been occupied by a restaurant. Low concentrations of PCE were observed in MH-04.

Former Hotel

A former hotel is located at 80 Glen Head Road. The hotel was suspected to have had a small dry-cleaning machine within the building. Two (2) manhole samples were collected from drainage structures associated with the building at this property, (MH-06 and MH-07). The analytical results for MH-06 and MH-07 reveal no exceedences of NYSDEC TAGM 4046 RSCOs.

Auto Body Repair Shop

An active auto body repair shop is located at 85 Glen Head Road. Two (2) manhole samples were collected from the onsite drainage structures which receive discharge from the septic system. The analytical results for

manhole samples MH-08 and MH-09 reveal no exceedences of NYSDEC TAGM 4046 RSCOs.

Former Unnamed Cleaners

Another (unnamed) cleaner was located at 58 Glen Head Road. One (1) manhole sample was collected from the septic system drainage structure located behind the building. The analytical results for MH-10 reveal no exceedences of the NYSDEC TAGM 4046 RSCOs. Concentrations of PCE were detected in sample MH-10.

Glen Head Cleaners

Glen Head Cleaners is an active drycleaner facility located at 56 Glen Head Road. Two (2) manhole samples were collected from drainage structures which directly receive septic and water discharge from the facility (MH-11 and MH-12). MH-12 contained acetone at a concentration above NYSDEC TAGM 4046 RSCOs. The concentration of acetone in the sample collected from MH-12 was 440J ug/kg, the NYSDEC TAGM 4046 RSCOs for acetone is 200 ug/kg. Acetone is, however, a common laboratory contaminant. PCE was also detected at low levels in both manhole samples collected from this property.

Station Valet Cleaners

Station Valet Cleaners is an active dry cleaning drop off center. One (1) sample was collected from behind Station Valet Cleaners and was designated MH-13. The analytical results for MH-13 revealed that acetone exceeded its NYSDEC TAGM 4046 RSCOs of 200 ug/kg with a concentration of 270J ug/kg. No other exceedences of the NYSDEC TAGM 4046 levels were observed. For a complete summary of analytical results refer to Table 4-1.

4.2.2 *Soil Boring Results*

Eight (8) soil borings were installed at locations SB-01 through SB-08, identified in the PSA as part of the SC and historic record searches as potential source areas for the Glen Head Groundwater Plume. Direct push methods were utilized to collect continuous macrocore soil samples.

Samples from the soil boring analytical data reveal no VOC exceedences of the NYSDEC TAGM RSCOs. VOCs were observed at each soil boring location and compounds detected include: 2-butanone, (MEK) 4-methyl-2-pentanone (MIBK), xylenes, 1, 4-dichlorobenzene and 1, 2-dichlorobenzene. The VOC analytical results are summarized in Table 4-2 and a summary of detected compounds are illustrated on Figure 4-2.

4.3 *GROUNDWATER INVESTIGATION RESULTS*

4.3.1 *Groundwater Sampling Results*

Groundwater samples were collected from each of the existing monitoring wells installed as part of the PSA, MW-01, MW-02, MW-03, MW-04, MW-05, MW-06, MW-07, MW-08 and MW-11. Monitoring wells MW-09 and MW-10 could not be located and have either been buried or destroyed. ERM also received permission to sample the monitoring wells associated with the Trans Technology Site (TT-MW-01, TT-MW-02, TT-MW-03, TT-MW-04, TT-MW-05, TT-MW-09, TT-MW-10 and TT-MW-11).

The results of the groundwater sampling are summarized on Table 4-3. VOC data are illustrated on Figure 4-3. The concentration data on Figure 4-3 are posted with a leader identifying each sampling location that contained VOC in exceedence of the NYSDEC Class GA Groundwater Standards. Concentrations exceeding the NYSDEC Class GA Standards are identified with a bracket (i.e., [2400]).

Review of the data and Figure 4-3 indicates that five (5) compounds were detected in groundwater at concentrations exceeding the NYSDEC Class GA Standards. The compounds exceeding the standards from greatest to least frequency of detection above the NYSDEC Class GA Standards are; tetrachloroethene (PCE), trichloroethene (TCE), cis-1,2-dichloroethene (cis-1,2-DCE), 1,1,1-trichloroethane (1,1,1-TCA) and 1,1-dichloroethane (1,1-DCA). The NYSDEC Class GA Standards for each of the five (5) compounds is 5 ug/l. The highest concentration VOC observed in groundwater at the Site was PCE which was detected at 2,400 ug/l in well MW-01. The duplicate sample from MW-01 contained PCE at a concentration of 2,500 ug/l. The highest TCE concentration was observed on the Trans Technology Site, 1,000 ug/l in TT-MW-02. The maximum detected cis-1,2-DCE concentration was also observed in TT-MW-02 at 150 ug/l. 1,1,1-TCA was detected in groundwater above its NYSDEC Class GA Standards only in TT-MW-03 at a concentration of 14 ug/l. 1,1-DCA exceeded the NYSDEC Class GA Standards in TT-MW-03 at a concentration of 10ug/l.

The groundwater data indicates that PCE is the VOC detected at greatest frequency and highest concentrations in the plume. PCE in groundwater, concentration data were contoured using a Krieging algorhythm, set to consider the concentration of PCE in the four (4) nearest neighboring monitoring wells. The result of this contouring is presented on Figure 4-4. The maximum PCE concentration is depicted in blue on Figure 4-4. The minimum concentration is set at the NYSDEC Class GA Standard of 5ug/l. Figure 4-4 illustrates a groundwater plume emanating from the study area. As shown on the Figure, plume boundaries are not entirely delineated in the east, west or southerly directions. The figure clearly

identifies a hotspot centered at the intersection of the Rail Road line and Glen Head Road. The hotspot of the plume is defined by the isoconcentration line of 1,000 ug/l encircling three monitoring wells MW-01, MW-04 and TT-MW-04. The plume axis appears to be aligned with the groundwater flow direction to the northwest. The down gradient extent of the plume is undefined.

4.4 *AIR INVESTIGATION RESULTS*

4.4.1 *Soil Vapor Sampling Results*

Permanent multi-level (discrete intervals) soil gas sampling points were installed at three (3) locations (SGI-01, SGI-02 and SGI-03) along the anticipated groundwater plume axis. SGI-01 is located at 7 School Street in Glen Head and soil gas implant SGI-02 is located on the Trans Technology Site. The third soil gas implant cluster SGI-03 was installed in the Elin Place Right-of-Way (ROW) in front of 21 Elin Place Road. It should also be noted that the soil gas implant sample identifications (ID) include the soil gas cluster number followed by the depth of the soil gas implant, ex. SGI-01-012.

Soil gas samples were collected from the three (3) multilevel soil gas clusters. The results of the soil gas sampling are summarized on Table 4-4 and Figure 4-5. The New York State Department of Health, finalized and issued guidance regarding procedures and evaluation criteria for soil vapor entitled, "Guidance for Evaluating Soil Vapor Intrusion in the State of New York" in October of 2006. This criteria was utilized to evaluate the below referenced data.

Soil gas sampling data define a PCE soil vapor plume in the unsaturated soil. PCE was observed in each of the soil gas samples collected from the soil gas implant clusters. PCE concentrations ranged from 260 ug/m^3 at SGI-03-012 to 280,000 ug/m^3 at SGI-02-100. The highest overall PCE concentrations were observed at the SGI-02 cluster, which is located within the hot spot area contoured in Figure 4-4. PCE concentrations were generally highest in the deepest and intermediate discrete intervals and decreased in the shallower samples.

TCE was detected at lower concentrations than PCE in each soil gas sampling location. TCE concentrations ranged from not detected (ND) in SGI-01-12 and SGI-02-100 to a maximum concentration of 1,200 ug/m^3 in SGI-02-60. Concentrations of TCE were greatest in the intermediate discrete intervals and were generally lower in the deeper and shallower samples. Table 4-4 provides a complete summary of the soil gas samples collected within the Study Area.

4.5 *SURFACE WATER SAMPLING RESULTS*

A sample SPRING from the natural spring discharge on the North Shore Country Club (NSCC) golf course was collected to assess the discharge of contaminants into Scudders Pond. The location of the SPRING sample and analytical results are presented on Figure 4-6 and a complete summary of SPRING analytical results are presented on Table 4-5.

The SPRING sample contained PCE at a concentration of 130 ug/l. The NYSDEC Class GA Standard for PCE is 5 ug/l, therefore groundwater discharging at this location exceeds NYSDEC criteria. Several other compounds were detected in the SPRING sample however concentrations were below the applicable NYSDEC RSCOs.

4.6 *SEDIMENT INVESTIGATION RESULTS*

The sample SPRING SED was collected from the primary pool receiving groundwater discharge (before surface water flows into Scudders Pond) on North Shore Country Club. The location and analytical results of this sample are presented on 4-6 and Table 4-6 summarizes the sample analytical data.

Three (3) compounds were detected in the sediment collected from this location. The compounds detected were: benzene, PCE and toluene and at concentrations of 1J ug/kg, 82J ug/kg and 0.7J ug/kg, respectively. No other compounds were detected in SPRING SED.

5.0 SUMMARY AND CONCLUSIONS

Between November 2005 and April 2006, ERM carried out SC field activities in the Glen Head Groundwater Plume Study Area. Previous investigations suggested that historic and current dry cleaner facilities may be the source(s) of PCE in the groundwater. The primary goal of this SC was to identify whether these potential sources were contributing or had historically contributed to the existing groundwater plume.

The scope of the SC included the sample collection of manhole samples and soil boring installations from the properties of potential contributors identified in the PSA which include;

- Former Glenco Cleaners, at 674 Glen Cove Avenue,
- Soundview Cleaners at 673 Glen Cove Avenue,
- Former Charrell Cleaners at 36 Glen Head Road,
- Glen Head Cleaners at 56 Glen Head Road,
- Former Unnamed Cleaners at 58 Glen Head Road,
- Station Valet Cleaners at 63 Glen Head Road,
- The Former Hotel at 80 Glen Head Road, and
- Auto Body Repair Shop located at 85 Glen Head Road.

The manhole, soil boring and groundwater (industry Trans Tech), sediment and surface water sampling confirmed the existence and configuration of the Glen Head Groundwater Plume. The groundwater also indicated that the limits of the plume are not adequately delineated. The soil gas sampling conducted along the plume axis suggests that sources may still exist within Glen Head.

6.0 *RECOMMENDATIONS*

The recommendations for additional activities at the Site are:

- Additional soil gas investigation to further characterize the soil vapor of the Site study area.
- Installation of additional wells to better define the limits of the plume.

7.0 REFERENCES

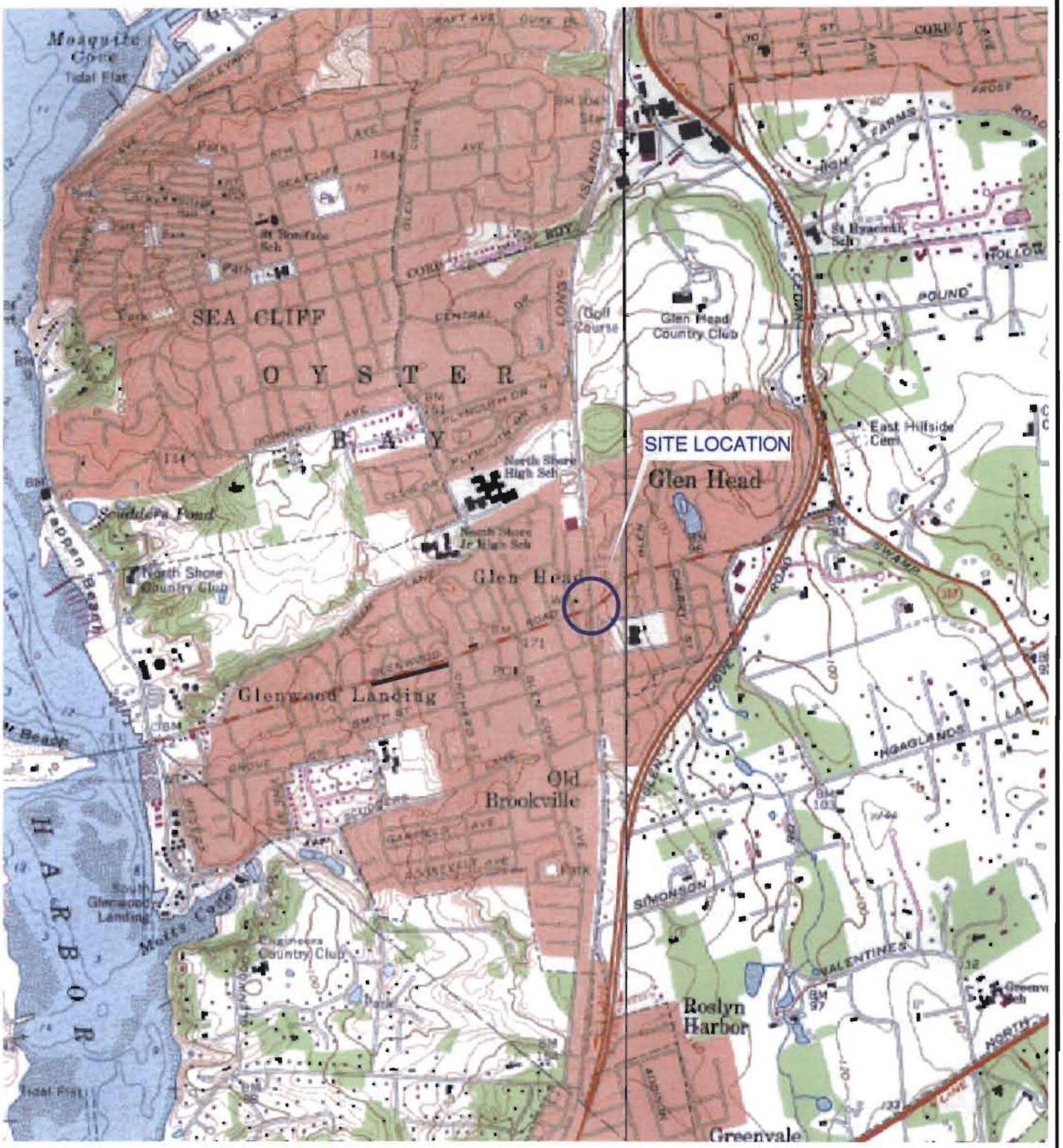
NYSDEC, 1989. Division Technical and Administrative Guidance Memorandum (TAGM): Disposal of Drill Cuttings. Division of Hazardous Waste Remediation. HWR-94-4032. 21 November 1989.

NYSDEC, 1991. New York State Water Classifications - 6 NYCRR 701. 2 August, 1991

NYSDEC, 1992. Division Technical and Administrative Guidance Memorandum (TAGM): "Contained-In" Criteria For Environmental Media. Division of Hazardous Substance Regulation. HWR-92-3028. 30 November 1992.

NYSDEC, 1994. Division Technical and Administrative Guidance Memorandum (TAGM): Determination of Soil Cleanup Objectives and Cleanup Levels. Division of Hazardous Waste Remediation. HWR-94-4046. 24 January 1994.

NYSDEC, 1998. New York State Groundwater Quality Standards - 6 NYCRR 703 (12 March 1998) and Division of Water Technical and Operational Guidance Series (1.1.1) - Ambient Water Quality Standards and Guidance Values, (June 1998), Errata Sheet (January 1999), and Addenda (April 2000).



N

SOURCE: U.S.G.S. QUADRANGLE MAP, SEACLIFF, NY, 1968, PHOTOREVISED 1979, AND HICKSVILLE, NY 1967, PHOTOREVISED 1979.

TITLE

SITE AREA LOCATION MAP

PREPARED FOR

NYSDEC WORK ASSIGNMENT NO. D003970-25

ERM Environmental Resources Management			SCALE: 1"=2000'	FIGURE: 1-1
DRAWN: EMF	JOB NO.: 0030800	FILE NAME: 0030800-00-021	DATE: 12/21/05	



0 0.2 0.4 0.6 0.8 1

GRAPHIC SCALE IN MILES

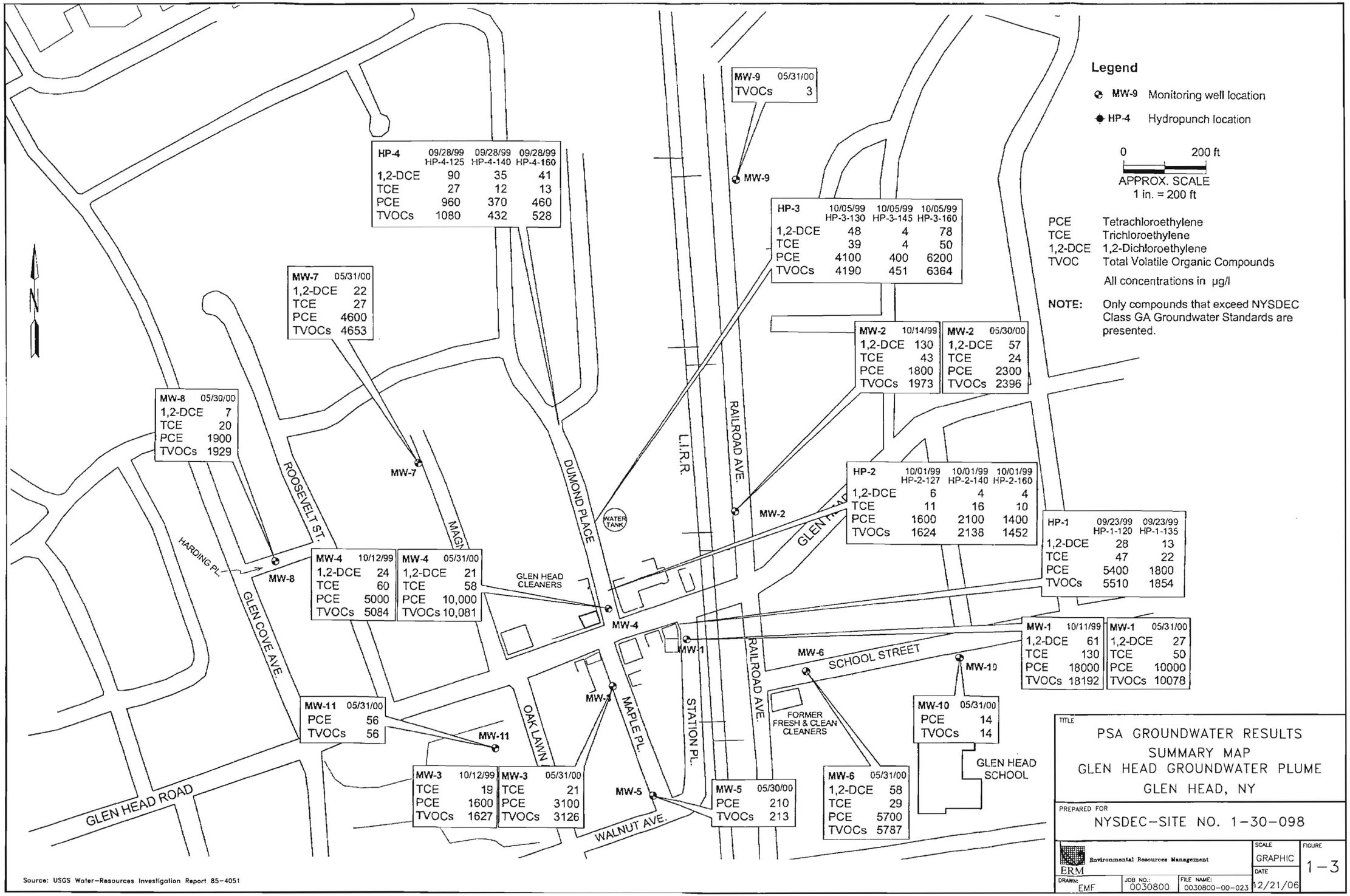
TITLE

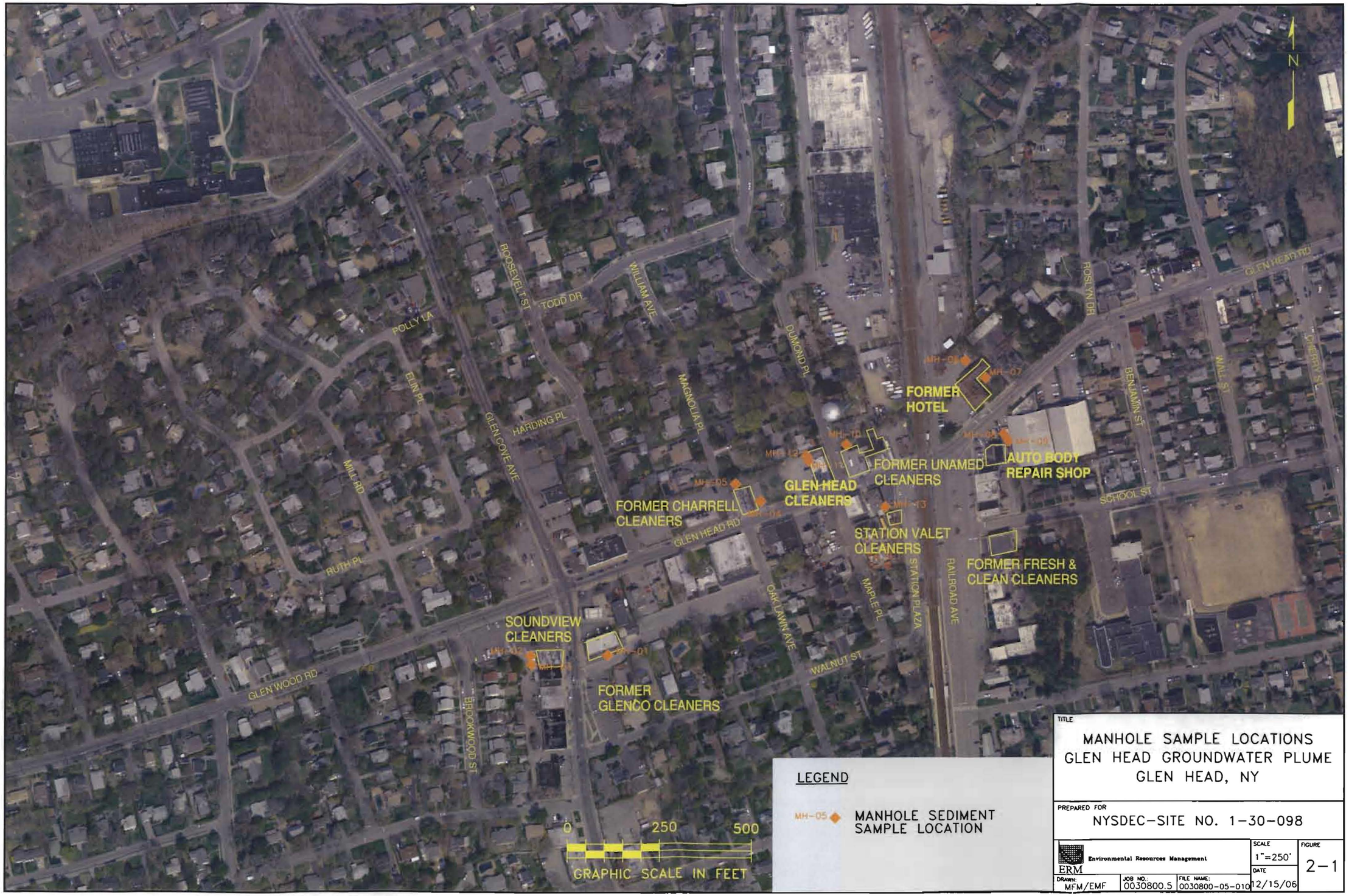
GLEN HEAD GROUNDWATER PLUME STUDY AREA PLAN

PREPARED FOR

NYSDEC WORK ASSIGNMENT NO. D003970-25

ERM Environmental Resources Management			SCALE: GRAPHIC	FIGURE: 1-2
DRAWN: EMF	JOB NO.: 0030800.00	FILE NAME: 0030800-00-007	DATE: 4/26/05	


HP-4 09/28/99 09/28/99 09/28/99
HP-4-125 HP-4-140 HP-4-160
1,2-DCE 90 35 41
TCE 27 12 13
PCE 960 370 460
TVOCs 1080 432 528
MW-7 05/31/00
1,2-DCE 22
TCE 27
PCE 4600
TVOCs 4653
MW-8 05/30/00
1,2-DCE 7
TCE 20
PCE 1900
TVOCs 1929
MW-9 05/31/00
TVOCs 3
HP-3 10/05/99 10/05/99 10/05/99
HP-3-130 HP-3-145 HP-3-160
1,2-DCE 48 4 78
TCE 39 4 50
PCE 4100 400 6200
TVOCs 4190 451 6364
MW-2 10/14/99
1,2-DCE 130
TCE 43
PCE 1800
TVOCs 1973
MW-2 05/30/00
1,2-DCE 57
TCE 24
PCE 2300
TVOCs 2396
HP-2 10/01/99 10/01/99 10/01/99
HP-2-127 HP-2-140 HP-2-160
1,2-DCE 6 4 4
TCE 11 16 10
PCE 1600 2100 1400
TVOCs 1624 2138 1452
HP-1 09/23/99 09/23/99
HP-1-120 HP-1-135
1,2-DCE 28 13
TCE 47 22
PCE 5400 1800
TVOCs 5510 1854
MW-1 10/11/99
1,2-DCE 61
TCE 130
PCE 18000
TVOCs 18192
MW-1 05/31/00
1,2-DCE 27
TCE 50
PCE 10000
TVOCs 10078
MW-4 10/12/99
1,2-DCE 24
TCE 60
PCE 5000
TVOCs 5084
MW-4 05/31/00
1,2-DCE 21
TCE 58
PCE 10,000
TVOCs 10,081
MW-11 05/31/00
PCE 56
TVOCs 56
MW-3 10/12/99
TCE 19
PCE 1600
TVOCs 1627
MW-3 05/31/00
TCE 21
PCE 3100
TVOCs 3126
MW-5 05/30/00
PCE 210
TVOCs 213
MW-6 05/31/00
1,2-DCE 58
TCE 29
PCE 5700
TVOCs 5787
MW-10 05/31/00
PCE 14
TVOCs 14
N
MW-7
MW-8
MW-9
MW-2
MW-4
MW-1
MW-6
MW-10
MW-11
MW-3
MW-5
ROOSEVELT ST.
HARDING PL.
GLEN COVE AVE.
MAGNOLIA
DUMOND PLACE
WATER TANK
GLEN HEAD CLEANERS
L.I.R.R.
RAILROAD AVE.
GLEN HEAD
SCHOOL STREET
FORMER FRESH & CLEAN CLEANERS
OAK LAWN
MAPLE PL.
STATION PL.
WALNUT AVE.
GLEN HEAD ROAD
GLEN HEAD SCHOOL
Legend
MW-9 Monitoring well location
HP-4 Hydropunch location
0 200 ft
APPROX. SCALE
1 in. = 200 ft
PCE Tetrachloroethylene
TCE Trichloroethylene
1,2-DCE 1,2-Dichloroethylene
TVOC Total Volatile Organic Compounds
All concentrations in µg/l
NOTE: Only compounds that exceed NYSDEC Class GA Groundwater Standards are presented.
Source: USGS Water-Resources Investigation Report 85-4051
TITLE
PSA GROUNDWATER RESULTS
SUMMARY MAP
GLEN HEAD GROUNDWATER PLUME
GLEN HEAD, NY
PREPARED FOR
NYSDEC-SITE NO. 1-30-098
Environmental Resources Management
ERM
SCALE GRAPHIC
FIGURE 1-3
DATE 12/21/06
DRAWN: EMF
JOB NO.: 0030800
FILE NAME: 0030800-00-023



TITLE

MANHOLE SAMPLE LOCATIONS
GLEN HEAD GROUNDWATER PLUME
GLEN HEAD, NY

PREPARED FOR

NYSDEC–SITE NO. 1–30–098

ERM Environmental Resources Management			SCALE 1"=250'	FIGURE 2–1
DRAWN: MFM/EMF	JOB NO.: 0030800.5	FILE NAME: 0030800-05-010	DATE 12/15/06	



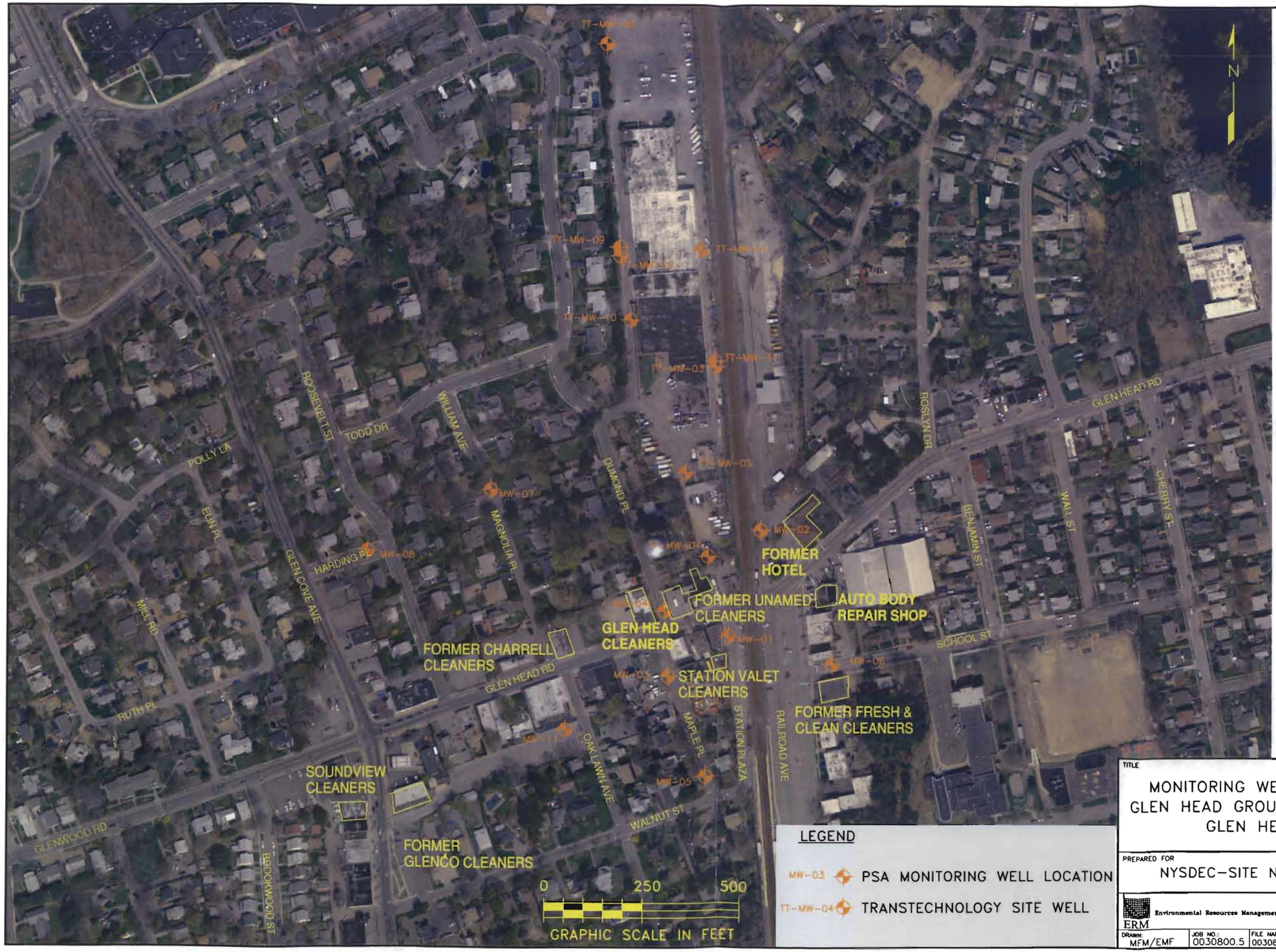
TITLE

SOIL BORING SAMPLE LOCATIONS
GLEN HEAD GROUNDWATER PLUME
GLEN HEAD, NY

PREPARED FOR

NYSDEC-SITE NO. 1-30-098

ERM Environmental Resources Management			SCALE	FIGURE
			1"=250'	2-2
DRAWN: MFM/EMF	JOB NO.: 0030800.5	FILE NAME: 0030800-05-009	DATE 12/12/06	



LEGEND

MW-03 PSA MONITORING WELL LOCATION

TT-MW-04 TRANSTECHNOLOGY SITE WELL

TITLE

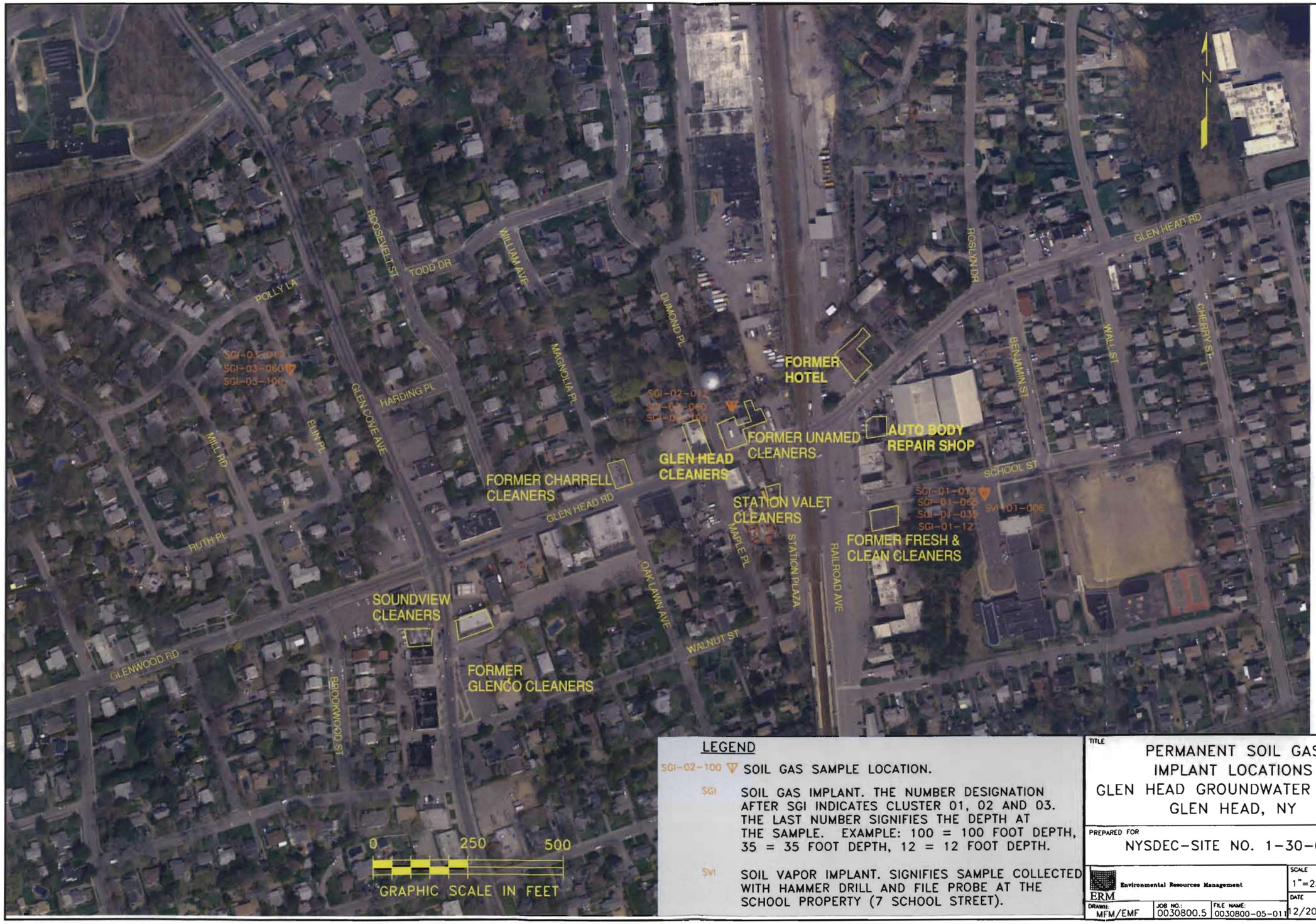
MONITORING WELL LOCATIONS
GLEN HEAD GROUNDWATER PLUME
GLEN HEAD, NY

PREPARED FOR

NYSDEC-SITE NO. 1-30-098

ERM Environmental Resources Management

DRAWN:	JOB NO.:	FILE NAME:	SCALE	FIGURE
MFM/EMF	0030800.5	0030800-05-012	1"=250'	2-3
			DATE 12/20/06	



LEGEND

SGI-02-100 ▽ SOIL GAS SAMPLE LOCATION.

SGI SOIL GAS IMPLANT. THE NUMBER DESIGNATION AFTER SGI INDICATES CLUSTER 01, 02 AND 03. THE LAST NUMBER SIGNIFIES THE DEPTH AT THE SAMPLE. EXAMPLE: 100 = 100 FOOT DEPTH, 35 = 35 FOOT DEPTH, 12 = 12 FOOT DEPTH.

SVI SOIL VAPOR IMPLANT. SIGNIFIES SAMPLE COLLECTED WITH HAMMER DRILL AND FILE PROBE AT THE SCHOOL PROPERTY (7 SCHOOL STREET).

TITLE

PERMANENT SOIL GAS IMPLANT LOCATIONS GLEN HEAD GROUNDWATER PLUME GLEN HEAD, NY

PREPARED FOR

NYSDEC-SITE NO. 1-30-098

ERM Environmental Resources Management			SCALE 1"=250'	FIGURE 2-4
DRAWN: MFM/EMF	JOB NO.: 0030800.5	FILE NAME: 0030800-05-011	DATE 12/20/06	



LEGEND

SPRING — NATURAL SPRING DISCHARGE SAMPLE

SPRING SED — SEDIMENT SAMPLE FROM SPRING DISCHARGE POND.

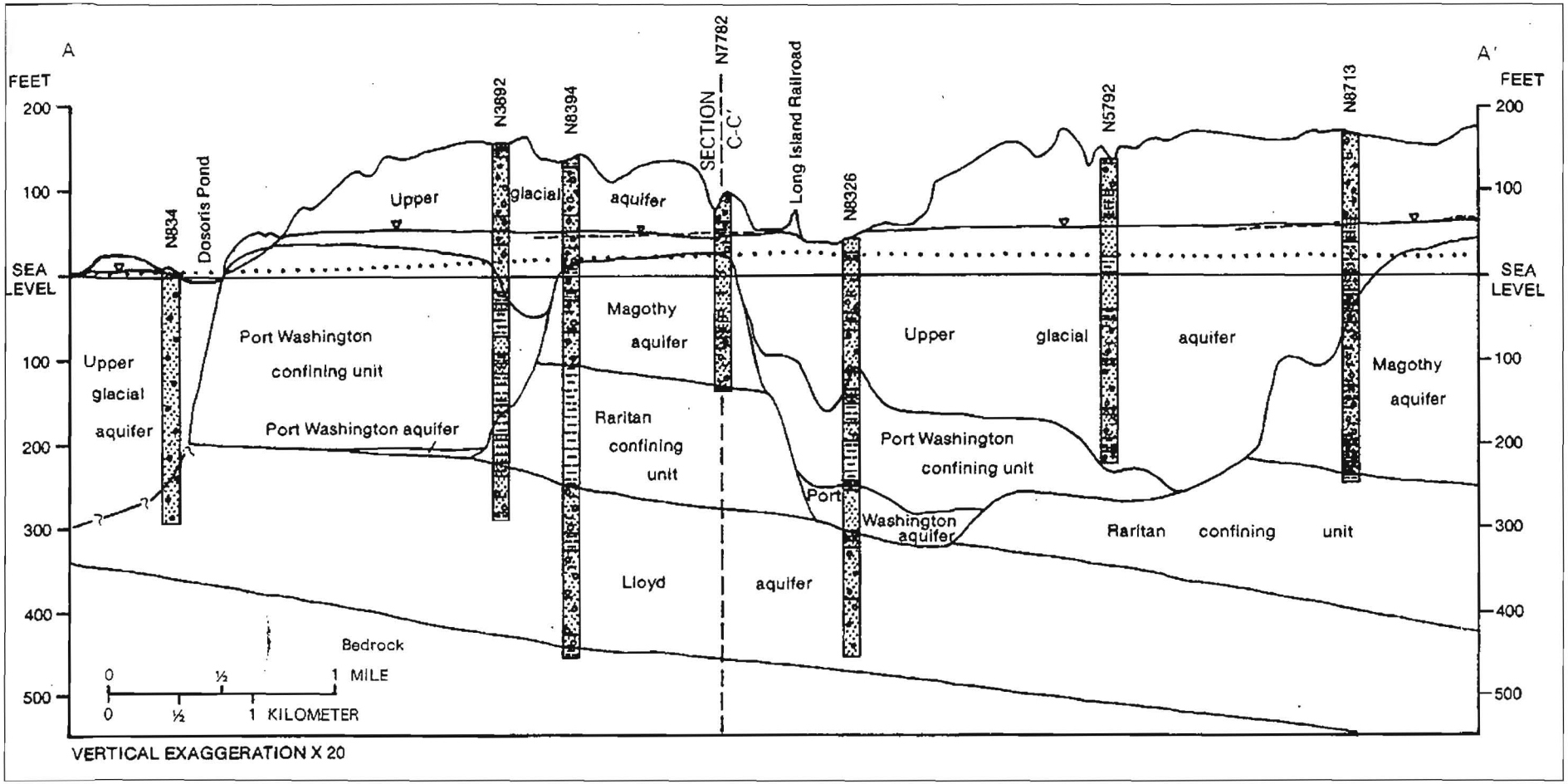
TITLE

SPRING SURFACE WATER AND SPRING SEDIMENT SAMPLE LOCATIONS
GLEN HEAD GROUNDWATER PLUME
GLEN HEAD, NY

PREPARED FOR

NYSDEC–SITE NO. 1–30–098

ERM Environmental Resources Management			SCALE 1"=250'	FIGURE 2–5
DRAWN: MFM/EMF	JOB NO.: 0030800.5	FILE NAME: 0030800-05-019	DATE 12/21/06	



Source: USGS Water-Resources Investigation Report 85-4051

TITLE

Geological Cross Section Glen Head, New York

PREPARED FOR
NYSDEC-WORK ASSIGNMENT NO. D003970-25

Environmental Resources Management (ERM)			SCALE: as shown	FIGURE: 3-1
DRAWN: EMF	JOB NO.: 0030800	FILE NAME: 0030800-00-022	DATE: 12/21/06	



LEGEND

TT-MW-08 MONITORING WELL LOCATION

49.64 GROUNDWATER ELEVATION

53 GROUNDWATER CONTOUR ELEVATION

NOTE: SYNOPTIC GROUNDWATER ELEVATIONS COLLECTED ON 7 DECEMBER 2005

TITLE

GROUNDWATER TABLE
ELEVATION CONTOUR MAP
GLEN HEAD GROUNDWATER PLUME
GLEN HEAD, NY

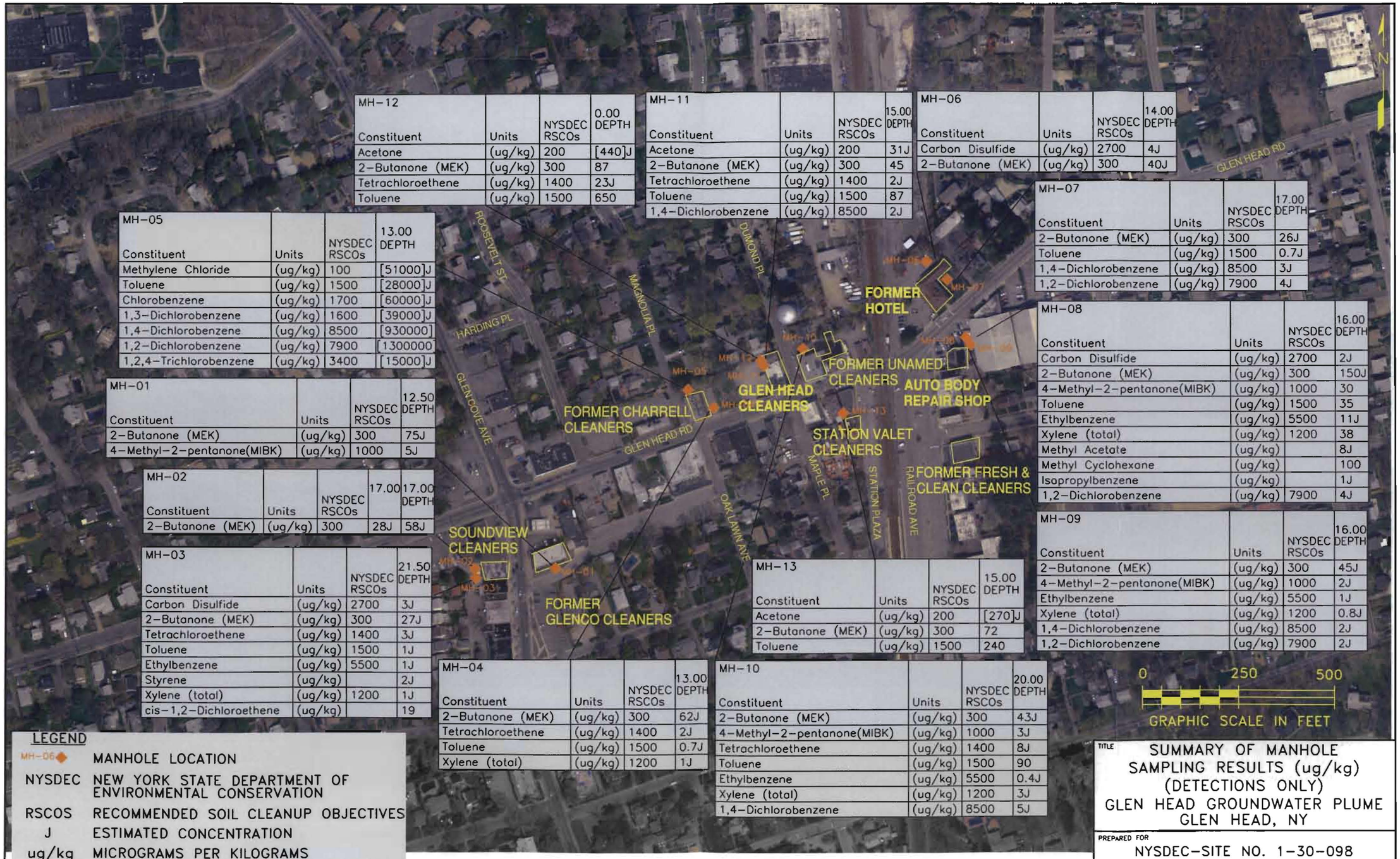
PREPARED FOR

NYSDEC-SITE NO. 1-30-098

Environmental Resources Management
ERM

SCALE	FIGURE
1"=250'	3-2

DRAWN:	JOB NO.:	FILE NAME:	DATE
MFM/EMF	0030800.5	0030800-05-015	12/29/06



MH-12 Constituent	Units	NYSDEC RSCOs	0.00 DEPTH
Acetone	(ug/kg)	200	[440]J
2-Butanone (MEK)	(ug/kg)	300	87
Tetrachloroethene	(ug/kg)	1400	23J
Toluene	(ug/kg)	1500	650

MH-11 Constituent	Units	NYSDEC RSCOs	15.00 DEPTH
Acetone	(ug/kg)	200	31J
2-Butanone (MEK)	(ug/kg)	300	45
Tetrachloroethene	(ug/kg)	1400	2J
Toluene	(ug/kg)	1500	87
1,4-Dichlorobenzene	(ug/kg)	8500	2J

MH-06 Constituent	Units	NYSDEC RSCOs	14.00 DEPTH
Carbon Disulfide	(ug/kg)	2700	4J
2-Butanone (MEK)	(ug/kg)	300	40J

MH-05 Constituent	Units	NYSDEC RSCOs	13.00 DEPTH
Methylene Chloride	(ug/kg)	100	[51000]J
Toluene	(ug/kg)	1500	[28000]J
Chlorobenzene	(ug/kg)	1700	[60000]J
1,3-Dichlorobenzene	(ug/kg)	1600	[39000]J
1,4-Dichlorobenzene	(ug/kg)	8500	[930000]
1,2-Dichlorobenzene	(ug/kg)	7900	[1300000
1,2,4-Trichlorobenzene	(ug/kg)	3400	[15000]J

MH-07 Constituent	Units	NYSDEC RSCOs	17.00 DEPTH
2-Butanone (MEK)	(ug/kg)	300	26J
Toluene	(ug/kg)	1500	0.7J
1,4-Dichlorobenzene	(ug/kg)	8500	3J
1,2-Dichlorobenzene	(ug/kg)	7900	4J

MH-01 Constituent	Units	NYSDEC RSCOs	12.50 DEPTH
2-Butanone (MEK)	(ug/kg)	300	75J
4-Methyl-2-pentanone(MIBK)	(ug/kg)	1000	5J

MH-08 Constituent	Units	NYSDEC RSCOs	16.00 DEPTH
Carbon Disulfide	(ug/kg)	2700	2J
2-Butanone (MEK)	(ug/kg)	300	150J
4-Methyl-2-pentanone(MIBK)	(ug/kg)	1000	30
Toluene	(ug/kg)	1500	35
Ethylbenzene	(ug/kg)	5500	11J
Xylene (total)	(ug/kg)	1200	38
Methyl Acetate	(ug/kg)		8J
Methyl Cyclohexane	(ug/kg)		100
Isopropylbenzene	(ug/kg)		1J
1,2-Dichlorobenzene	(ug/kg)	7900	4J

MH-02 Constituent	Units	NYSDEC RSCOs	17.00	17.00 DEPTH
2-Butanone (MEK)	(ug/kg)	300	28J	58J

MH-09 Constituent	Units	NYSDEC RSCOs	16.00 DEPTH
2-Butanone (MEK)	(ug/kg)	300	45J
4-Methyl-2-pentanone(MIBK)	(ug/kg)	1000	2J
Ethylbenzene	(ug/kg)	5500	1J
Xylene (total)	(ug/kg)	1200	0.8J
1,4-Dichlorobenzene	(ug/kg)	8500	2J
1,2-Dichlorobenzene	(ug/kg)	7900	2J

MH-03 Constituent	Units	NYSDEC RSCOs	21.50 DEPTH
Carbon Disulfide	(ug/kg)	2700	3J
2-Butanone (MEK)	(ug/kg)	300	27J
Tetrachloroethene	(ug/kg)	1400	3J
Toluene	(ug/kg)	1500	1J
Ethylbenzene	(ug/kg)	5500	1J
Styrene	(ug/kg)		2J
Xylene (total)	(ug/kg)	1200	1J
cis-1,2-Dichloroethene	(ug/kg)		19

MH-13 Constituent	Units	NYSDEC RSCOs	15.00 DEPTH
Acetone	(ug/kg)	200	[270]J
2-Butanone (MEK)	(ug/kg)	300	72
Toluene	(ug/kg)	1500	240

MH-04 Constituent	Units	NYSDEC RSCOs	13.00 DEPTH
2-Butanone (MEK)	(ug/kg)	300	62J
Tetrachloroethene	(ug/kg)	1400	2J
Toluene	(ug/kg)	1500	0.7J
Xylene (total)	(ug/kg)	1200	1J

MH-10 Constituent	Units	NYSDEC RSCOs	20.00 DEPTH
2-Butanone (MEK)	(ug/kg)	300	43J
4-Methyl-2-pentanone(MIBK)	(ug/kg)	1000	3J
Tetrachloroethene	(ug/kg)	1400	8J
Toluene	(ug/kg)	1500	90
Ethylbenzene	(ug/kg)	5500	0.4J
Xylene (total)	(ug/kg)	1200	3J
1,4-Dichlorobenzene	(ug/kg)	8500	5J

LEGEND

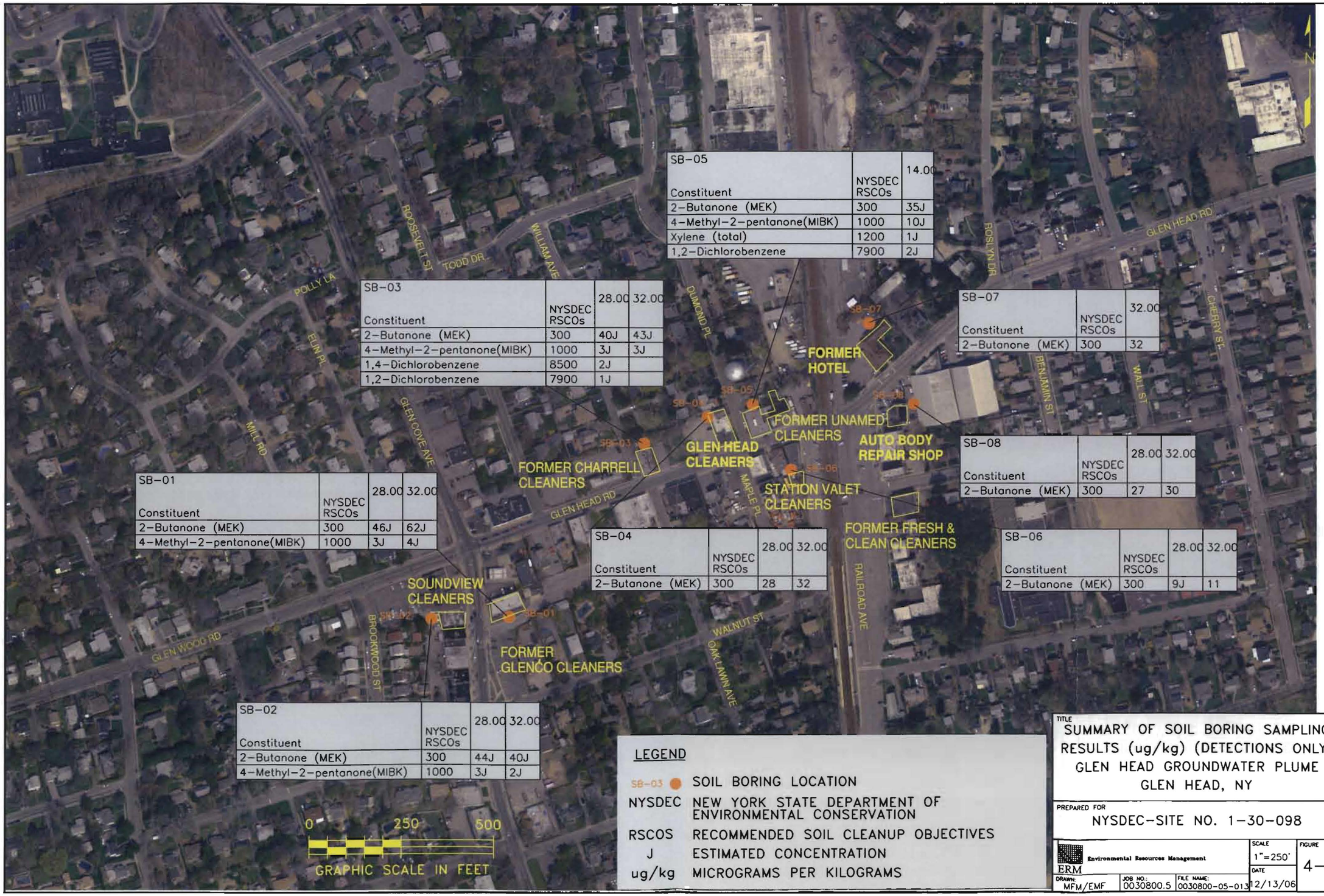
MH-06	MANHOLE LOCATION
NYSDEC	NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
RSCOS	RECOMMENDED SOIL CLEANUP OBJECTIVES
J	ESTIMATED CONCENTRATION
ug/kg	MICROGRAMS PER KILOGRAMS

TITLE: SUMMARY OF MANHOLE SAMPLING RESULTS (ug/kg) (DETECTIONS ONLY) GLEN HEAD GROUNDWATER PLUME GLEN HEAD, NY

PREPARED FOR: NYSDEC-SITE NO. 1-30-098

Environmental Resources Management
ERM

DRAWN:	JOB NO.:	FILE NAME:	SCALE	DATE	FIGURE
MFM/EMF	0030800.5	0030800-05-014	1"=250'	12/20/06	4-1



TITLE
SUMMARY OF SOIL BORING SAMPLING RESULTS (ug/kg) (DETECTIONS ONLY)
GLEN HEAD GROUNDWATER PLUME
GLEN HEAD, NY

PREPARED FOR
NYSDEC-SITE NO. 1-30-098

Environmental Resources Management
ERM

SCALE 1"=250'
FIGURE 4-2
DRAWN: MFM/EMF
JOB NO.: 0030800.5
FILE NAME: 0030800-05-013
DATE 12/13/06



TT-MW-11

Constituent	Units	NYSDEC TOGS	12/09/05
1,1-Dichloroethane	(ug/l)	5	3
cis-1,2-Dichloroethene	(ug/l)	5	[11]
1,1,1-Trichloroethane	(ug/l)	5	2
Trichloroethene	(ug/l)	5	[53]
Toluene	(ug/l)	5	0.2 J
Tetrachloroethene	(ug/l)	5	[10]
Total VOCs	(ug/l)		79.2

TT-MW-01

Constituent	Units	NYSDEC TOGS	12/09/05
1,1-Dichloroethane	(ug/l)	5	1
cis-1,2-Dichloroethene	(ug/l)	5	1
1,1,1-Trichloroethane	(ug/l)	5	1
Trichloroethene	(ug/l)	5	[24]
Tetrachloroethene	(ug/l)	5	2
Total VOCs	(ug/l)		29

TT-MW-03

Constituent	Units	NYSDEC TOGS	12/09/05
1,1-Dichloroethene	(ug/l)	5	0.5 J
trans-1,2-Dichloroethene	(ug/l)	5	0.4 J
1,1-Dichloroethane	(ug/l)	5	[10]
cis-1,2-Dichloroethene	(ug/l)	5	[81]
1,1,1-Trichloroethane	(ug/l)	5	[14]
Trichloroethene	(ug/l)	5	[190]
Toluene	(ug/l)	5	0.1 J
Tetrachloroethene	(ug/l)	5	[13]
Total VOCs	(ug/l)		309

TT-MW-09

Constituent	Units	NYSDEC TOGS	12/08/05
1,1-Dichloroethane	(ug/l)	5	0.5 J
cis-1,2-Dichloroethene	(ug/l)	5	0.2 J
Chloroform	(ug/l)	7	0.3 J
1,1,1-Trichloroethane	(ug/l)	5	0.4 J
Trichloroethene	(ug/l)	5	1
1,2-Dichloropropane	(ug/l)	1	0.6 J
Toluene	(ug/l)	5	0.2 J
Tetrachloroethene	(ug/l)	5	3
Xylene (total)	(ug/l)	5	0.2 J
Total VOCs	(ug/l)		6.4

TT-MW-05

Constituent	Units	NYSDEC TOGS	12/09/05
cis-1,2-Dichloroethene	(ug/l)	5	[6]
Chloroform	(ug/l)	7	0.2 J
1,1,1-Trichloroethane	(ug/l)	5	2
Trichloroethene	(ug/l)	5	[7]
Tetrachloroethene	(ug/l)	5	[290]
Total VOCs	(ug/l)		305.2

TT-MW-02

Constituent	Units	NYSDEC TOGS	12/08/05
cis-1,2-Dichloroethene	(ug/l)	5	[150]
Trichloroethene	(ug/l)	5	[1000]
Tetrachloroethene	(ug/l)	5	[33] J
Total VOCs	(ug/l)		1183

TT-MW-04

Constituent	Units	NYSDEC TOGS	12/09/05
1,1-Dichloroethane	(ug/l)	5	0.3 J
cis-1,2-Dichloroethene	(ug/l)	5	[12]
Chloroform	(ug/l)	7	0.2 J
1,1,1-Trichloroethane	(ug/l)	5	0.4 J
Trichloroethene	(ug/l)	5	[7]
Toluene	(ug/l)	5	0.1 J
Tetrachloroethene	(ug/l)	5	[1600]
1,4-Dichlorobenzene	(ug/l)	3	0.2 J
Total VOCs	(ug/l)		1620.2

TT-MW-10

Constituent	Units	NYSDEC TOGS	12/08/05
cis-1,2-Dichloroethene	(ug/l)	5	[57]
Trichloroethene	(ug/l)	5	[590]
Tetrachloroethene	(ug/l)	5	[22] J
Total VOCs	(ug/l)		669

MW-02

Constituent	Units	NYSDEC TOGS	12/13/05
cis-1,2-Dichloroethene	(ug/l)	5	[25] J
Tetrachloroethene	(ug/l)	5	[580]
Total VOCs	(ug/l)		605

MW-07

Constituent	Units	NYSDEC TOGS	12/09/05
cis-1,2-Dichloroethene	(ug/l)	5	2
Chloroform	(ug/l)	7	0.2 J
1,1,1-Trichloroethane	(ug/l)	5	1
Trichloroethene	(ug/l)	5	[6]
Toluene	(ug/l)	5	0.2 J
Tetrachloroethene	(ug/l)	5	[690]
Total VOCs	(ug/l)		699.4

MW-04

Constituent	Units	NYSDEC TOGS	12/13/05
Tetrachloroethene	(ug/l)	5	[1500]
Total VOCs	(ug/l)		1500

MW-08

Constituent	Units	NYSDEC TOGS	12/09/05
cis-1,2-Dichloroethene	(ug/l)	5	2
2-Butanone (MEK)	(ug/l)	50	0.5 J
Chloroform	(ug/l)	7	0.3 J
1,1,1-Trichloroethane	(ug/l)	5	0.4 J
Trichloroethene	(ug/l)	5	[5]
Toluene	(ug/l)	5	0.2 J
Tetrachloroethene	(ug/l)	5	[610]
Xylene (total)	(ug/l)	5	0.3 J
Total VOCs	(ug/l)		618.7

MW-01

Constituent	Units	NYSDEC TOGS	12/12/05
trans-1,2-Dichloroethene	(ug/l)	5	0.2 J
cis-1,2-Dichloroethene	(ug/l)	5	[8] J
Chloroform	(ug/l)	7	0.2 J
1,1,1-Trichloroethane	(ug/l)	5	1 J
Benzene	(ug/l)	1	0.1 J
Trichloroethene	(ug/l)	5	[17] J
Toluene	(ug/l)	5	0.3 J
Tetrachloroethene	(ug/l)	5	[2400]
Xylene (total)	(ug/l)	5	0.3 J
1,4-Dichlorobenzene	(ug/l)	3	0.3 J
1,2-Dichlorobenzene	(ug/l)	3	0.5 J
Total VOCs	(ug/l)		2427.9

MW-11

Constituent	Units	NYSDEC TOGS	12/12/05
Chloroform	(ug/l)	7	0.7 J
Trichloroethene	(ug/l)	5	0.3 J
Toluene	(ug/l)	5	0.1 J
Tetrachloroethene	(ug/l)	5	[25]
Total VOCs	(ug/l)		26.1
Total VOC TICs	(ug/l)		16

MW-03

Constituent	Units	NYSDEC TOGS	12/12/05
1,1-Dichloroethene	(ug/l)	5	0.1 J
1,1-Dichloroethane	(ug/l)	5	0.3 J
cis-1,2-Dichloroethene	(ug/l)	5	0.6 J
Chloroform	(ug/l)	7	0.2 J
1,1,1-Trichloroethane	(ug/l)	5	1 J
Benzene	(ug/l)	1	0.1 J
Trichloroethene	(ug/l)	5	[10] J
Toluene	(ug/l)	5	0.4 J
Tetrachloroethene	(ug/l)	5	[640]
Ethylbenzene	(ug/l)	5	0.1 J
Xylene (total)	(ug/l)	5	0.2 J
Total VOCs	(ug/l)		653

MW-05

Constituent	Units	NYSDEC TOGS	12/12/05
Vinyl chloride	(ug/l)	2	0.3 J
1,1-Dichloroethene	(ug/l)	5	0.2 J
Chloroform	(ug/l)	7	0.2 J
1,1,1-Trichloroethane	(ug/l)	5	0.9 J
Benzene	(ug/l)	1	0.4 J
Trichloroethene	(ug/l)	5	0.5 J
Toluene	(ug/l)	5	0.3 J
Tetrachloroethene	(ug/l)	5	[50]
Xylene (total)	(ug/l)	5	0.2 J
Total VOCs	(ug/l)		53

MW-06

Constituent	Units	NYSDEC TOGS	12/12/05
cis-1,2-Dichloroethene	(ug/l)	5	0.8 J
Trichloroethene	(ug/l)	5	0.8 J
Toluene	(ug/l)	5	0.3 J
Tetrachloroethene	(ug/l)	5	[140] J
Xylene (total)	(ug/l)	5	0.4 J
Total VOCs	(ug/l)		142.3

LEGEND

MW-02	MONITORING WELL LOCATION
NYSDEC	NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
TOGS	TECHNICAL OPERATIONAL GUIDANCE SERIES 1.1.1 – (TOGS)
[ ]	INDICATES EXCEEDANCE TO NYSDEC TOGS
J	ESTIMATED CONCENTRATION
ug/L	MICROGRAMS PER LITER

TITLE:

SUMMARY OF MONITORING WELL SAMPLING RESULTS GLEN HEAD GROUNDWATER PLUME GLEN HEAD, NY

PREPARED FOR

NYSDEC–SITE NO. 1–30–098

ERM Environmental Resources Management

SCALE: 1"=400'

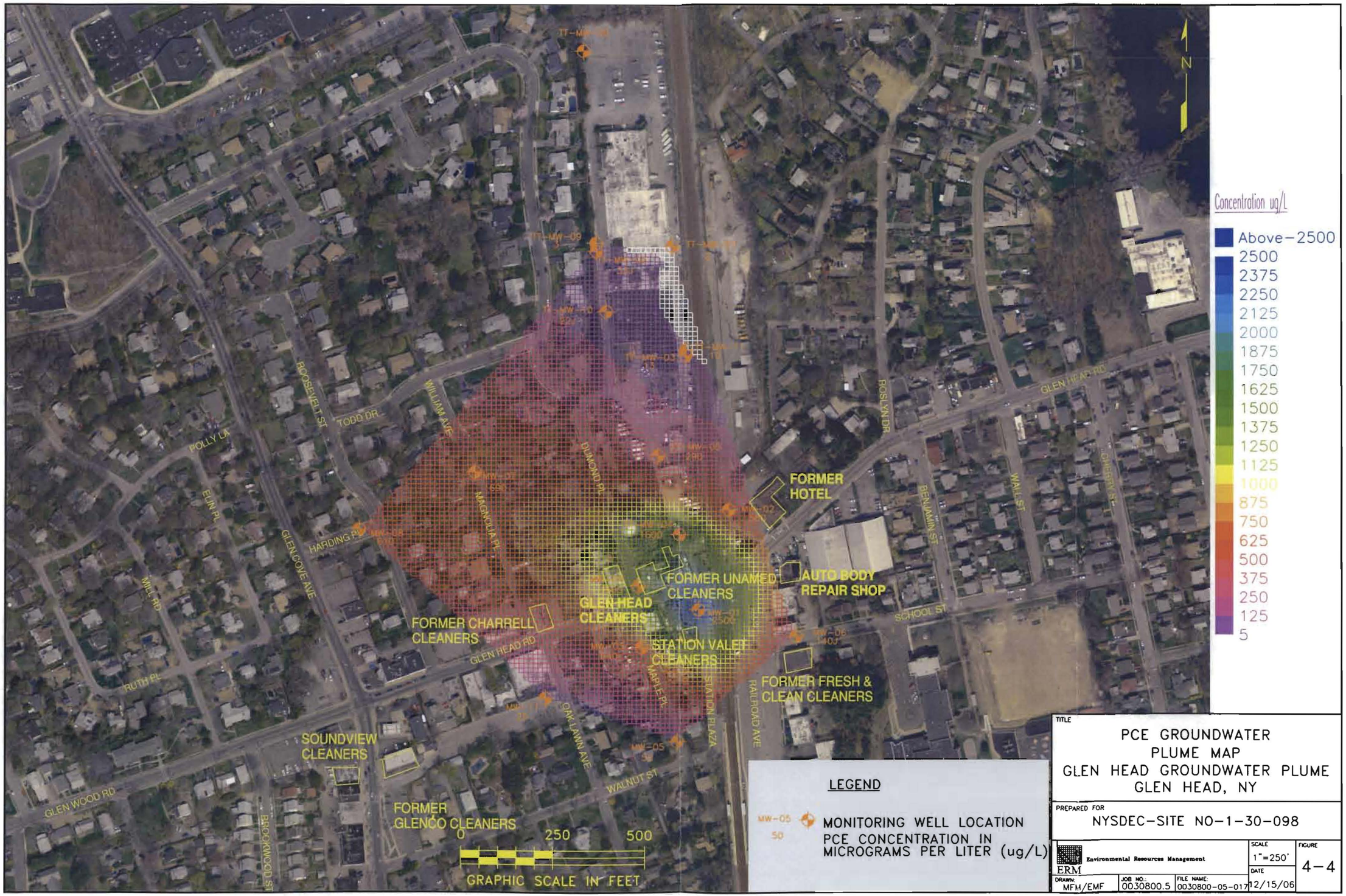
FIGURE: 4–3

DRAWN: MFM/EMF

JOB NO.: 0030800.5

FILE NAME: 0030800-05-016

DATE: 12/13/06



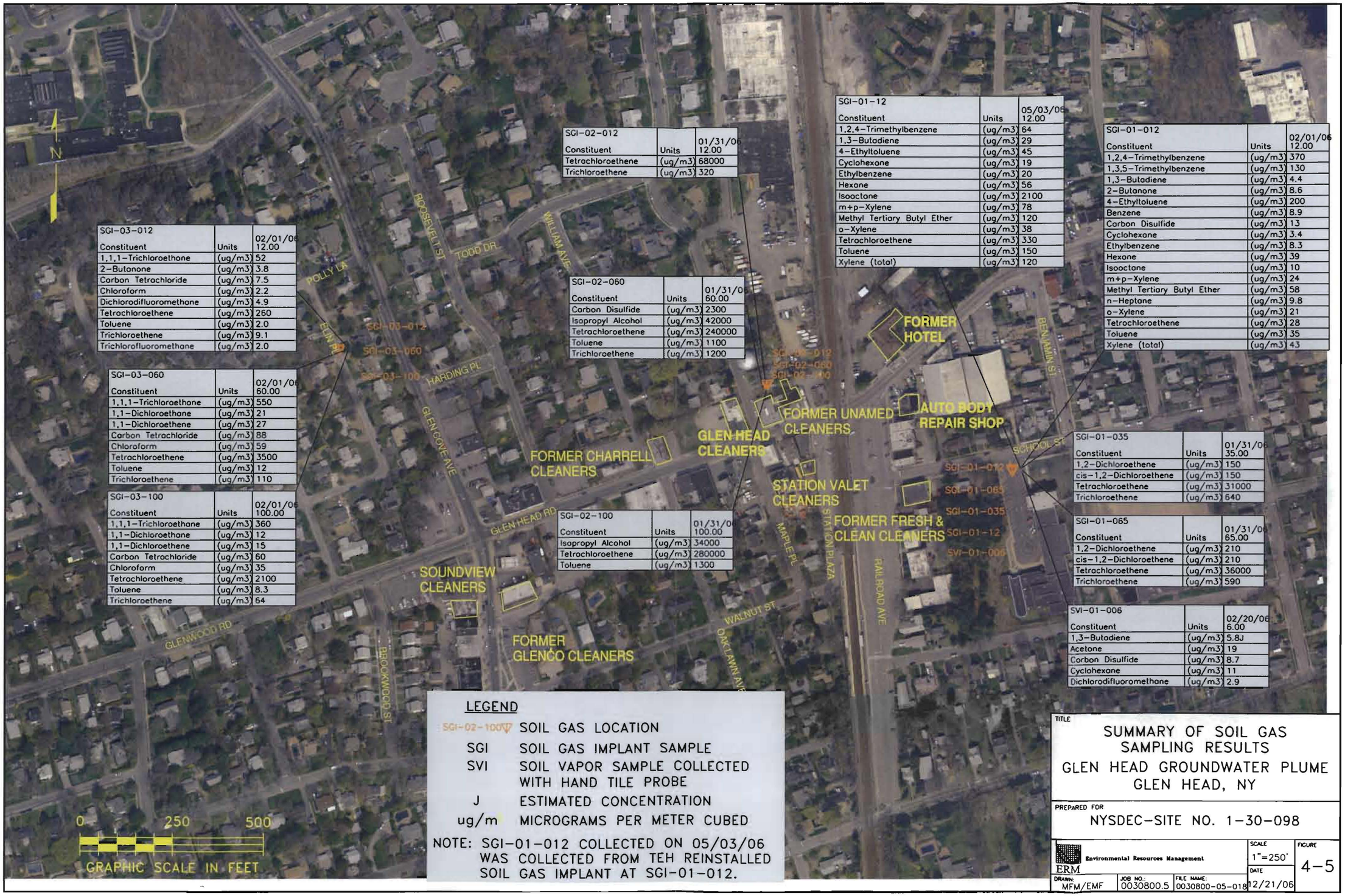
TITLE

PCE GROUNDWATER PLUME MAP
GLEN HEAD GROUNDWATER PLUME
GLEN HEAD, NY

PREPARED FOR

NYSDEC-SITE NO-1-30-098

ERM Environmental Resources Management				SCALE 1"=250'	FIGURE 4-4
DRAWN: MFM/EMF	JOB NO.: 0030800.5	FILE NAME: 0030800-05-017		DATE 12/15/06	



SGI-03-012 Constituent	Units	02/01/06 12.00
1,1,1-Trichloroethane	(ug/m3)	52
2-Butanone	(ug/m3)	3.8
Carbon Tetrachloride	(ug/m3)	7.5
Chloroform	(ug/m3)	2.2
Dichlorodifluoromethane	(ug/m3)	4.9
Tetrachloroethene	(ug/m3)	260
Toluene	(ug/m3)	2.0
Trichloroethene	(ug/m3)	9.1
Trichlorofluoromethane	(ug/m3)	2.0

SGI-03-060 Constituent	Units	02/01/06 60.00
1,1,1-Trichloroethane	(ug/m3)	550
1,1-Dichloroethane	(ug/m3)	21
1,1-Dichloroethene	(ug/m3)	27
Carbon Tetrachloride	(ug/m3)	88
Chloroform	(ug/m3)	59
Tetrachloroethene	(ug/m3)	3500
Toluene	(ug/m3)	12
Trichloroethene	(ug/m3)	110

SGI-03-100 Constituent	Units	02/01/06 100.00
1,1,1-Trichloroethane	(ug/m3)	360
1,1-Dichloroethane	(ug/m3)	12
1,1-Dichloroethene	(ug/m3)	15
Carbon Tetrachloride	(ug/m3)	60
Chloroform	(ug/m3)	35
Tetrachloroethene	(ug/m3)	2100
Toluene	(ug/m3)	8.3
Trichloroethene	(ug/m3)	64

SGI-02-012 Constituent	Units	01/31/06 12.00
Tetrachloroethene	(ug/m3)	68000
Trichloroethene	(ug/m3)	320

SGI-02-060 Constituent	Units	01/31/06 60.00
Carbon Disulfide	(ug/m3)	2300
Isopropyl Alcohol	(ug/m3)	42000
Tetrachloroethene	(ug/m3)	240000
Toluene	(ug/m3)	1100
Trichloroethene	(ug/m3)	1200

SGI-02-100 Constituent	Units	01/31/06 100.00
Isopropyl Alcohol	(ug/m3)	34000
Tetrachloroethene	(ug/m3)	280000
Toluene	(ug/m3)	1300

SGI-01-12 Constituent	Units	05/03/06 12.00
1,2,4-Trimethylbenzene	(ug/m3)	64
1,3-Butadiene	(ug/m3)	29
4-Ethyltoluene	(ug/m3)	45
Cyclohexane	(ug/m3)	19
Ethylbenzene	(ug/m3)	20
Hexane	(ug/m3)	56
Isooctane	(ug/m3)	2100
m+p-Xylene	(ug/m3)	78
Methyl Tertiary Butyl Ether	(ug/m3)	120
o-Xylene	(ug/m3)	38
Tetrachloroethene	(ug/m3)	330
Toluene	(ug/m3)	150
Xylene (total)	(ug/m3)	120

SGI-01-012 Constituent	Units	02/01/06 12.00
1,2,4-Trimethylbenzene	(ug/m3)	370
1,3,5-Trimethylbenzene	(ug/m3)	130
1,3-Butadiene	(ug/m3)	4.4
2-Butanone	(ug/m3)	8.6
4-Ethyltoluene	(ug/m3)	200
Benzene	(ug/m3)	8.9
Carbon Disulfide	(ug/m3)	13
Cyclohexane	(ug/m3)	3.4
Ethylbenzene	(ug/m3)	8.3
Hexane	(ug/m3)	39
Isooctane	(ug/m3)	10
m+p-Xylene	(ug/m3)	24
Methyl Tertiary Butyl Ether	(ug/m3)	58
n-Heptane	(ug/m3)	9.8
o-Xylene	(ug/m3)	21
Tetrachloroethene	(ug/m3)	28
Toluene	(ug/m3)	35
Xylene (total)	(ug/m3)	43

SGI-01-035 Constituent	Units	01/31/06 35.00
1,2-Dichloroethene	(ug/m3)	150
cis-1,2-Dichloroethene	(ug/m3)	150
Tetrachloroethene	(ug/m3)	31000
Trichloroethene	(ug/m3)	640

SGI-01-065 Constituent	Units	01/31/06 65.00
1,2-Dichloroethene	(ug/m3)	210
cis-1,2-Dichloroethene	(ug/m3)	210
Tetrachloroethene	(ug/m3)	36000
Trichloroethene	(ug/m3)	590

SVI-01-006 Constituent	Units	02/20/06 6.00
1,3-Butadiene	(ug/m3)	5.8J
Acetone	(ug/m3)	19
Carbon Disulfide	(ug/m3)	8.7
Cyclohexane	(ug/m3)	11
Dichlorodifluoromethane	(ug/m3)	2.9

LEGEND

SGI-02-100 SOIL GAS LOCATION

SGI SOIL GAS IMPLANT SAMPLE

SVI SOIL VAPOR SAMPLE COLLECTED WITH HAND TILE PROBE

J ESTIMATED CONCENTRATION

ug/m MICROGRAMS PER METER CUBED

NOTE: SGI-01-012 COLLECTED ON 05/03/06 WAS COLLECTED FROM TEH REINSTALLED SOIL GAS IMPLANT AT SGI-01-012.

TITLE

SUMMARY OF SOIL GAS SAMPLING RESULTS
GLEN HEAD GROUNDWATER PLUME
GLEN HEAD, NY

PREPARED FOR

NYSDEC-SITE NO. 1-30-098

ERM Environmental Resources Management

SCALE 1"=250'

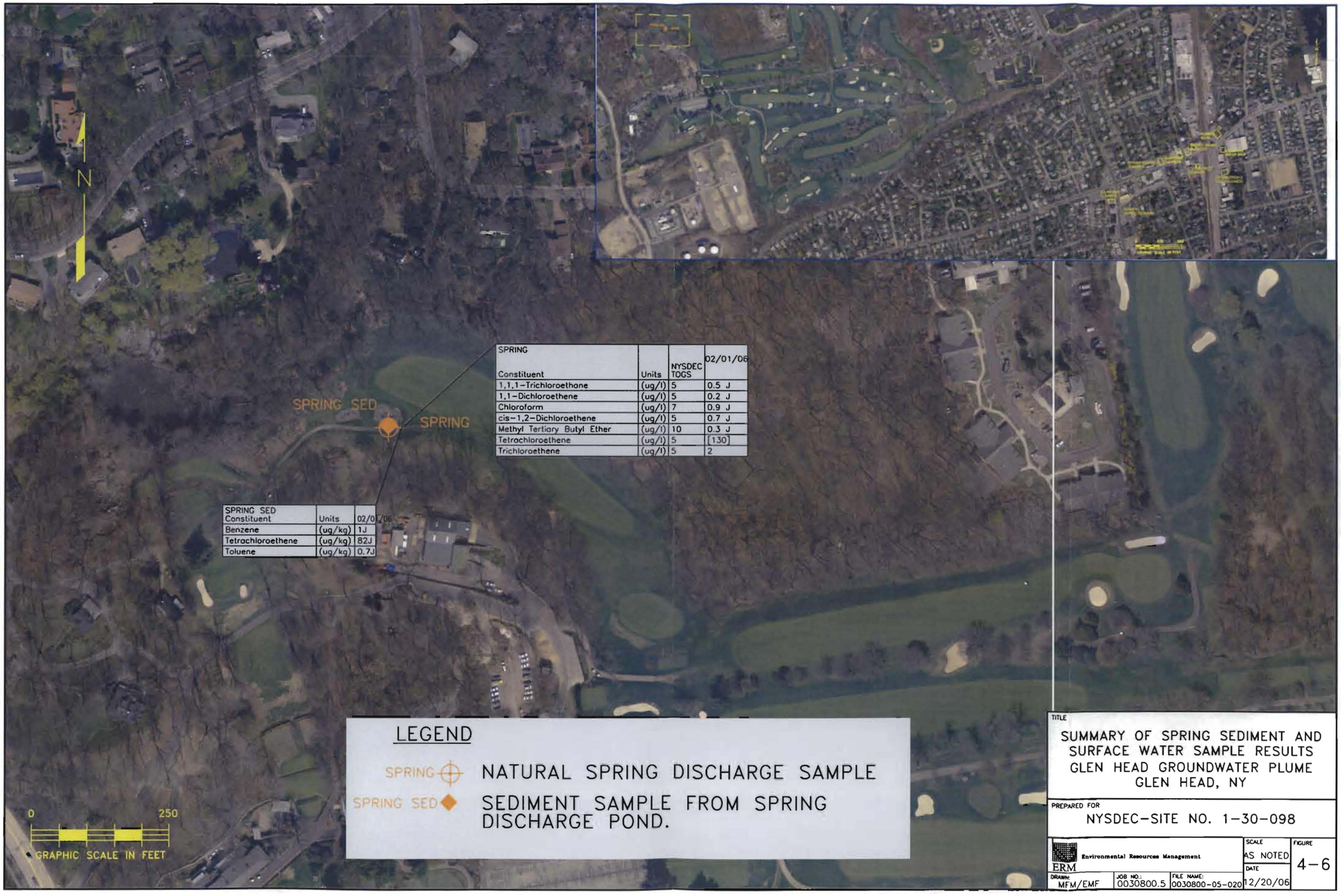
FIGURE 4-5

DRAWN: MFM/EMF

JOB NO.: 0030800.5

FILE NAME: 0030800-05-018

DATE 12/21/06



SPRING Constituent	Units	NYSDEC TOGS	02/01/06
1,1,1-Trichloroethane	(ug/l)	5	0.5 J
1,1-Dichloroethene	(ug/l)	5	0.2 J
Chloroform	(ug/l)	7	0.9 J
cis-1,2-Dichloroethene	(ug/l)	5	0.7 J
Methyl Tertiary Butyl Ether	(ug/l)	10	0.3 J
Tetrachloroethene	(ug/l)	5	[130]
Trichloroethene	(ug/l)	5	2

SPRING SED Constituent	Units	02/01/06
Benzene	(ug/kg)	1J
Tetrachloroethene	(ug/kg)	82J
Toluene	(ug/kg)	0.7J

LEGEND

SPRING — NATURAL SPRING DISCHARGE SAMPLE

SPRING SED — SEDIMENT SAMPLE FROM SPRING DISCHARGE POND.

TITLE

SUMMARY OF SPRING SEDIMENT AND SURFACE WATER SAMPLE RESULTS
GLEN HEAD GROUNDWATER PLUME
GLEN HEAD, NY

PREPARED FOR

NYSDEC-SITE NO. 1-30-098

ERM — Environmental Resources Management

SCALE	FIGURE
AS NOTED	4-6

DRAWN:	JOB NO.:	FILE NAME:	DATE
MFM/EMF	0030800.5	0030800-05-020	12/20/06

Table 4-1
Summary of Manhole Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 11/28/2005 thru 12/01/2005 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE LAB SAMPLE ID DATE DEPTH (ft) RESULT TYPE	NYSDEC RSCOs	MH-03 211489-005 11/29/2005 21.50 Primary	MH-04 211489-010 11/29/2005 13.00 Primary	MH-05 211489-011 11/29/2005 13.00 Primary
1,1,1-Trichloroethane	(ug/kg)	800	12U	12U	140000U
1,1,2,2-Tetrachloroethane	(ug/kg)	600	12U	12U	140000U
1,1,2-Trichloroethane	(ug/kg)		12U	12U	140000U
1,1-Dichloroethane	(ug/kg)	200	12U	12U	140000U
1,1-Dichloroethene	(ug/kg)	400	12U	12U	140000U
1,2,4-Trichlorobenzene	(ug/kg)	3400	12U	12U	[15000]J
1,2-Dibromoethane	(ug/kg)		12U	12U	140000U
1,2-Dichlorobenzene	(ug/kg)	7900	12U	12U	[1300000]
1,2-Dichloroethane	(ug/kg)	100	12U	12U	140000U
1,2-Dichloropropane	(ug/kg)		12U	12U	140000U
1,3-Dichlorobenzene	(ug/kg)	1600	12U	12U	[39000]J
1,4-Dichlorobenzene	(ug/kg)	8500	12U	12U	[930000]
2-Butanone	(ug/kg)	300	27J	62J	140000U
2-Hexanone	(ug/kg)		12U	12U	140000U
4-Methyl-2-Pentanone	(ug/kg)	1000	12U	12U	140000U
Acetone	(ug/kg)	200	38UJ	12UJ	140000U
Benzene	(ug/kg)	60	12U	12U	140000U
Bromodichloromethane	(ug/kg)		12U	12U	140000U
Bromoform	(ug/kg)		12U	12U	140000U
Bromomethane	(ug/kg)		12U	12U	140000U
Carbon Disulfide	(ug/kg)	2700	3J	12U	140000U
Carbon Tetrachloride	(ug/kg)	600	12U	12U	140000U
Chlorobenzene	(ug/kg)	1700	12U	12U	[60000]J
Chloroethane	(ug/kg)	1900	12UJ	12UJ	140000UJ
Chloroform	(ug/kg)	300	12U	12U	140000U
Chloromethane	(ug/kg)		12U	12U	140000U
cis-1,2-Dichloroethene	(ug/kg)		19	12U	140000U
cis-1,3-Dichloropropene	(ug/kg)		12U	12U	140000U
Cyclohexane	(ug/kg)		12U	12U	140000U
Dibromochloromethane	(ug/kg)		12U	12U	140000U
Dibromochloropropane	(ug/kg)		12U	12U	140000U
Dichlorodifluoromethane	(ug/kg)		12U	12U	140000UJ
Ethylbenzene	(ug/kg)	5500	1J	12U	140000U
Freon 113	(ug/kg)	6000	12U	12U	140000U
Isopropylbenzene	(ug/kg)		12U	12U	140000U
Methyl Acetate	(ug/kg)		12U	12U	140000U
Methyl Cyclohexane	(ug/kg)		12U	12U	140000U
Methyl Tertiary Butyl Ether	(ug/kg)	120	12U	12U	140000U
Methylene Chloride	(ug/kg)	100	12U	12U	[51000]J

See end notes following the last page of this table.

Table 4-1
Summary of Manhole Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 11/28/2005 thru 12/01/2005 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE LAB SAMPLE ID DATE DEPTH (ft) RESULT TYPE	NYSDEC RSCOs	MH-06 211489-012 11/30/2005 14.00 Primary	MH-07 211489-013 11/30/2005 17.00 Primary	MH-08 211489-014 11/30/2005 16.00 Primary
1,1,1-Trichloroethane	(ug/kg)	800	17U	12U	13U
1,1,2,2-Tetrachloroethane	(ug/kg)	600	17U	12U	13U
1,1,2-Trichloroethane	(ug/kg)		17U	12U	13U
1,1-Dichloroethane	(ug/kg)	200	17U	12U	13U
1,1-Dichloroethene	(ug/kg)	400	17U	12U	13U
1,2,4-Trichlorobenzene	(ug/kg)	3400	17U	12U	13U
1,2-Dibromoethane	(ug/kg)		17U	12U	13U
1,2-Dichlorobenzene	(ug/kg)	7900	17U	4J	4J
1,2-Dichloroethane	(ug/kg)	100	17U	12U	13U
1,2-Dichloropropane	(ug/kg)		17U	12U	13U
1,3-Dichlorobenzene	(ug/kg)	1600	17U	12U	13U
1,4-Dichlorobenzene	(ug/kg)	8500	17U	3J	13U
2-Butanone	(ug/kg)	300	40J	26J	150J
2-Hexanone	(ug/kg)		17U	12U	13U
4-Methyl-2-Pentanone	(ug/kg)	1000	17U	12U	30
Acetone	(ug/kg)	200	56UJ	12UJ	35UJ
Benzene	(ug/kg)	60	17U	12U	13U
Bromodichloromethane	(ug/kg)		17U	12U	13U
Bromoform	(ug/kg)		17U	12U	13U
Bromomethane	(ug/kg)		17U	12U	13U
Carbon Disulfide	(ug/kg)	2700	4J	12U	2J
Carbon Tetrachloride	(ug/kg)	600	17U	12U	13U
Chlorobenzene	(ug/kg)	1700	17U	12U	13U
Chloroethane	(ug/kg)	1900	17UJ	12UJ	13UJ
Chloroform	(ug/kg)	300	17U	12U	13U
Chloromethane	(ug/kg)		17U	12U	13U
cis-1,2-Dichloroethene	(ug/kg)		17U	12U	13U
cis-1,3-Dichloropropene	(ug/kg)		17U	12U	13U
Cyclohexane	(ug/kg)		17U	12U	13U
Dibromochloromethane	(ug/kg)		17U	12U	13U
Dibromochloropropane	(ug/kg)		17U	12U	13U
Dichlorodifluoromethane	(ug/kg)		17U	12U	13U
Ethylbenzene	(ug/kg)	5500	17U	12U	11J
Freon 113	(ug/kg)	6000	17U	12U	13U
Isopropylbenzene	(ug/kg)		17U	12U	1J
Methyl Acetate	(ug/kg)		17U	12U	8J
Methyl Cyclohexane	(ug/kg)		17U	12U	100
Methyl Tertiary Butyl Ether	(ug/kg)	120	17U	12U	13U
Methylene Chloride	(ug/kg)	100	17U	12U	13U

See end notes following the last page of this table.

Table 4-1
Summary of Manhole Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 11/28/2005 thru 12/01/2005 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT		NYSDEC RSCOs	MH-09 211489-015 11/30/2005 16.00 Primary	MH-10 211489-018 11/30/2005 20.00 Primary	MH-11 211531-003 12/01/2005 0.00 Primary
SITE			MH-09	MH-10	MH-11
LAB SAMPLE ID			211489-015	211489-018	211531-003
DATE			11/30/2005	11/30/2005	12/01/2005
DEPTH (ft)		NYSDEC	16.00	20.00	0.00
RESULT TYPE		RSCOs	Primary	Primary	Primary
1,1,1-Trichloroethane	(ug/kg)	800	12U	12U	12U
1,1,2,2-Tetrachloroethane	(ug/kg)	600	12U	12U	12U
1,1,2-Trichloroethane	(ug/kg)		12U	12U	12U
1,1-Dichloroethane	(ug/kg)	200	12U	12U	12U
1,1-Dichloroethene	(ug/kg)	400	12U	12U	12U
1,2,4-Trichlorobenzene	(ug/kg)	3400	12U	12U	12U
1,2-Dibromoethane	(ug/kg)		12U	12U	12U
1,2-Dichlorobenzene	(ug/kg)	7900	2J	12U	12U
1,2-Dichloroethane	(ug/kg)	100	12U	12U	12U
1,2-Dichloropropane	(ug/kg)		12U	12U	12U
1,3-Dichlorobenzene	(ug/kg)	1600	12U	12U	12U
1,4-Dichlorobenzene	(ug/kg)	8500	2J	5J	2J
2-Butanone	(ug/kg)	300	45J	43J	45
2-Hexanone	(ug/kg)		12U	12U	12U
4-Methyl-2-Pentanone	(ug/kg)	1000	2J	3J	12U
Acetone	(ug/kg)	200	12UJ	19UJ	31J
Benzene	(ug/kg)	60	12U	12U	12U
Bromodichloromethane	(ug/kg)		12U	12U	12U
Bromoform	(ug/kg)		12U	12U	12U
Bromomethane	(ug/kg)		12U	12U	12UJ
Carbon Disulfide	(ug/kg)	2700	12U	12U	12U
Carbon Tetrachloride	(ug/kg)	600	12U	12U	12U
Chlorobenzene	(ug/kg)	1700	12U	12U	12U
Chloroethane	(ug/kg)	1900	12UJ	12UJ	12UJ
Chloroform	(ug/kg)	300	12U	12U	12U
Chloromethane	(ug/kg)		12U	12U	12U
cis-1,2-Dichloroethene	(ug/kg)		12U	12U	12U
cis-1,3-Dichloropropene	(ug/kg)		12U	12U	12U
Cyclohexane	(ug/kg)		12U	12U	12U
Dibromochloromethane	(ug/kg)		12U	12U	12U
Dibromochloropropane	(ug/kg)		12U	12U	12U
Dichlorodifluoromethane	(ug/kg)		12U	12U	12U
Ethylbenzene	(ug/kg)	5500	1J	0.4J	12U
Freon 113	(ug/kg)	6000	12U	12U	12U
Isopropylbenzene	(ug/kg)		12U	12U	12U
Methyl Acetate	(ug/kg)		12U	12U	12U
Methyl Cyclohexane	(ug/kg)		12U	12U	12U
Methyl Tertiary Butyl Ether	(ug/kg)	120	12U	12U	12U
Methylene Chloride	(ug/kg)	100	12U	12U	12U

See end notes following the last page of this table.

Table 4-1
Summary of Manhole Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 11/28/2005 thru 12/01/2005 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE LAB SAMPLE ID DATE DEPTH (ft) RESULT TYPE	NYSDEC RSCOs	MH-12 211531-002 12/01/2005 0.00 Primary	MH-13 211531-001 12/01/2005 0.00 Primary
1,1,1-Trichloroethane	(ug/kg)	800	77U	23U
1,1,2,2-Tetrachloroethane	(ug/kg)	600	77U	23U
1,1,2-Trichloroethane	(ug/kg)		77U	23U
1,1-Dichloroethane	(ug/kg)	200	77U	23U
1,1-Dichloroethene	(ug/kg)	400	77U	23U
1,2,4-Trichlorobenzene	(ug/kg)	3400	77U	23U
1,2-Dibromoethane	(ug/kg)		77U	23U
1,2-Dichlorobenzene	(ug/kg)	7900	77U	23U
1,2-Dichloroethane	(ug/kg)	100	77U	23U
1,2-Dichloropropane	(ug/kg)		77U	23U
1,3-Dichlorobenzene	(ug/kg)	1600	77U	23U
1,4-Dichlorobenzene	(ug/kg)	8500	77U	23U
2-Butanone	(ug/kg)	300	87	72
2-Hexanone	(ug/kg)		77U	23U
4-Methyl-2-Pentanone	(ug/kg)	1000	77U	23U
Acetone	(ug/kg)	200	[440]J	[270]J
Benzene	(ug/kg)	60	77U	23U
Bromodichloromethane	(ug/kg)		77U	23U
Bromoform	(ug/kg)		77U	23U
Bromomethane	(ug/kg)		77UJ	23UJ
Carbon Disulfide	(ug/kg)	2700	77U	23U
Carbon Tetrachloride	(ug/kg)	600	77U	23U
Chlorobenzene	(ug/kg)	1700	77U	23U
Chloroethane	(ug/kg)	1900	77UJ	23UJ
Chloroform	(ug/kg)	300	77U	23U
Chloromethane	(ug/kg)		77U	23U
cis-1,2-Dichloroethene	(ug/kg)		77U	23U
cis-1,3-Dichloropropene	(ug/kg)		77U	23U
Cyclohexane	(ug/kg)		77U	23U
Dibromochloromethane	(ug/kg)		77U	23U
Dibromochloropropane	(ug/kg)		77U	23U
Dichlorodifluoromethane	(ug/kg)		77U	23U
Ethylbenzene	(ug/kg)	5500	77U	23U
Freon 113	(ug/kg)	6000	77U	23U
Isopropylbenzene	(ug/kg)		77U	23U
Methyl Acetate	(ug/kg)		77U	23U
Methyl Cyclohexane	(ug/kg)		77U	23U
Methyl Tertiary Butyl Ether	(ug/kg)	120	77U	23U
Methylene Chloride	(ug/kg)	100	77U	23U

See end notes following the last page of this table.

Table 4-1
Summary of Manhole Sampling Analytical Results
Volatile Organic Compounds
Glen Head Groundwater Plume
Glen Head, New York
NYSDEC Site Number 1-30-098

Notes:

- µg/kg = micrograms per kilogram (parts per billion; ppb).
- NYSDEC RSCOs = New York State Department of Environmental Conservation, Recommended Soil Cleanup Objectives.
- Bracketed values indicate exceedances of the Recommended Soil Cleanup Objectives.
- All samples analyzed for Target Compound List (TCL) Volatile Organic Compounds (VOCs) using "*United State Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) Statement of Work (SOW) for Organics Analysis Low Concentration Water OLM04.2 (February 1996)*".

Qualifiers

no qualifier	The compound was positively identified at the associated numerical value which is the concentration of the compound in the sample.
U	Non Detect. The compound was analyzed for, but not detected. The associated numerical value is the quantitation limit. The value is usable as a non-detect at the quantitation limit.
J	Estimated value. The value was designated as estimated by the laboratory per the method to indicate the compound is present, but the concentration is less than the Contract Required Quantitation Limit (CRQL). Also used to indicate tentatively identified compounds (TICs). The value is usable as an estimated result.
UJ	The compound was analyzed for, but not detected. The associated numerical value is the quantitation limit. The value is an estimated quantity due to a QC exceedance. The value is usable as a non-detect at the estimated quantitation limit.

Table 4-2
Summary of Soil Boring Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 11/28/2005 thru 12/02/2005 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE LAB SAMPLE ID DATE DEPTH (ft) RESULT TYPE	NYSDEC RSCOs	SB-01 211489-003 11/28/2005 28.00 Primary	SB-01 211489-004 11/28/2005 32.00 Primary	SB-02 211489-006 11/29/2005 28.00 Primary
1,1,1-Trichloroethane	(ug/kg)	800	11U	10U	10U
1,1,2,2-Tetrachloroethane	(ug/kg)	600	11U	10U	10U
1,1,2-Trichloroethane	(ug/kg)		11U	10U	10U
1,1-Dichloroethane	(ug/kg)	200	11U	10U	10U
1,1-Dichloroethene	(ug/kg)	400	11U	10U	10U
1,2,4-Trichlorobenzene	(ug/kg)	3400	11U	10U	10U
1,2-Dibromoethane	(ug/kg)		11U	10U	10U
1,2-Dichlorobenzene	(ug/kg)	7900	11U	10U	10U
1,2-Dichloroethane	(ug/kg)	100	11U	10U	10U
1,2-Dichloropropane	(ug/kg)		11U	10U	10U
1,3-Dichlorobenzene	(ug/kg)	1600	11U	10U	10U
1,4-Dichlorobenzene	(ug/kg)	8500	11U	10U	10U
2-Butanone	(ug/kg)	300	46J	62J	44J
2-Hexanone	(ug/kg)		11U	10U	10U
4-Methyl-2-Pentanone	(ug/kg)	1000	3J	4J	3J
Acetone	(ug/kg)	200	11UJ	10UJ	10UJ
Benzene	(ug/kg)	60	11U	10U	10U
Bromodichloromethane	(ug/kg)		11U	10U	10U
Bromoform	(ug/kg)		11U	10U	10U
Bromomethane	(ug/kg)		11U	10U	10U
Carbon Disulfide	(ug/kg)	2700	11U	10U	10U
Carbon Tetrachloride	(ug/kg)	600	11U	10U	10U
Chlorobenzene	(ug/kg)	1700	11U	10U	10U
Chloroethane	(ug/kg)	1900	11UJ	10UJ	10UJ
Chloroform	(ug/kg)	300	11U	10U	10U
Chloromethane	(ug/kg)		11U	10U	10U
cis-1,2-Dichloroethene	(ug/kg)		11U	10U	10U
cis-1,3-Dichloropropene	(ug/kg)		11U	10U	10U
Cyclohexane	(ug/kg)		11U	10U	10U
Dibromochloromethane	(ug/kg)		11U	10U	10U
Dibromochloropropane	(ug/kg)		11U	10U	10U
Dichlorodifluoromethane	(ug/kg)		11U	10U	10U
Ethylbenzene	(ug/kg)	5500	11U	10U	10U
Freon 113	(ug/kg)	6000	11U	10U	10U
Isopropylbenzene	(ug/kg)		11U	10U	10U
Methyl Acetate	(ug/kg)		11U	10U	10U
Methyl Cyclohexane	(ug/kg)		11U	10U	10U
Methyl Tertiary Butyl Ether	(ug/kg)	120	11U	10U	10U
Methylene Chloride	(ug/kg)	100	11U	10U	10U

See end notes following the last page of this table.

Table 4-2
Summary of Soil Boring Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 11/28/2005 thru 12/02/2005 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE LAB SAMPLE ID DATE DEPTH (ft) RESULT TYPE	NYSDEC RSCOs	SB-02 211489-007 11/29/2005 32.00 Primary	SB-03 211489-016 11/30/2005 28.00 Primary	SB-03 211489-017 11/30/2005 32.00 Primary
1,1,1-Trichloroethane	(ug/kg)	800	11U	11U	11U
1,1,2,2-Tetrachloroethane	(ug/kg)	600	11U	11U	11U
1,1,2-Trichloroethane	(ug/kg)		11U	11U	11U
1,1-Dichloroethane	(ug/kg)	200	11U	11U	11U
1,1-Dichloroethene	(ug/kg)	400	11U	11U	11U
1,2,4-Trichlorobenzene	(ug/kg)	3400	11U	11U	11U
1,2-Dibromoethane	(ug/kg)		11U	11U	11U
1,2-Dichlorobenzene	(ug/kg)	7900	11U	1J	11U
1,2-Dichloroethane	(ug/kg)	100	11U	11U	11U
1,2-Dichloropropane	(ug/kg)		11U	11U	11U
1,3-Dichlorobenzene	(ug/kg)	1600	11U	11U	11U
1,4-Dichlorobenzene	(ug/kg)	8500	11U	2J	11U
2-Butanone	(ug/kg)	300	40J	40J	43J
2-Hexanone	(ug/kg)		11U	11U	11U
4-Methyl-2-Pentanone	(ug/kg)	1000	2J	3J	3J
Acetone	(ug/kg)	200	11UJ	11UJ	11UJ
Benzene	(ug/kg)	60	11U	11U	11U
Bromodichloromethane	(ug/kg)		11U	11U	11U
Bromoform	(ug/kg)		11U	11U	11U
Bromomethane	(ug/kg)		11U	11U	11U
Carbon Disulfide	(ug/kg)	2700	11U	11U	11U
Carbon Tetrachloride	(ug/kg)	600	11U	11U	11U
Chlorobenzene	(ug/kg)	1700	11U	11U	11U
Chloroethane	(ug/kg)	1900	11UJ	11UJ	11UJ
Chloroform	(ug/kg)	300	11U	11U	11U
Chloromethane	(ug/kg)		11U	11U	11U
cis-1,2-Dichloroethene	(ug/kg)		11U	11U	11U
cis-1,3-Dichloropropene	(ug/kg)		11U	11U	11U
Cyclohexane	(ug/kg)		11U	11U	11U
Dibromochloromethane	(ug/kg)		11U	11U	11U
Dibromochloropropane	(ug/kg)		11U	11U	11U
Dichlorodifluoromethane	(ug/kg)		11U	11U	11U
Ethylbenzene	(ug/kg)	5500	11U	11U	11U
Freon 113	(ug/kg)	6000	11U	11U	11U
Isopropylbenzene	(ug/kg)		11U	11U	11U
Methyl Acetate	(ug/kg)		11U	11U	11U
Methyl Cyclohexane	(ug/kg)		11U	11U	11U
Methyl Tertiary Butyl Ether	(ug/kg)	120	11U	11U	11U
Methylene Chloride	(ug/kg)	100	11U	11U	11U

See end notes following the last page of this table.

Table 4-2
Summary of Soil Boring Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 11/28/2005 thru 12/02/2005 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE LAB SAMPLE ID DATE DEPTH (ft) RESULT TYPE	NYSDEC RSCOs	SB-04 211531-004 12/01/2005 28.00 Primary	SB-04 211531-005 12/01/2005 32.00 Primary	SB-05 211489-019 11/30/2005 14.00 Primary
1,1,1-Trichloroethane	(ug/kg)	800	11U	11U	11U
1,1,2,2-Tetrachloroethane	(ug/kg)	600	11U	11U	11U
1,1,2-Trichloroethane	(ug/kg)		11U	11U	11U
1,1-Dichloroethane	(ug/kg)	200	11U	11U	11U
1,1-Dichloroethene	(ug/kg)	400	11U	11U	11U
1,2,4-Trichlorobenzene	(ug/kg)	3400	11U	11U	11U
1,2-Dibromoethane	(ug/kg)		11U	11U	11U
1,2-Dichlorobenzene	(ug/kg)	7900	11U	11U	2J
1,2-Dichloroethane	(ug/kg)	100	11U	11U	11U
1,2-Dichloropropane	(ug/kg)		11U	11U	11U
1,3-Dichlorobenzene	(ug/kg)	1600	11U	11U	11U
1,4-Dichlorobenzene	(ug/kg)	8500	11U	11U	11U
2-Butanone	(ug/kg)	300	28	32	35J
2-Hexanone	(ug/kg)		11U	11U	11U
4-Methyl-2-Pentanone	(ug/kg)	1000	11U	11U	10J
Acetone	(ug/kg)	200	11UJ	11UJ	15UJ
Benzene	(ug/kg)	60	11U	11U	11U
Bromodichloromethane	(ug/kg)		11U	11U	11U
Bromoform	(ug/kg)		11U	11U	11U
Bromomethane	(ug/kg)		11UJ	11UJ	11U
Carbon Disulfide	(ug/kg)	2700	11U	11U	11U
Carbon Tetrachloride	(ug/kg)	600	11U	11U	11U
Chlorobenzene	(ug/kg)	1700	11U	11U	11U
Chloroethane	(ug/kg)	1900	11UJ	11UJ	11UJ
Chloroform	(ug/kg)	300	11U	11U	11U
Chloromethane	(ug/kg)		11U	11U	11U
cis-1,2-Dichloroethene	(ug/kg)		11U	11U	11U
cis-1,3-Dichloropropene	(ug/kg)		11U	11U	11U
Cyclohexane	(ug/kg)		11U	11U	11U
Dibromochloromethane	(ug/kg)		11U	11U	11U
Dibromochloropropane	(ug/kg)		11U	11U	11U
Dichlorodifluoromethane	(ug/kg)		11U	11U	11U
Ethylbenzene	(ug/kg)	5500	11U	11U	11U
Freon 113	(ug/kg)	6000	11U	11U	11U
Isopropylbenzene	(ug/kg)		11U	11U	11U
Methyl Acetate	(ug/kg)		11U	11U	11U
Methyl Cyclohexane	(ug/kg)		11U	11U	11U
Methyl Tertiary Butyl Ether	(ug/kg)	120	11U	11U	11U
Methylene Chloride	(ug/kg)	100	11U	11U	11U

See end notes following the last page of this table.

Table 4-2
Summary of Soil Boring Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 11/28/2005 thru 12/02/2005 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE LAB SAMPLE ID DATE DEPTH (ft) RESULT TYPE	NYSDEC RSCOs	SB-06 211531-007 12/01/2005 28.00 Primary	SB-06 211531-006 12/01/2005 32.00 Primary	SB-07 211531-008 12/02/2005 28.00 Primary
1,1,1-Trichloroethane	(ug/kg)	800	10U	10U	10U
1,1,2,2-Tetrachloroethane	(ug/kg)	600	10U	10U	10U
1,1,2-Trichloroethane	(ug/kg)		10U	10U	10U
1,1-Dichloroethane	(ug/kg)	200	10U	10U	10U
1,1-Dichloroethene	(ug/kg)	400	10U	10U	10U
1,2,4-Trichlorobenzene	(ug/kg)	3400	10U	10U	10U
1,2-Dibromoethane	(ug/kg)		10U	10U	10U
1,2-Dichlorobenzene	(ug/kg)	7900	10U	10U	10U
1,2-Dichloroethane	(ug/kg)	100	10U	10U	10U
1,2-Dichloropropane	(ug/kg)		10U	10U	10U
1,3-Dichlorobenzene	(ug/kg)	1600	10U	10U	10U
1,4-Dichlorobenzene	(ug/kg)	8500	10U	10U	10U
2-Butanone	(ug/kg)	300	9J	11	10U
2-Hexanone	(ug/kg)		10U	10U	10U
4-Methyl-2-Pentanone	(ug/kg)	1000	10U	10U	10U
Acetone	(ug/kg)	200	10UJ	10UJ	10UJ
Benzene	(ug/kg)	60	10U	10U	10U
Bromodichloromethane	(ug/kg)		10U	10U	10U
Bromoform	(ug/kg)		10U	10U	10U
Bromomethane	(ug/kg)		10UJ	10UJ	10UJ
Carbon Disulfide	(ug/kg)	2700	10U	10U	10U
Carbon Tetrachloride	(ug/kg)	600	10U	10U	10U
Chlorobenzene	(ug/kg)	1700	10U	10U	10U
Chloroethane	(ug/kg)	1900	10UJ	10UJ	10UJ
Chloroform	(ug/kg)	300	10U	10U	10U
Chloromethane	(ug/kg)		10U	10U	10U
cis-1,2-Dichloroethene	(ug/kg)		10U	10U	10U
cis-1,3-Dichloropropene	(ug/kg)		10U	10U	10U
Cyclohexane	(ug/kg)		10U	10U	10U
Dibromochloromethane	(ug/kg)		10U	10U	10U
Dibromochloropropane	(ug/kg)		10U	10U	10U
Dichlorodifluoromethane	(ug/kg)		10U	10U	10U
Ethylbenzene	(ug/kg)	5500	10U	10U	10U
Freon 113	(ug/kg)	6000	10U	10U	10U
Isopropylbenzene	(ug/kg)		10U	10U	10U
Methyl Acetate	(ug/kg)		10U	10U	10U
Methyl Cyclohexane	(ug/kg)		10U	10U	10U
Methyl Tertiary Butyl Ether	(ug/kg)	120	10U	10U	10U
Methylene Chloride	(ug/kg)	100	10U	10U	10U

See end notes following the last page of this table.

Table 2-1
Summary of Manhole and Soil Boring Samples Collected
Glen Head Groundwater Plume
Glen Head, New York
NYSDEC Site No. 1-30-098

Name of Facility	Address	Section/Block/Lot			Status	Manhole Samples Collected	Depth	Soil Boring Samples Collected	Depth
Former Glenco Cleaners	674 Glen Cove Avenue Glen Head, NY 11545	20	60	55	Inactive	MH-01	12.5	SB-01	27-28 31-32
Soundview Cleaners	673 Glen Cove Avenue Glen Head, NY 11545	20	57	1	Active	MH-02 MH-03	17 21.5	SB-02	27-28 30-32
Former Charrell Cleaners	36 Glen Head Road Glen Head, NY 11545	21	228	11	Inactive	MH-04 MH-05	13 13	SB-03	27-28 31-32
Glen Head Cleaners	56 Glen Head Road Glen Head, NY 11545	21	228	18	Active	MH-11 MH-12	15 15	SB-04	27-28 31-32
Former Unnamed Cleaners	58 Glen Head Road Glen Head, NY 11545	21	N03	18	Inactive	MH-10	20	SB-05	12-14
Station Valet Cleaners	63 Glen Head Road Glen Head, NY 11545	20	62	1	Active Drop Off	MH-13	13	SB-06	27-28 31-32
The Former Hotel	80 Glen Head Road Glen Head, NY 11545	21	S	821	Inactive	MH-06 MH-07	14 32	SB-07	27-28 31-32
Auto Body Repair Shop	85 Glen Head Road Glen Head, NY 11545	20	13	311	Active	MH-08 MH-09	16 16	SB-08	27-28 31-32
Former Fresh and Clean Dry Cleaners	22-26 Rail Road Ave Glen Head, NY 11545	20	19	319	Inactive	NC	NC	NC	NC

Notes:

Soil Samples Analyzed for Volatile Organic Compounds (VOCs) via USEPA Method OLM 04.2.
Sample depths measured from grade surface to depth of sediment.
Active = Facility currently in operation.
Inactive = Facility not currently active.
NC = None Collected

Table 2-2
Summary of Monitoring Well Construction Information
Glen Head Groundwater Plume
Glen Head, New York
NYSDEC Site No. 1-30-098

Well ID	Location	Status	Casing Elevation	Diameter	Well Depth
MW-01	PSA Well	Active	164.26	2 inch	126.05
MW-02	PSA Well	Active	160.63	2 inch	122.60
MW-03	PSA Well	Active	168.95	2 inch	132.36
MW-04	PSA Well	Active	169.18	2 inch	133.10
MW-05	PSA Well	Active	172.99	2 inch	143.65
MW-06	PSA Well	Active	153.55	2 inch	116.00
MW-07	PSA Well	Active	179.9	2 inch	144.30
MW-08	PSA Well	Active	174.83	2 inch	143.51
MW-09	PSA Well	Could Not Be Located	NA	2 inch	NA
MW-10	PSA Well	Could Not Be Located	NA	2 inch	NA
MW-11	PSA Well	Active	174.67	2 inch	137.56
TT-MW-01	Trans Technology Site Well	Active	160.33	4 inch	126.05
TT-MW-02	Trans Technology Site Well	Active	161.46	4 inch	125.60
TT-MW-03	Trans Technology Site Well	Active	160.02	4 inch	122.00
TT-MW-04	Trans Technology Site Well	Active	171.9	2 inch	132.40
TT-MW-05	Trans Technology Site Well	Active	167.73	2 inch	126.80
TT-MW-06	Trans Technology Site Well	Dry	NA	2 inch	119.80
TT-MW-07	Trans Technology Site Well	Dry	NA	2 inch	108.40
TT-MW-08	Trans Technology Site Well	Dry	158.94	2 inch	123.40
TT-MW-09	Trans Technology Site Well	Active	161.78	2 inch	151.08
TT-MW-10	Trans Technology Site Well	Active	161.65	2 inch	123.00
TT-MW-11	Trans Technology Site Well	Active	160.24	2 inch	153.10

Notes:
PSA = Preliminary Site Assessment
MW = Monitoring Well
TT = Trans Technology Site Well
NA = Not Available

Table 3-1
Summary of Glen Head Groundwater Elevation Data
PSA and Trans Technology Site Monitoring Wells
Glen Head Groundwater Plume
Glen Head, New York
NYSDEC Site No. 1-30-098

PERIOD: From 12/07/2005 thru 12/13/2005 - Inclusive

SITE	DATE	MP ELEVATION (feet)	TIME	DEPTH TO WATER (feet)	FLOATING PRODUCT THICKNESS (feet)	WATER ELEV. (feet)	DELTA WATER ELEV (feet)	EQUIV. FRESH WATER HEAD (feet)
MW-01	12/7/2005	164.26	09:53	112.40	0.00	51.86	NA	51.86
MW-02	12/7/2005	160.63	09:35	108.53	0.00	52.10	NA	52.10
MW-03	12/7/2005	168.95	10:08	117.12	0.00	51.83	NA	51.83
MW-05	12/7/2005	172.99	10:02	121.15	0.00	51.84	NA	51.84
MW-06	12/7/2005	153.55	09:44	99.80	0.00	53.75	NA	53.75
MW-07	12/7/2005	179.90	10:40	129.95	0.00	49.95	NA	49.95
MW-08	12/7/2005	174.83	10:31	125.42	0.00	49.41	NA	49.41
MW-11	12/7/2005	174.67	10:22	123.35	0.00	51.32	NA	51.32
TT-MW-01	12/7/2005	160.33	09:23	109.95	0.00	50.38	NA	50.38
TT-MW-02	12/7/2005	161.46	08:48	111.28	0.00	50.18	NA	50.18
TT-MW-03	12/7/2005	160.02	08:17	109.05	0.00	50.97	NA	50.97
TT-MW-04	12/7/2005	171.90	09:10	119.95	0.00	51.95	NA	51.95
TT-MW-05	12/7/2005	167.73	08:08	116.55	0.00	51.18	NA	51.18
TT-MW-08	12/7/2005	158.94	08:34	109.30	0.00	49.64	NA	49.64
TT-MW-09	12/7/2005	161.78	08:50	111.65	0.00	50.13	NA	50.13
TT-MW-10	12/7/2005	161.65	09:03	111.25	0.00	50.40	NA	50.40
TT-MW-11	12/7/2005	160.24	08:24	109.34	0.00	50.90	NA	50.90
MW-01	12/13/2005	164.26	15:13	112.19	0.00	52.07	0.21	52.07
MW-02	12/13/2005	160.63	14:45	108.51	0.00	52.12	0.02	52.12
MW-03	12/13/2005	168.95	13:30	117.07	0.00	51.88	0.05	51.88
MW-04	12/13/2005	169.18	13:42	117.42	0.00	51.76	NA	51.76
MW-05	12/13/2005	172.99	13:28	121.11	0.00	51.88	0.04	51.88
MW-07	12/13/2005	179.90	15:00	129.96	0.00	49.94	-0.01	49.94
MW-08	12/13/2005	174.83	15:05	125.47	0.00	49.36	-0.05	49.36
MW-11	12/13/2005	174.67	13:35	123.33	0.00	51.34	0.02	51.34
TT-MW-01	12/13/2005	160.33	12:46	109.82	0.00	50.51	0.13	50.51
TT-MW-02	12/13/2005	161.46	12:58	111.24	0.00	50.22	0.04	50.22
TT-MW-03	12/13/2005	160.02	13:30	108.99	0.00	51.03	0.06	51.03
TT-MW-04	12/13/2005	171.90	13:42	119.93	0.00	51.97	0.02	51.97
TT-MW-05	12/13/2005	167.73	13:28	116.56	0.00	51.17	-0.01	51.17
TT-MW-08	12/13/2005	158.94	12:49	109.22	0.00	49.72	0.08	49.72
TT-MW-09	12/13/2005	161.78	12:56	111.58	0.00	50.20	0.07	50.20
TT-MW-10	12/13/2005	161.65	13:04	111.28	0.00	50.37	-0.03	50.37
TT-MW-11	12/13/2005	160.24	13:35	109.28	0.00	50.96	0.06	50.96

Table 4-1
Summary of Manhole Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 11/28/2005 thru 12/01/2005 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE LAB SAMPLE ID DATE DEPTH (ft) RESULT TYPE	NYSDEC RSCOs	MH-01 211489-001 11/28/2005 12.50 Primary	MH-02 211489-008 11/29/2005 17.00 Primary	MH-02 211489-009 11/29/2005 17.00 Duplicate 1
1,1,1-Trichloroethane	(ug/kg)	800	12U	16U	16U
1,1,2,2-Tetrachloroethane	(ug/kg)	600	12U	16U	16U
1,1,2-Trichloroethane	(ug/kg)		12U	16U	16U
1,1-Dichloroethane	(ug/kg)	200	12U	16U	16U
1,1-Dichloroethene	(ug/kg)	400	12U	16U	16U
1,2,4-Trichlorobenzene	(ug/kg)	3400	12U	16U	16U
1,2-Dibromoethane	(ug/kg)		12U	16U	16U
1,2-Dichlorobenzene	(ug/kg)	7900	12U	16U	16U
1,2-Dichloroethane	(ug/kg)	100	12U	16U	16U
1,2-Dichloropropane	(ug/kg)		12U	16U	16U
1,3-Dichlorobenzene	(ug/kg)	1600	12U	16U	16U
1,4-Dichlorobenzene	(ug/kg)	8500	12U	16U	16U
2-Butanone	(ug/kg)	300	75J	28J	58J
2-Hexanone	(ug/kg)		12U	16U	16U
4-Methyl-2-Pentanone	(ug/kg)	1000	5J	16U	16U
Acetone	(ug/kg)	200	19UJ	35UJ	68UJ
Benzene	(ug/kg)	60	12U	16U	16U
Bromodichloromethane	(ug/kg)		12U	16U	16U
Bromoform	(ug/kg)		12U	16U	16U
Bromomethane	(ug/kg)		12U	16U	16U
Carbon Disulfide	(ug/kg)	2700	12U	16U	16U
Carbon Tetrachloride	(ug/kg)	600	12U	16U	16U
Chlorobenzene	(ug/kg)	1700	12U	16U	16U
Chloroethane	(ug/kg)	1900	12UJ	16UJ	16UJ
Chloroform	(ug/kg)	300	12U	16U	16U
Chloromethane	(ug/kg)		12U	16U	16U
cis-1,2-Dichloroethene	(ug/kg)		12U	16U	16U
cis-1,3-Dichloropropene	(ug/kg)		12U	16U	16U
Cyclohexane	(ug/kg)		12U	16U	16U
Dibromochloromethane	(ug/kg)		12U	16U	16U
Dibromochloropropane	(ug/kg)		12U	16U	16U
Dichlorodifluoromethane	(ug/kg)		12U	16U	16U
Ethylbenzene	(ug/kg)	5500	12U	16U	16U
Freon 113	(ug/kg)	6000	12U	16U	16U
Isopropylbenzene	(ug/kg)		12U	16U	16U
Methyl Acetate	(ug/kg)		12U	16U	16U
Methyl Cyclohexane	(ug/kg)		12U	16U	16U
Methyl Tertiary Butyl Ether	(ug/kg)	120	12U	16U	16U
Methylene Chloride	(ug/kg)	100	12U	16U	16U

See end notes following the last page of this table.

Table 4-1
Summary of Manhole Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 11/28/2005 thru 12/01/2005 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE LAB SAMPLE ID DATE DEPTH (ft) RESULT TYPE	 NYSDEC RSCOs	MH-01 211489-001 11/28/2005 12.50 Primary	MH-02 211489-008 11/29/2005 17.00 Primary	MH-02 211489-009 11/29/2005 17.00 Duplicate 1
Styrene	(ug/kg)		12U	16U	16U
Tetrachloroethene	(ug/kg)	1400	12U	16U	16U
Toluene	(ug/kg)	1500	12U	16U	16U
trans-1,2-Dichloroethene	(ug/kg)	300	12U	16U	16U
trans-1,3-Dichloropropene	(ug/kg)		12U	16U	16U
Trichloroethene	(ug/kg)	700	12U	16U	16U
Trichlorofluoromethane	(ug/kg)		12U	16U	16U
Vinyl chloride	(ug/kg)	200	12U	16U	16U
Xylene (total)	(ug/kg)	1200	12U	16U	16U

See end notes following the last page of this table.

Table 4-2
Summary of Soil Boring Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 11/28/2005 thru 12/02/2005 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE LAB SAMPLE ID DATE DEPTH (ft) RESULT TYPE	NYSDEC RSCOs	SB-07 211531-009 12/02/2005 32.00 Primary	SB-08 211531-012 12/02/2005 28.00 Primary	SB-08 211531-011 12/02/2005 32.00 Primary
1,1,1-Trichloroethane	(ug/kg)	800	10U	10U	11U
1,1,2,2-Tetrachloroethane	(ug/kg)	600	10U	10U	11U
1,1,2-Trichloroethane	(ug/kg)		10U	10U	11U
1,1-Dichloroethane	(ug/kg)	200	10U	10U	11U
1,1-Dichloroethene	(ug/kg)	400	10U	10U	11U
1,2,4-Trichlorobenzene	(ug/kg)	3400	10U	10U	11U
1,2-Dibromoethane	(ug/kg)		10U	10U	11U
1,2-Dichlorobenzene	(ug/kg)	7900	10U	10U	11U
1,2-Dichloroethane	(ug/kg)	100	10U	10U	11U
1,2-Dichloropropane	(ug/kg)		10U	10U	11U
1,3-Dichlorobenzene	(ug/kg)	1600	10U	10U	11U
1,4-Dichlorobenzene	(ug/kg)	8500	10U	10U	11U
2-Butanone	(ug/kg)	300	32	27	30
2-Hexanone	(ug/kg)		10U	10U	11U
4-Methyl-2-Pentanone	(ug/kg)	1000	10U	10U	11U
Acetone	(ug/kg)	200	10UJ	10UJ	11UJ
Benzene	(ug/kg)	60	10U	10U	11U
Bromodichloromethane	(ug/kg)		10U	10U	11U
Bromoform	(ug/kg)		10U	10U	11U
Bromomethane	(ug/kg)		10UJ	10UJ	11UJ
Carbon Disulfide	(ug/kg)	2700	10U	10U	11U
Carbon Tetrachloride	(ug/kg)	600	10U	10U	11U
Chlorobenzene	(ug/kg)	1700	10U	10U	11U
Chloroethane	(ug/kg)	1900	10UJ	10UJ	11UJ
Chloroform	(ug/kg)	300	10U	10U	11U
Chloromethane	(ug/kg)		10U	10U	11U
cis-1,2-Dichloroethene	(ug/kg)		10U	10U	11U
cis-1,3-Dichloropropene	(ug/kg)		10U	10U	11U
Cyclohexane	(ug/kg)		10U	10U	11U
Dibromochloromethane	(ug/kg)		10U	10U	11U
Dibromochloropropane	(ug/kg)		10U	10U	11U
Dichlorodifluoromethane	(ug/kg)		10U	10U	11U
Ethylbenzene	(ug/kg)	5500	10U	10U	11U
Freon 113	(ug/kg)	6000	10U	10U	11U
Isopropylbenzene	(ug/kg)		10U	10U	11U
Methyl Acetate	(ug/kg)		10U	10U	11U
Methyl Cyclohexane	(ug/kg)		10U	10U	11U
Methyl Tertiary Butyl Ether	(ug/kg)	120	10U	10U	11U
Methylene Chloride	(ug/kg)	100	10U	10U	11U

See end notes following the last page of this table.

Table 4-2
Summary of Soil Boring Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 11/28/2005 thru 12/02/2005 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT		NYSDEC	SB-07	SB-08	SB-08
SITE			SB-07	SB-08	SB-08
LAB SAMPLE ID			211531-009	211531-012	211531-011
DATE			12/02/2005	12/02/2005	12/02/2005
DEPTH (ft)		NYSDEC	32.00	28.00	32.00
RESULT TYPE		RSCOs	Primary	Primary	Primary
Styrene	(ug/kg)		10U	10U	11U
Tetrachloroethene	(ug/kg)	1400	10U	10U	11U
Toluene	(ug/kg)	1500	10U	10U	11U
trans-1,2-Dichloroethene	(ug/kg)	300	10U	10U	11U
trans-1,3-Dichloropropene	(ug/kg)		10U	10U	11U
Trichloroethene	(ug/kg)	700	10U	10U	11U
Trichlorofluoromethane	(ug/kg)		10U	10U	11U
Vinyl chloride	(ug/kg)	200	10U	10U	11U
Xylene (total)	(ug/kg)	1200	10U	10U	11U

See end notes following the last page of this table.

Table 4-2
Summary of Soil Boring Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 11/28/2005 thru 12/02/2005 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE LAB SAMPLE ID DATE DEPTH (ft) RESULT TYPE	NYSDEC RSCOs	SB-08 211531-010 12/02/2005 32.00 Duplicate 1
1,1,1-Trichloroethane	(ug/kg)	800	11U
1,1,2,2-Tetrachloroethane	(ug/kg)	600	11U
1,1,2-Trichloroethane	(ug/kg)		11U
1,1-Dichloroethane	(ug/kg)	200	11U
1,1-Dichloroethene	(ug/kg)	400	11U
1,2,4-Trichlorobenzene	(ug/kg)	3400	11U
1,2-Dibromoethane	(ug/kg)		11U
1,2-Dichlorobenzene	(ug/kg)	7900	11U
1,2-Dichloroethane	(ug/kg)	100	11U
1,2-Dichloropropane	(ug/kg)		11U
1,3-Dichlorobenzene	(ug/kg)	1600	11U
1,4-Dichlorobenzene	(ug/kg)	8500	11U
2-Butanone	(ug/kg)	300	33
2-Hexanone	(ug/kg)		11U
4-Methyl-2-Pentanone	(ug/kg)	1000	11U
Acetone	(ug/kg)	200	11UJ
Benzene	(ug/kg)	60	11U
Bromodichloromethane	(ug/kg)		11U
Bromoform	(ug/kg)		11U
Bromomethane	(ug/kg)		11UJ
Carbon Disulfide	(ug/kg)	2700	11U
Carbon Tetrachloride	(ug/kg)	600	11U
Chlorobenzene	(ug/kg)	1700	11U
Chloroethane	(ug/kg)	1900	11UJ
Chloroform	(ug/kg)	300	11U
Chloromethane	(ug/kg)		11U
cis-1,2-Dichloroethene	(ug/kg)		11U
cis-1,3-Dichloropropene	(ug/kg)		11U
Cyclohexane	(ug/kg)		11U
Dibromochloromethane	(ug/kg)		11U
Dibromochloropropane	(ug/kg)		11U
Dichlorodifluoromethane	(ug/kg)		11U
Ethylbenzene	(ug/kg)	5500	11U
Freon 113	(ug/kg)	6000	11U
Isopropylbenzene	(ug/kg)		11U
Methyl Acetate	(ug/kg)		11U
Methyl Cyclohexane	(ug/kg)		11U
Methyl Tertiary Butyl Ether	(ug/kg)	120	11U
Methylene Chloride	(ug/kg)	100	11U

See end notes following the last page of this table.

Table 4-2
Summary of Soil Boring Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 11/28/2005 thru 12/02/2005 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE LAB SAMPLE ID DATE DEPTH (ft) RESULT TYPE	NYSDEC RSCOs	SB-08 211531-010 12/02/2005 32.00 Duplicate 1
Styrene	(ug/kg)		11U
Tetrachloroethene	(ug/kg)	1400	11U
Toluene	(ug/kg)	1500	11U
trans-1,2-Dichloroethene	(ug/kg)	300	11U
trans-1,3-Dichloropropene	(ug/kg)		11U
Trichloroethene	(ug/kg)	700	11U
Trichlorofluoromethane	(ug/kg)		11U
Vinyl chloride	(ug/kg)	200	11U
Xylene (total)	(ug/kg)	1200	11U

See end notes following the last page of this table.

Table 4-2
Summary of Soil Boring Sampling Analytical Results
Volatile Organic Compounds
Glen Head Groundwater Plume
Glen Head, New York
NYSDEC Site Number 1-30-098

Notes:

- µg/kg = micrograms per kilogram (parts per billion; ppb).
- NYSDEC RSCOs = New York State Department of Environmental Conservation, Recommended Soil Cleanup Objectives.
- Bracketed values indicate exceedances of the Recommended Soil Cleanup Objectives.
- All samples analyzed for Target Compound List (TCL) Volatile Organic Compounds (VOCs) using "*United State Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) Statement of Work (SOW) for Organics Analysis Low Concentration Water OLM04.2 (February 1996)*".

Qualifiers

no qualifier	The compound was positively identified at the associated numerical value which is the concentration of the compound in the sample.
U	Non Detect. The compound was analyzed for, but not detected. The associated numerical value is the quantitation limit. The value is usable as a non-detect at the quantitation limit.
J	Estimated value. The value was designated as estimated by the laboratory per the method to indicate the compound is present, but the concentration is less than the Contract Required Quantitation Limit (CRQL). Also used to indicate tentatively identified compounds (TICs). The value is usable as an estimated result.
UJ	The compound was analyzed for, but not detected. The associated numerical value is the quantitation limit. The value is an estimated quantity due to a QC exceedance. The value is usable as a non-detect at the estimated quantitation limit.

Table 4-3
Summary of Groundwater Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 12/08/2005 thru 12/13/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE LAB SAMPLE ID DATE RESULT TYPE	NYSDEC TOGS	MW-01 211624-003 12/12/2005 Primary	MW-01 211624-006 12/12/2005 Duplicate 1	MW-02 211624-012 12/13/2005 Primary
Chloromethane	(ug/l)	5	1 U J	1 U	50 U
Vinyl chloride	(ug/l)	2	1 U J	1 U	50 U
Bromomethane	(ug/l)	5	1 U J	1 U	50 U
Chloroethane	(ug/l)	5	1 U J	1 U	50 U
1,1-Dichloroethene	(ug/l)	5	1 U J	1 U	50 U
Carbon Disulfide	(ug/l)	60	1 U J	1 U	50 U
Acetone	(ug/l)	50	5 U J	5 U	350 U
Methylene Chloride	(ug/l)	5	2 U J	2 U	100 U
trans-1,2-Dichloroethene	(ug/l)	5	0.2 J	0.2 J	50 U
1,1-Dichloroethane	(ug/l)	5	1 U J	1 U	50 U
cis-1,2-Dichloroethene	(ug/l)	5	[8] J	[9]	[25] J
2-Butanone (MEK)	(ug/l)	50	5 U J	5 U	250 U
Bromochloromethane	(ug/l)	5	1 U J	1 U	50 U
Chloroform	(ug/l)	7	0.2 J	0.1 J	50 U
1,1,1-Trichloroethane	(ug/l)	5	1 J	1 U	50 U
Carbon Tetrachloride	(ug/l)	5	1 U J	1 U	50 U
Benzene	(ug/l)	1	0.1 J	1 U	50 U
1,2-Dichloroethane	(ug/l)	0.6	1 U J	1 U	50 U
Trichloroethene	(ug/l)	5	[17] J	[11]	50 U
1,2-Dichloropropane	(ug/l)	1	1 U J	1 U	50 U
Bromodichloromethane	(ug/l)	50	1 U J	1 U	50 U
cis-1,3-Dichloropropene	(ug/l)	0.4	1 U J	1 U	50 U
4-Methyl-2-Pentanone	(ug/l)		5 U J	5 U	250 U
Toluene	(ug/l)	5	0.3 J	0.5 J	50 U
trans-1,3-Dichloropropene	(ug/l)	0.4	1 U J	1 U	50 U
1,1,2-Trichloroethane	(ug/l)	1	1 U J	1 U	50 U
Tetrachloroethene	(ug/l)	5	[2400]	[2500]	[580]
2-Hexanone	(ug/l)	50	5 U J	5 U	250 U
Dibromochloromethane	(ug/l)	50	1 U J	1 U	50 U
1,2-Dibromoethane (EDB)	(ug/l)	0.0006	1 U J	1 U	50 U
Chlorobenzene	(ug/l)	5	1 U J	1 U	50 U
Ethylbenzene	(ug/l)	5	1 U J	0.2 J	50 U
Styrene	(ug/l)	5	1 U J	1 U	50 U
Bromoform	(ug/l)	50	1 U J	1 U	50 U
1,1,2,2-Tetrachloroethane	(ug/l)	5	1 U J	1 U	50 U
Xylene (total)	(ug/l)	5	0.3 J	0.8 J	50 U
1,3-Dichlorobenzene	(ug/l)	3	1 U J	1 U	50 U
1,4-Dichlorobenzene	(ug/l)	3	0.3 J	0.3 J	50 U
1,2-Dichlorobenzene	(ug/l)	3	0.5 J	0.5 J	50 U

See end notes following the last page of this table.

Table 4-3
Summary of Groundwater Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 12/08/2005 thru 12/13/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE LAB SAMPLE ID DATE RESULT TYPE	NYSDEC TOGS	MW-01 211624-003 12/12/2005 Primary	MW-01 211624-006 12/12/2005 Duplicate 1	MW-02 211624-012 12/13/2005 Primary
1,2-Dibromo-3-chloropropane	(ug/l)	0.04	1 U J	1 U	50 U
1,2,4-Trichlorobenzene	(ug/l)	5	1 U J	1 U	50 U
Total VOC TICs	(ug/l)		0	0	0
Total VOCs	(ug/l)		2427.9	2522.6	605

See end notes following the last page of this table.

Table 4-3
Summary of Groundwater Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 12/08/2005 thru 12/13/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE LAB SAMPLE ID DATE RESULT TYPE	NYSDEC TOGS	MW-03 211624-004 12/12/2005 Primary	MW-04 211624-013 12/13/2005 Primary	MW-05 211624-005 12/12/2005 Primary
Chloromethane	(ug/l)	5	1 U J	100 U	1 U J
Vinyl chloride	(ug/l)	2	1 U J	100 U	0.3 J
Bromomethane	(ug/l)	5	1 U J	100 U	1 U J
Chloroethane	(ug/l)	5	1 U J	100 U	1 U J
1,1-Dichloroethene	(ug/l)	5	0.1 J	100 U	0.2 J
Carbon Disulfide	(ug/l)	60	1 U J	100 U	1 U J
Acetone	(ug/l)	50	5 U J	620 U	5 U J
Methylene Chloride	(ug/l)	5	2 U J	200 U	2 U J
trans-1,2-Dichloroethene	(ug/l)	5	1 U J	100 U	1 U J
1,1-Dichloroethane	(ug/l)	5	0.3 J	100 U	1 U J
cis-1,2-Dichloroethene	(ug/l)	5	0.6 J	100 U	1 U J
2-Butanone (MEK)	(ug/l)	50	5 U J	500 U	5 U J
Bromochloromethane	(ug/l)	5	1 U J	100 U	1 U J
Chloroform	(ug/l)	7	0.2 J	100 U	0.2 J
1,1,1-Trichloroethane	(ug/l)	5	1 J	100 U	0.9 J
Carbon Tetrachloride	(ug/l)	5	1 U J	100 U	1 U J
Benzene	(ug/l)	1	0.1 J	100 U	0.4 J
1,2-Dichloroethane	(ug/l)	0.6	1 U J	100 U	1 U J
Trichloroethene	(ug/l)	5	[10] J	100 U	0.5 J
1,2-Dichloropropane	(ug/l)	1	1 U J	100 U	1 U J
Bromodichloromethane	(ug/l)	50	1 U J	100 U	1 U J
cis-1,3-Dichloropropene	(ug/l)	0.4	1 U J	100 U	1 U J
4-Methyl-2-Pentanone	(ug/l)		5 U J	500 U	5 U J
Toluene	(ug/l)	5	0.4 J	100 U	0.3 J
trans-1,3-Dichloropropene	(ug/l)	0.4	1 U J	100 U	1 U J
1,1,2-Trichloroethane	(ug/l)	1	1 U J	100 U	1 U J
Tetrachloroethene	(ug/l)	5	[640]	[1500]	[50]
2-Hexanone	(ug/l)	50	5 U J	500 U	5 U J
Dibromochloromethane	(ug/l)	50	1 U J	100 U	1 U J
1,2-Dibromoethane (EDB)	(ug/l)	0.0006	1 U J	100 U	1 U J
Chlorobenzene	(ug/l)	5	1 U J	100 U	1 U J
Ethylbenzene	(ug/l)	5	0.1 J	100 U	1 U J
Styrene	(ug/l)	5	1 U J	100 U	1 U J
Bromoform	(ug/l)	50	1 U J	100 U	1 U J
1,1,2,2-Tetrachloroethane	(ug/l)	5	1 U J	100 U	1 U J
Xylene (total)	(ug/l)	5	0.2 J	100 U	0.2 J
1,3-Dichlorobenzene	(ug/l)	3	1 U J	100 U	1 U J
1,4-Dichlorobenzene	(ug/l)	3	1 U J	100 U	1 U J
1,2-Dichlorobenzene	(ug/l)	3	1 U J	100 U	1 U J

See end notes following the last page of this table.

Table 4-3
Summary of Groundwater Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 12/08/2005 thru 12/13/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE LAB SAMPLE ID DATE RESULT TYPE	NYSDEC TOGS	MW-03 211624-004 12/12/2005 Primary	MW-04 211624-013 12/13/2005 Primary	MW-05 211624-005 12/12/2005 Primary
1,2-Dibromo-3-chloropropane	(ug/l)	0.04	1 U J	100 U	1 U J
1,2,4-Trichlorobenzene	(ug/l)	5	1 U J	100 U	1 U J
Total VOC TICs	(ug/l)		0	0	0
Total VOCs	(ug/l)		653	1500	53

See end notes following the last page of this table.

Table 4-3
Summary of Groundwater Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 12/08/2005 thru 12/13/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE LAB SAMPLE ID DATE RESULT TYPE	NYSDEC TOGS	MW-06 211624-007 12/12/2005 Primary	MW-07 211603-009 12/09/2005 Primary	MW-08 211603-008 12/09/2005 Primary
Chloromethane	(ug/l)	5	1 U	1 U	1 U
Vinyl chloride	(ug/l)	2	1 U	1 U	1 U
Bromomethane	(ug/l)	5	1 U	1 U	1 U
Chloroethane	(ug/l)	5	1 U	1 U	1 U
1,1-Dichloroethene	(ug/l)	5	1 U	1 U	1 U
Carbon Disulfide	(ug/l)	60	1 U	1 U	1 U
Acetone	(ug/l)	50	5 U	5 U	5 U
Methylene Chloride	(ug/l)	5	2 U	2 U J	2 U J
trans-1,2-Dichloroethene	(ug/l)	5	1 U	1 U	1 U
1,1-Dichloroethane	(ug/l)	5	1 U	1 U	1 U
cis-1,2-Dichloroethene	(ug/l)	5	0.8 J	2	2
2-Butanone (MEK)	(ug/l)	50	5 U	5 U	0.5 J
Bromochloromethane	(ug/l)	5	1 U	1 U	1 U
Chloroform	(ug/l)	7	1 U	0.2 J	0.3 J
1,1,1-Trichloroethane	(ug/l)	5	1 U	1	0.4 J
Carbon Tetrachloride	(ug/l)	5	1 U	1 U	1 U
Benzene	(ug/l)	1	1 U	1 U	1 U
1,2-Dichloroethane	(ug/l)	0.6	1 U	1 U	1 U
Trichloroethene	(ug/l)	5	0.8 J	[6]	[5]
1,2-Dichloropropane	(ug/l)	1	1 U	1 U	1 U
Bromodichloromethane	(ug/l)	50	1 U	1 U	1 U
cis-1,3-Dichloropropene	(ug/l)	0.4	1 U	1 U	1 U
4-Methyl-2-Pentanone	(ug/l)		5 U	5 U	5 U
Toluene	(ug/l)	5	0.3 J	0.2 J	0.2 J
trans-1,3-Dichloropropene	(ug/l)	0.4	1 U	1 U	1 U
1,1,2-Trichloroethane	(ug/l)	1	1 U	1 U	1 U
Tetrachloroethene	(ug/l)	5	[140] J	[690]	[610]
2-Hexanone	(ug/l)	50	5 U	5 U	5 U
Dibromochloromethane	(ug/l)	50	1 U	1 U	1 U
1,2-Dibromoethane (EDB)	(ug/l)	0.0006	1 U	1 U	1 U
Chlorobenzene	(ug/l)	5	1 U	1 U	1 U
Ethylbenzene	(ug/l)	5	1 U	1 U	1 U
Styrene	(ug/l)	5	1 U	1 U	1 U
Bromoform	(ug/l)	50	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	(ug/l)	5	1 U	1 U	1 U
Xylene (total)	(ug/l)	5	0.4 J	1 U	0.3 J
1,3-Dichlorobenzene	(ug/l)	3	1 U	1 U	1 U
1,4-Dichlorobenzene	(ug/l)	3	1 U	1 U	1 U
1,2-Dichlorobenzene	(ug/l)	3	1 U	1 U	1 U

See end notes following the last page of this table.

Table 4-3
Summary of Groundwater Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 12/08/2005 thru 12/13/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE LAB SAMPLE ID DATE RESULT TYPE		MW-06 211624-007 12/12/2005 Primary	MW-07 211603-009 12/09/2005 Primary	MW-08 211603-008 12/09/2005 Primary
		NYSDEC TOGS			
1,2-Dibromo-3-chloropropane	(ug/l)	0.04	1 U	1 U	1 U
1,2,4-Trichlorobenzene	(ug/l)	5	1 U	1 U	1 U
Total VOC TICs	(ug/l)		0	0	0
Total VOCs	(ug/l)		142.3	699.4	618.7

See end notes following the last page of this table.

Table 4-3
Summary of Groundwater Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 12/08/2005 thru 12/13/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE LAB SAMPLE ID DATE RESULT TYPE	NYSDEC TOGS	MW-11 211624-008 12/12/2005 Primary	TT-MW-01 211603-007 12/09/2005 Primary	TT-MW-02 211603-012 12/08/2005 Primary
Chloromethane	(ug/l)	5	1 U J	1 U	50 U
Vinyl chloride	(ug/l)	2	1 U J	1 U	50 U
Bromomethane	(ug/l)	5	1 U J	1 U	50 U
Chloroethane	(ug/l)	5	1 U J	1 U	50 U
1,1-Dichloroethene	(ug/l)	5	1 U J	1 U	50 U
Carbon Disulfide	(ug/l)	60	1 U J	1 U	50 U
Acetone	(ug/l)	50	5 U J	5 U	250 U
Methylene Chloride	(ug/l)	5	2 U J	2 U J	100 U
trans-1,2-Dichloroethene	(ug/l)	5	1 U J	1 U	50 U
1,1-Dichloroethane	(ug/l)	5	1 U J	1	50 U
cis-1,2-Dichloroethene	(ug/l)	5	1 U J	1	[150]
2-Butanone (MEK)	(ug/l)	50	5 U J	5 U	250 U
Bromochloromethane	(ug/l)	5	1 U J	1 U	50 U
Chloroform	(ug/l)	7	0.7 J	1 U	50 U
1,1,1-Trichloroethane	(ug/l)	5	1 U J	1	50 U
Carbon Tetrachloride	(ug/l)	5	1 U J	1 U	50 U
Benzene	(ug/l)	1	1 U J	1 U	50 U
1,2-Dichloroethane	(ug/l)	0.6	1 U J	1 U	50 U
Trichloroethene	(ug/l)	5	0.3 J	[24]	[1000]
1,2-Dichloropropane	(ug/l)	1	1 U J	1 U	50 U
Bromodichloromethane	(ug/l)	50	1 U J	1 U	50 U
cis-1,3-Dichloropropene	(ug/l)	0.4	1 U J	1 U	50 U
4-Methyl-2-Pentanone	(ug/l)		5 U J	5 U	250 U
Toluene	(ug/l)	5	0.1 J	1 U	50 U
trans-1,3-Dichloropropene	(ug/l)	0.4	1 U J	1 U	50 U
1,1,2-Trichloroethane	(ug/l)	1	1 U J	1 U	50 U
Tetrachloroethene	(ug/l)	5	[25]	2	[33] J
2-Hexanone	(ug/l)	50	5 U J	5 U	250 U
Dibromochloromethane	(ug/l)	50	1 U J	1 U	50 U
1,2-Dibromoethane (EDB)	(ug/l)	0.0006	1 U J	1 U	50 U
Chlorobenzene	(ug/l)	5	1 U J	1 U	50 U
Ethylbenzene	(ug/l)	5	1 U J	1 U	50 U
Styrene	(ug/l)	5	1 U J	1 U	50 U
Bromoform	(ug/l)	50	1 U J	1 U	50 U
1,1,2,2-Tetrachloroethane	(ug/l)	5	1 U J	1 U	50 U
Xylene (total)	(ug/l)	5	1 U J	1 U	50 U
1,3-Dichlorobenzene	(ug/l)	3	1 U J	1 U	50 U
1,4-Dichlorobenzene	(ug/l)	3	1 U J	1 U	50 U
1,2-Dichlorobenzene	(ug/l)	3	1 U J	1 U	50 U

See end notes following the last page of this table.

Table 4-3
Summary of Groundwater Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 12/08/2005 thru 12/13/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE LAB SAMPLE ID DATE RESULT TYPE	NYSDEC TOGS	MW-11 211624-008 12/12/2005 Primary	TT-MW-01 211603-007 12/09/2005 Primary	TT-MW-02 211603-012 12/08/2005 Primary
1,2-Dibromo-3-chloropropane	(ug/l)	0.04	1 U J	1 U	50 U
1,2,4-Trichlorobenzene	(ug/l)	5	1 U J	1 U	50 U
Total VOC TICs	(ug/l)		16	0	0
Total VOCs	(ug/l)		26.1	29	1183

See end notes following the last page of this table.

Table 4-3
Summary of Groundwater Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 12/08/2005 thru 12/13/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE LAB SAMPLE ID DATE RESULT TYPE	NYSDEC TOGS	TT-MW-03 211603-006 12/09/2005 Primary	TT-MW-04 211603-003 12/09/2005 Primary	TT-MW-05 211603-004 12/09/2005 Primary
Chloromethane	(ug/l)	5	1 U	1 U	1 U
Vinyl chloride	(ug/l)	2	1 U	1 U	1 U
Bromomethane	(ug/l)	5	1 U	1 U	1 U
Chloroethane	(ug/l)	5	1 U	1 U	1 U
1,1-Dichloroethene	(ug/l)	5	0.5 J	1 U	1 U
Carbon Disulfide	(ug/l)	60	1 U	1 U	1 U
Acetone	(ug/l)	50	5 U	5 U	5 U
Methylene Chloride	(ug/l)	5	2 U J	2 U J	2 U J
trans-1,2-Dichloroethene	(ug/l)	5	0.4 J	1 U	1 U
1,1-Dichloroethane	(ug/l)	5	[10]	0.3 J	1 U
cis-1,2-Dichloroethene	(ug/l)	5	[81]	[12]	[6]
2-Butanone (MEK)	(ug/l)	50	5 U	5 U	5 U
Bromochloromethane	(ug/l)	5	1 U	1 U	1 U
Chloroform	(ug/l)	7	1 U	0.2 J	0.2 J
1,1,1-Trichloroethane	(ug/l)	5	[14]	0.4 J	2
Carbon Tetrachloride	(ug/l)	5	1 U	1 U	1 U
Benzene	(ug/l)	1	1 U	1 U	1 U
1,2-Dichloroethane	(ug/l)	0.6	1 U	1 U	1 U
Trichloroethene	(ug/l)	5	[190]	[7]	[7]
1,2-Dichloropropane	(ug/l)	1	1 U	1 U	1 U
Bromodichloromethane	(ug/l)	50	1 U	1 U	1 U
cis-1,3-Dichloropropene	(ug/l)	0.4	1 U	1 U	1 U
4-Methyl-2-Pentanone	(ug/l)		5 U	5 U	5 U
Toluene	(ug/l)	5	0.1 J	0.1 J	1 U
trans-1,3-Dichloropropene	(ug/l)	0.4	1 U	1 U	1 U
1,1,2-Trichloroethane	(ug/l)	1	1 U	1 U	1 U
Tetrachloroethene	(ug/l)	5	[13]	[1600]	[290]
2-Hexanone	(ug/l)	50	5 U	5 U	5 U
Dibromochloromethane	(ug/l)	50	1 U	1 U	1 U
1,2-Dibromoethane (EDB)	(ug/l)	0.0006	1 U	1 U	1 U
Chlorobenzene	(ug/l)	5	1 U	1 U	1 U
Ethylbenzene	(ug/l)	5	1 U	1 U	1 U
Styrene	(ug/l)	5	1 U	1 U	1 U
Bromoform	(ug/l)	50	1 U	1 U	1 U
1,1,2,2-Tetrachloroethane	(ug/l)	5	1 U	1 U	1 U
Xylene (total)	(ug/l)	5	1 U	1 U	1 U
1,3-Dichlorobenzene	(ug/l)	3	1 U	1 U	1 U
1,4-Dichlorobenzene	(ug/l)	3	1 U	0.2 J	1 U
1,2-Dichlorobenzene	(ug/l)	3	1 U	1 U	1 U

See end notes following the last page of this table.

Table 4-3
Summary of Groundwater Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 12/08/2005 thru 12/13/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE LAB SAMPLE ID DATE RESULT TYPE	 NYSDEC TOGS	TT-MW-03 211603-006 12/09/2005 Primary	TT-MW-04 211603-003 12/09/2005 Primary	TT-MW-05 211603-004 12/09/2005 Primary
1,2-Dibromo-3-chloropropane	(ug/l)	0.04	1 U	1 U	1 U
1,2,4-Trichlorobenzene	(ug/l)	5	1 U	1 U	1 U
Total VOC TICs	(ug/l)		0	0	0
Total VOCs	(ug/l)		309	1620.2	305.2

See end notes following the last page of this table.

Table 4-3
Summary of Groundwater Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 12/08/2005 thru 12/13/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE LAB SAMPLE ID DATE RESULT TYPE	NYSDEC TOGS	TT-MW-09 211603-013 12/08/2005 Primary	TT-MW-10 211603-014 12/08/2005 Primary	TT-MW-11 211603-005 12/09/2005 Primary
Chloromethane	(ug/l)	5	1 U	40 U	1 U
Vinyl chloride	(ug/l)	2	1 U	40 U	1 U
Bromomethane	(ug/l)	5	1 U	40 U	1 U
Chloroethane	(ug/l)	5	1 U	40 U	1 U
1,1-Dichloroethene	(ug/l)	5	1 U	40 U	1 U
Carbon Disulfide	(ug/l)	60	1 U	40 U	1 U
Acetone	(ug/l)	50	5 U	200 U	5 U
Methylene Chloride	(ug/l)	5	R	80 U	2 U J
trans-1,2-Dichloroethene	(ug/l)	5	1 U	40 U	1 U
1,1-Dichloroethane	(ug/l)	5	0.5 J	40 U	3
cis-1,2-Dichloroethene	(ug/l)	5	0.2 J	[57]	[11]
2-Butanone (MEK)	(ug/l)	50	5 U	200 U	5 U
Bromochloromethane	(ug/l)	5	1 U	40 U	1 U
Chloroform	(ug/l)	7	0.3 J	40 U	1 U
1,1,1-Trichloroethane	(ug/l)	5	0.4 J	40 U	2
Carbon Tetrachloride	(ug/l)	5	1 U	40 U	1 U
Benzene	(ug/l)	1	1 U	40 U	1 U
1,2-Dichloroethane	(ug/l)	0.6	1 U	40 U	1 U
Trichloroethene	(ug/l)	5	1	[590]	[53]
1,2-Dichloropropane	(ug/l)	1	0.6 J	40 U	1 U
Bromodichloromethane	(ug/l)	50	1 U	40 U	1 U
cis-1,3-Dichloropropene	(ug/l)	0.4	1 U	40 U	1 U
4-Methyl-2-Pentanone	(ug/l)		5 U	200 U	5 U
Toluene	(ug/l)	5	0.2 J	40 U	0.2 J
trans-1,3-Dichloropropene	(ug/l)	0.4	1 U	40 U	1 U
1,1,2-Trichloroethane	(ug/l)	1	1 U	40 U	1 U
Tetrachloroethene	(ug/l)	5	3	[22] J	[10]
2-Hexanone	(ug/l)	50	5 U	200 U	5 U
Dibromochloromethane	(ug/l)	50	1 U	40 U	1 U
1,2-Dibromoethane (EDB)	(ug/l)	0.0006	1 U	40 U	1 U
Chlorobenzene	(ug/l)	5	1 U	40 U	1 U
Ethylbenzene	(ug/l)	5	1 U	40 U	1 U
Styrene	(ug/l)	5	1 U	40 U	1 U
Bromoform	(ug/l)	50	1 U	40 U	1 U
1,1,2,2-Tetrachloroethane	(ug/l)	5	1 U	40 U	1 U
Xylene (total)	(ug/l)	5	0.2 J	40 U	1 U
1,3-Dichlorobenzene	(ug/l)	3	1 U	40 U	1 U
1,4-Dichlorobenzene	(ug/l)	3	1 U	40 U	1 U
1,2-Dichlorobenzene	(ug/l)	3	1 U	40 U	1 U

See end notes following the last page of this table.

Table 4-3
Summary of Groundwater Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 12/08/2005 thru 12/13/2005 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE LAB SAMPLE ID DATE RESULT TYPE	NYSDEC TOGS	TT-MW-09 211603-013 12/08/2005 Primary	TT-MW-10 211603-014 12/08/2005 Primary	TT-MW-11 211603-005 12/09/2005 Primary
1,2-Dibromo-3-chloropropane	(ug/l)	0.04	1 U	40 U	1 U
1,2,4-Trichlorobenzene	(ug/l)	5	1 U	40 U	1 U
Total VOC TICs	(ug/l)		0	0	0
Total VOCs	(ug/l)		6.4	669	79.2

See end notes following the last page of this table.

Table 4-3
Summary of Groundwater Sampling Analytical Results
Volatile Organic Compounds
Glen Head Groundwater Plume
Glen Head, New York
NYSDEC Site Number 1-30-098

Notes:

- µg/l = micrograms per liter (parts per billion; ppb).
- Total VOCs = Total Volatile Organic Compounds.
- Total VOC TICs = Total Volatile Organic Compound Tentatively Identified Compounds.
- NYSDEC TOGS = ambient water quality standards and guidance values for Class GA groundwater as identified in New York State Department of Environmental Conservation Technical and Operational Guidance Series No. 1.1.1.
- Bracketed values indicate exceedances of the standards and guidance values identified in TOGs 1.1.1.
- All samples analyzed for Target Compound List (TCL) Volatile Organic Compounds (VOCs) using "*United State Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) Statement of Work (SOW) for Organics Analysis Low Concentration Water OLC02.1 (February 1996)*".

Qualifiers

no qualifier	The compound was positively identified at the associated numerical value which is the concentration of the compound in the sample.
U	Non Detect. The compound was analyzed for, but not detected. The associated numerical value is the quantitation limit. The value is usable as a non-detect at the quantitation limit.
J	Estimated value. The value was designated as estimated by the laboratory per the method to indicate the compound is present, but the concentration is less than the Contract Required Quantitation Limit (CRQL). Also used to indicate tentatively identified compounds (TICs). The value is usable as an estimated result.
UJ	The compound was analyzed for, but not detected. The associated numerical value is the quantitation limit. The value is an estimated quantity due to a QC exceedance. The value is usable as a non-detect at the estimated quantitation limit.

Table 4-4
Summary of Soil Gas Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
No. 1-30-098

PERIOD: From 01/31/2006 thru 05/03/2006 - Inclusive
SAMPLE TYPE: Air

CONSTITUENT	SITE	SGI-03-012	SGI-03-060	SGI-03-100	SVI-01-006
	LAB SAMPLE ID	656790	656791	656792	658426
	DATE	02/01/2006	02/01/2006	02/01/2006	02/20/2006
	DEPTH (ft)	12.00	60.00	100.00	6.00
	RESULT TYPE	Primary	Primary	Primary	Primary
Ethylbenzene	(ug/m3)	1.3 U	13 U	8.7 U	0.87 U
Freon 113	(ug/m3)	2.3 U	23 U	15 U	1.5 U
Freon 114	(ug/m3)	2.1 U	21 U	14 U	1.4 U
Hexachlorobutadiene	(ug/m3)	3.2 U	32 U	21 U	2.1 U
Hexane	(ug/m3)	2.6 U	26 U	18 U	1.8 U
Isooctane	(ug/m3)	1.4 U	14 U	9.3 U	0.93 U
Isopropyl Alcohol	(ug/m3)	18 U	180 U	120 U	12 U
m+p-Xylene	(ug/m3)	3.3 U	33 U	22 U	2.2 U
Methyl Tertiary Butyl Ether	(ug/m3)	2.7 U	27 U	18 U	1.8 U
Methylene Chloride	(ug/m3)	2.6 U	26 U	17 U	1.7 U
n-Heptane	(ug/m3)	1.2 U	12 U	8.2 U	0.82 U
o-Xylene	(ug/m3)	1.3 U	13 U	8.7 U	0.87 U
Styrene	(ug/m3)	1.3 U	13 U	8.5 U	0.85 U
Tertiary Butyl Alcohol	(ug/m3)	23 U	230 U	150 U	15 U
Tetrachloroethene	(ug/m3)	260	3500	2100	1.4 U
Tetrahydrofuran	(ug/m3)	22 U	220 U	150 U	15 U
Toluene	(ug/m3)	2.0	12	8.3	0.75 U
trans-1,2-Dichloroethene	(ug/m3)	1.2 U	12 U	7.9 U	0.79 U
trans-1,3-Dichloropropene	(ug/m3)	1.4 U	14 U	9.1 U	0.91 U
Trichloroethene	(ug/m3)	9.1	110	64	1.1 U
Trichlorofluoromethane	(ug/m3)	2.0	17 U	11 U	1.1 U
Vinyl bromide	(ug/m3)	1.3 U	13 U	8.7 U	0.87 U
Vinyl chloride	(ug/m3)	0.77 U	7.7 U	5.1 U	0.51 U
Xylene (total)	(ug/m3)	1.3 U	13 U	8.7 U	0.87 U

See end notes following the last page of this table.

Table 4-4
Summary of Soil Gas Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
No. 1-30-098

PERIOD: From 01/31/2006 thru 05/03/2006 - Inclusive
SAMPLE TYPE: Air

CONSTITUENT		SITE	SGI-03-012	SGI-03-060	SGI-03-100	SVI-01-006
		LAB SAMPLE ID	656790	656791	656792	658426
		DATE	02/01/2006	02/01/2006	02/01/2006	02/20/2006
		DEPTH (ft)	12.00	60.00	100.00	6.00
		RESULT TYPE	Primary	Primary	Primary	Primary
1,1,1-Trichloroethane	(ug/m3)		52	550	360	1.1 U
1,1,2,2-Tetrachloroethane	(ug/m3)		2.1 U	21 U	14 U	1.4 U
1,1,2-Trichloroethane	(ug/m3)		1.6 U	16 U	11 U	1.1 U
1,1-Dichloroethane	(ug/m3)		1.2 U	21	12	0.81 U
1,1-Dichloroethene	(ug/m3)		1.2 U	27	15	0.79 U
1,2,4-Trichlorobenzene	(ug/m3)		5.6 U	56 U	37 U	3.7 R
1,2,4-Trimethylbenzene	(ug/m3)		1.5 U	15 U	9.8 U	0.98 U
1,2-Dibromoethane	(ug/m3)		2.3 U	23 U	15 U	1.5 U
1,2-Dichlorobenzene	(ug/m3)		1.8 U	18 U	12 U	1.2 U
1,2-Dichloroethane	(ug/m3)		1.2 U	12 U	8.1 U	0.81 U
1,2-Dichloroethene	(ug/m3)		1.2 U	12 U	7.9 U	0.79 U
1,2-Dichloropropane	(ug/m3)		1.4 U	14 U	9.2 U	0.92 U
1,3,5-Trimethylbenzene	(ug/m3)		1.5 U	15 U	9.8 U	0.98 U
1,3-Butadiene	(ug/m3)		1.7 U	17 U	11 U	5.8 J
1,3-Dichlorobenzene	(ug/m3)		1.8 U	18 U	12 U	1.2 U
1,4-Dichlorobenzene	(ug/m3)		1.8 U	18 U	12 U	1.2 U
1,4-Dioxane	(ug/m3)		27 U	270 U	180 U	18 R
2-Butanone	(ug/m3)		3.8	22 U	15 U	1.5 U
2-Chlorotoluene	(ug/m3)		1.6 U	16 U	10 U	1.0 U
2-Hexanone	(ug/m3)		3.1 U	31 U	20 U	2.0 U J
4-Ethyltoluene	(ug/m3)		1.5 U	15 U	9.8 U	0.98 U
4-Methyl-2-Pentanone	(ug/m3)		3.1 U	31 U	20 U	2.0 U J
Acetone	(ug/m3)		18 U	180 U	120 U	19
Allyl chloride	(ug/m3)		2.3 U	23 U	16 U	1.6 U
Benzene	(ug/m3)		0.96 U	9.6 U	6.4 U	0.64 U
Bromodichloromethane	(ug/m3)		2.0 U	20 U	13 U	1.3 U
Bromoform	(ug/m3)		3.1 U	31 U	21 U	2.1 U
Bromomethane	(ug/m3)		1.2 U	12 U	7.8 U	0.78 U
Carbon Disulfide	(ug/m3)		2.3 U	23 U	16 U	8.7
Carbon Tetrachloride	(ug/m3)		7.5	88	60	1.3 U
Chlorobenzene	(ug/m3)		1.4 U	14 U	9.2 U	0.92 U
Chloroethane	(ug/m3)		2.0 U	20 U	13 U	1.3 U
Chloroform	(ug/m3)		2.2	59	35	0.98 U
Chloromethane	(ug/m3)		1.5 U	15 U	10 U	1.0 U
cis-1,2-Dichloroethene	(ug/m3)		1.2 U	12 U	7.9 U	0.79 U
cis-1,3-Dichloropropene	(ug/m3)		1.4 U	14 U	9.1 U	0.91 U
Cyclohexane	(ug/m3)		1.0 U	10 U	6.9 U	11
Dibromochloromethane	(ug/m3)		2.6 U	26 U	17 U	1.7 U
Dichlorodifluoromethane	(ug/m3)		4.9	37 U	25 U	2.9

See end notes following the last page of this table.

Table 4-4
Summary of Soil Gas Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
No. 1-30-098

PERIOD: From 01/31/2006 thru 05/03/2006 - Inclusive
SAMPLE TYPE: Air

CONSTITUENT	SITE	SGI-01-12	SGI-02-012	SGI-02-060	SGI-02-100
	LAB SAMPLE ID	668097	656787	656788	656789
	DATE	05/03/2006	01/31/2006	01/31/2006	01/31/2006
	DEPTH (ft)	12.00	12.00	60.00	100.00
	RESULT TYPE	Primary	Primary	Primary	Primary
Ethylbenzene	(ug/m3)	20	260 U	870 U	1400 U
Freon 113	(ug/m3)	34 U	460 U	1500 U	2500 U
Freon 114	(ug/m3)	31 U	420 U	1400 U	2200 U
Hexachlorobutadiene	(ug/m3)	47 U J	640 U	2100 U	3400 U
Hexane	(ug/m3)	56	530 U	1800 U	2800 U
Isooctane	(ug/m3)	2100	280 U	930 U	1500 U
Isopropyl Alcohol	(ug/m3)	270 U	3700 U	42000	34000
m+p-Xylene	(ug/m3)	78	650 U	2200 U	3500 U
Methyl Tertiary Butyl Ether	(ug/m3)	120	540 U	1800 U	2900 U
Methylene Chloride	(ug/m3)	38 U	520 U	1700 U	2800 U
n-Heptane	(ug/m3)	18 U	250 U	820 U	1300 U
o-Xylene	(ug/m3)	38	260 U	870 U	1400 U
Styrene	(ug/m3)	19 U	260 U	850 U	1400 U
Tertiary Butyl Alcohol	(ug/m3)	330 U J	4500 U	15000 U	24000 U
Tetrachloroethene	(ug/m3)	330	68000	240000	280000
Tetrahydrofuran	(ug/m3)	320 U	4400 U	15000 U	24000 U
Toluene	(ug/m3)	150	230 U	1100	1300
trans-1,2-Dichloroethene	(ug/m3)	17 U	240 U	790 U	1300 U
trans-1,3-Dichloropropene	(ug/m3)	20 U	270 U	910 U	1500 U
Trichloroethene	(ug/m3)	24 U	320	1200	1700 U
Trichlorofluoromethane	(ug/m3)	25 U	340 U	1100 U	1800 U
Vinyl bromide	(ug/m3)	19 U	260 U	870 U	1400 U
Vinyl chloride	(ug/m3)	11 U	150 U	510 U	820 U
Xylene (total)	(ug/m3)	120	260 U	870 U	1400 U

See end notes following the last page of this table.

Table 4-4
Summary of Soil Gas Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
No. 1-30-098

PERIOD: From 01/31/2006 thru 05/03/2006 - Inclusive
SAMPLE TYPE: Air

CONSTITUENT	SITE	SGI-01-12	SGI-02-012	SGI-02-060	SGI-02-100
	LAB SAMPLE ID	668097	656787	656788	656789
	DATE	05/03/2006	01/31/2006	01/31/2006	01/31/2006
	DEPTH (ft)	12.00	12.00	60.00	100.00
	RESULT TYPE	Primary	Primary	Primary	Primary
1,1,1-Trichloroethane	(ug/m3)	24 U	330 U	1100 U	1700 U
1,1,2,2-Tetrachloroethane	(ug/m3)	30 U	410 U	1400 U	2200 U
1,1,2-Trichloroethane	(ug/m3)	24 U	330 U	1100 U	1700 U
1,1-Dichloroethane	(ug/m3)	18 U	240 U	810 U	1300 U
1,1-Dichloroethene	(ug/m3)	17 U	240 U	790 U	1300 U
1,2,4-Trichlorobenzene	(ug/m3)	82 U	1100 U	3700 U	5900 U
1,2,4-Trimethylbenzene	(ug/m3)	64	290 U	980 U	1600 U
1,2-Dibromoethane	(ug/m3)	34 U	460 U	1500 U	2500 U
1,2-Dichlorobenzene	(ug/m3)	26 U	360 U	1200 U	1900 U
1,2-Dichloroethane	(ug/m3)	18 U	240 U	810 U	1300 U
1,2-Dichloroethene	(ug/m3)	17 U	240 U	790 U	1300 U
1,2-Dichloropropane	(ug/m3)	20 U	280 U	920 U	1500 U
1,3,5-Trimethylbenzene	(ug/m3)	22 U	290 U	980 U	1600 U
1,3-Butadiene	(ug/m3)	29	330 U	1100 U	1800 U
1,3-Dichlorobenzene	(ug/m3)	26 U	360 U	1200 U	1900 U
1,4-Dichlorobenzene	(ug/m3)	26 U	360 U	1200 U	1900 U
1,4-Dioxane	(ug/m3)	R	5400 U	18000 U	29000 U
2-Butanone	(ug/m3)	32 U	440 U	1500 U	2400 U
2-Chlorotoluene	(ug/m3)	23 U	310 U	1000 U	1700 U
2-Hexanone	(ug/m3)	45 U	610 U	2000 U	3300 U
4-Ethyltoluene	(ug/m3)	45	290 U	980 U	1600 U
4-Methyl-2-Pentanone	(ug/m3)	45 U	610 U	2000 U	3300 U
Acetone	(ug/m3)	260 U	3600 U	12000 U	19000 U
Allyl chloride	(ug/m3)	34 U	470 U	1600 U	2500 U
Benzene	(ug/m3)	14 U	190 U	640 U	1000 U
Bromodichloromethane	(ug/m3)	29 U	400 U	1300 U	2100 U
Bromoform	(ug/m3)	45 U	620 U	2100 U	3300 U
Bromomethane	(ug/m3)	17 U	230 U	780 U	1200 U
Carbon Disulfide	(ug/m3)	34 U	470 U	2300	2500 U
Carbon Tetrachloride	(ug/m3)	28 U	380 U	1300 U	2000 U
Chlorobenzene	(ug/m3)	20 U	280 U	920 U	1500 U
Chloroethane	(ug/m3)	12 U	400 U	1300 U	2100 U
Chloroform	(ug/m3)	21 U	290 U	980 U	1600 U
Chloromethane	(ug/m3)	23 U	310 U	1000 U	1700 U
cis-1,2-Dichloroethene	(ug/m3)	17 U	240 U	790 U	1300 U
cis-1,3-Dichloropropene	(ug/m3)	20 U	270 U	910 U	1500 U
Cyclohexane	(ug/m3)	19	210 U	690 U	1100 U
Dibromochloromethane	(ug/m3)	37 U	510 U	1700 U	2700 U
Dichlorodifluoromethane	(ug/m3)	54 U	740 U	2500 U	4000 U

See end notes following the last page of this table.

Table 4-4
Summary of Soil Gas Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
No. 1-30-098

PERIOD: From 01/31/2006 thru 05/03/2006 - Inclusive
SAMPLE TYPE: Air

CONSTITUENT	SITE	SGI-01-012	SGI-01-012	SGI-01-035	SGI-01-065
	LAB SAMPLE ID	656784	656793	656785	656786
	DATE	02/01/2006	02/01/2006	01/31/2006	01/31/2006
	DEPTH (ft)	12.00	12.00	35.00	65.00
	RESULT TYPE	Primary	Duplicate 1	Primary	Primary
Ethylbenzene	(ug/m3)	8.3	6.9	130 U	170 U
Freon 113	(ug/m3)	4.6 U	4.6 U	230 U	310 U
Freon 114	(ug/m3)	4.2 U	4.2 U	210 U	280 U
Hexachlorobutadiene	(ug/m3)	6.4 U	6.4 U	320 U	430 U
Hexane	(ug/m3)	39	33	260 U	350 U
Isooctane	(ug/m3)	10	9.8	140 U	190 U
Isopropyl Alcohol	(ug/m3)	37 U	37 U	1800 U	2500 U
m+p-Xylene	(ug/m3)	24	21	330 U	430 U
Methyl Tertiary Butyl Ether	(ug/m3)	58	54	270 U	360 U
Methylene Chloride	(ug/m3)	5.2 U	5.2 U	260 U	350 U
n-Heptane	(ug/m3)	9.8	9.0	120 U	160 U
o-Xylene	(ug/m3)	21	19	130 U	170 U
Styrene	(ug/m3)	2.6 U	2.6 U	130 U	170 U
Tertiary Butyl Alcohol	(ug/m3)	45 U	45 U	2300 U	3000 U
Tetrachloroethene	(ug/m3)	28	28	31000	36000
Tetrahydrofuran	(ug/m3)	44 U	44 U	2200 U	2900 U
Toluene	(ug/m3)	35	32	110 U	150 U
trans-1,2-Dichloroethene	(ug/m3)	2.4 U	2.4 U	120 U	160 U
trans-1,3-Dichloropropene	(ug/m3)	2.7 U	2.7 U	140 U	180 U
Trichloroethene	(ug/m3)	3.2 U	3.2 U	640	590
Trichlorofluoromethane	(ug/m3)	3.4 U	3.4 U	170 U	220 U
Vinyl bromide	(ug/m3)	2.6 U	2.6 U	130 U	170 U
Vinyl chloride	(ug/m3)	1.5 U	1.5 U	77 U	100 U
Xylene (total)	(ug/m3)	43	41	130 U	170 U

See end notes following the last page of this table.

Table 4-4
Summary of Soil Gas Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
No. 1-30-098

PERIOD: From 01/31/2006 thru 05/03/2006 - Inclusive
SAMPLE TYPE: Air

CONSTITUENT	SITE	SGI-01-012	SGI-01-012	SGI-01-035	SGI-01-065
	LAB SAMPLE ID	656784	656793	656785	656786
	DATE	02/01/2006	02/01/2006	01/31/2006	01/31/2006
	DEPTH (ft)	12.00	12.00	35.00	65.00
	RESULT TYPE	Primary	Duplicate 1	Primary	Primary
1,1,1-Trichloroethane	(ug/m3)	3.3 U	3.3 U	160 U	220 U
1,1,2,2-Tetrachloroethane	(ug/m3)	4.1 U	4.1 U	210 U	270 U
1,1,2-Trichloroethane	(ug/m3)	3.3 U	3.3 U	160 U	220 U
1,1-Dichloroethane	(ug/m3)	2.4 U	2.4 U	120 U	160 U
1,1-Dichloroethene	(ug/m3)	2.4 U	2.4 U	120 U	160 U
1,2,4-Trichlorobenzene	(ug/m3)	11 U	11 U	560 U	740 U
1,2,4-Trimethylbenzene	(ug/m3)	370	330	150 U	200 U
1,2-Dibromoethane	(ug/m3)	4.6 U	4.6 U	230 U	310 U
1,2-Dichlorobenzene	(ug/m3)	3.6 U	3.6 U	180 U	240 U
1,2-Dichloroethane	(ug/m3)	2.4 U	2.4 U	120 U	160 U
1,2-Dichloroethene	(ug/m3)	2.4 U	2.4 U	150	210
1,2-Dichloropropane	(ug/m3)	2.8 U	2.8 U	140 U	180 U
1,3,5-Trimethylbenzene	(ug/m3)	130	120	150 U	200 U
1,3-Butadiene	(ug/m3)	4.4	3.3 U	170 U	220 U
1,3-Dichlorobenzene	(ug/m3)	3.6 U	3.6 U	180 U	240 U
1,4-Dichlorobenzene	(ug/m3)	3.6 U	3.6 U	180 U	240 U
1,4-Dioxane	(ug/m3)	54 U	54 U	2700 U	3600 U
2-Butanone	(ug/m3)	8.6	6.5	220 U	290 U
2-Chlorotoluene	(ug/m3)	3.1 U	3.1 U	160 U	210 U
2-Hexanone	(ug/m3)	6.1 U	6.1 U	310 U	410 U
4-Ethyltoluene	(ug/m3)	200	180	150 U	200 U
4-Methyl-2-Pentanone	(ug/m3)	6.1 U	6.1 U	310 U	410 U
Acetone	(ug/m3)	36 U	36 U	1800 U	2400 U
Allyl chloride	(ug/m3)	4.7 U	4.7 U	230 U	310 U
Benzene	(ug/m3)	8.9	8.3	96 U	130 U
Bromodichloromethane	(ug/m3)	4.0 U	4.0 U	200 U	270 U
Bromoform	(ug/m3)	6.2 U	6.2 U	310 U	410 U
Bromomethane	(ug/m3)	2.3 U	2.3 U	120 U	160 U
Carbon Disulfide	(ug/m3)	13	12	230 U	310 U
Carbon Tetrachloride	(ug/m3)	3.8 U	3.8 U	190 U	250 U
Chlorobenzene	(ug/m3)	2.8 U	2.8 U	140 U	180 U
Chloroethane	(ug/m3)	4.0 U	4.0 U	200 U	260 U
Chloroform	(ug/m3)	2.9 U	2.9 U	150 U	200 U
Chloromethane	(ug/m3)	3.1 U	3.1 U	150 U	210 U
cis-1,2-Dichloroethene	(ug/m3)	2.4 U	2.4 U	150	210
cis-1,3-Dichloropropene	(ug/m3)	2.7 U	2.7 U	140 U	180 U
Cyclohexane	(ug/m3)	3.4	3.4	100 U	140 U
Dibromochloromethane	(ug/m3)	5.1 U	5.1 U	260 U	340 U
Dichlorodifluoromethane	(ug/m3)	7.4 U	7.4 U	370 U	490 U

See end notes following the last page of this table.

Table 4-4
Summary of Soil Gas Sampling Analytical Results
Volatile Organic Compounds
Glen Head Groundwater Plume
Glen Head, New York
NYSDEC Site Number 1-30-098

Notes:

- $\mu g/m^3$ = micrograms per cubic meter.
- The samples were analyzed following "*Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition 1997, EPA/625/R-96/010B*", Compendium Method TO-15, "*Determination Of Volatile Organic Compounds (VOCs) In Air Collected In Specially-Prepared Canisters And Analyzed By Gas Chromatography/Mass Spectrometry (GC/MS)*".

Qualifiers

no qualifier	The compound was positively identified at the associated numerical value which is the concentration of the compound in the sample.
U	Non Detect. The compound was analyzed for, but not detected. The associated numerical value is the quantitation limit. The value is usable as a non-detect at the quantitation limit.
J	Estimated value. The value was designated as estimated as a result of the data validation criteria. The value is usable as an estimated result.
UJ	The compound was analyzed for, but not detected. The associated numerical value is the quantitation limit. The value is an estimated quantity due to a QC exceedance. The value is usable as a non-detect at the estimated quantitation limit.

Table 4-5
Summary of Spring Surface Water Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 02/01/2006 thru 02/01/2006 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE LAB SAMPLE ID DATE DEPTH (ft) RESULT TYPE	NYSDEC TOGS	SPRING 212033-001 02/01/2006 0.00 Primary	SPRING 212033-002 02/01/2006 0.00 Duplicate 1
1,1,1-Trichloroethane	(ug/l)	5	0.5 J	0.5 J
1,1,2,2-Tetrachloroethane	(ug/l)	5	1 U	1 U
1,1,2-Trichloroethane	(ug/l)	1	1 U	1 U
1,1-Dichloroethane	(ug/l)	5	1 U	1 U
1,1-Dichloroethene	(ug/l)	5	0.2 J	0.1 J
1,2,4-Trichlorobenzene	(ug/l)	5	1 U	1 U
1,2-Dibromoethane	(ug/l)	0.0006	1 U	1 U
1,2-Dichlorobenzene	(ug/l)	3	1 U	1 U
1,2-Dichloroethane	(ug/l)	0.6	1 U	1 U
1,2-Dichloropropane	(ug/l)	1	1 U	1 U
1,3-Dichlorobenzene	(ug/l)	3	1 U	1 U
1,4-Dichlorobenzene	(ug/l)	3	1 U	1 U
2-Butanone	(ug/l)	50	5 U	5 U
2-Hexanone	(ug/l)	50	5 U	5 U
4-Methyl-2-Pentanone	(ug/l)		5 U	5 U
Acetone	(ug/l)	50	5 U J	5 U J
Benzene	(ug/l)	1	1 U	1 U
Bromochloromethane	(ug/l)	5	1 U	1 U
Bromodichloromethane	(ug/l)	50	1 U	1 U
Bromoform	(ug/l)	50	1 U	1 U
Bromomethane	(ug/l)	5	1 U	1 U
Carbon Disulfide	(ug/l)	60	1 U	1 U
Carbon Tetrachloride	(ug/l)	5	1 U	1 U
Chlorobenzene	(ug/l)	5	1 U	1 U
Chloroethane	(ug/l)	5	1 U	1 U
Chloroform	(ug/l)	7	0.9 J	0.9 J
Chloromethane	(ug/l)	5	1 U	1 U
cis-1,2-Dichloroethene	(ug/l)	5	0.7 J	0.7 J
cis-1,3-Dichloropropene	(ug/l)	0.4	1 U	1 U
Cyclohexane	(ug/l)		1 U	1 U
Dibromochloromethane	(ug/l)	50	1 U	1 U
Dibromochloropropane	(ug/l)	0.04	1 U	1 U
Dichlorodifluoromethane	(ug/l)	5	1 U	1 U
Ethylbenzene	(ug/l)	5	1 U	1 U
Freon 113	(ug/l)	5	1 U	1 U
Isopropylbenzene	(ug/l)	5	1 U	1 U
Methyl Cyclohexane	(ug/l)		1 U	1 U
Methyl Tertiary Butyl Ether	(ug/l)	10	0.3 J	0.3 J
Methylene Chloride	(ug/l)	5	2 U	2 U

See end notes following the last page of this table.

Table 4-5
Summary of Spring Surface Water Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 02/01/2006 thru 02/01/2006 - Inclusive
SAMPLE TYPE: Water

CONSTITUENT	SITE LAB SAMPLE ID DATE DEPTH (ft) RESULT TYPE	 NYSDEC TOGS	SPRING 212033-001 02/01/2006 0.00 Primary	SPRING 212033-002 02/01/2006 0.00 Duplicate 1
Styrene	(ug/l)	5	1 U	1 U
Tetrachloroethene	(ug/l)	5	[130]	[140]
Toluene	(ug/l)	5	1 U	1 U
trans-1,2-Dichloroethene	(ug/l)	5	1 U	1 U
trans-1,3-Dichloropropene	(ug/l)	0.4	1 U	1 U
Trichloroethene	(ug/l)	5	2	2
Trichlorofluoromethane	(ug/l)	5	1 U	1 U
Vinyl chloride	(ug/l)	2	1 U	1 U
Xylene (total)	(ug/l)	5	1 U	1 U

See end notes following the last page of this table.

Table 4-5
Summary of Spring Surface Water Sampling Analytical Results
Volatile Organic Compounds
Glen Head Groundwater Plume
Glen Head, New York
NYSDEC Site Number 1-30-098

Notes:

- µg/l = micrograms per liter (parts per billion; ppb).
- NYSDEC TOGS = ambient water quality standards and guidance values for Class GA groundwater as identified in New York State Department of Environmental Conservation Technical and Operational Guidance Series No. 1.1.1.
- Bracketed values indicate exceedances of the standards and guidance values identified in TOGs 1.1.1.
- All samples analyzed for Target Compound List (TCL) Volatile Organic Compounds (VOCs) using *"United State Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) Statement of Work (SOW) for Organics Analysis Low Concentration Water OLC02.1 (February 1996)".*

Qualifiers

no qualifier	The compound was positively identified at the associated numerical value which is the concentration of the compound in the sample.
U	Non Detect. The compound was analyzed for, but not detected. The associated numerical value is the quantitation limit. The value is usable as a non-detect at the quantitation limit.
J	Estimated value. The value was designated as estimated by the laboratory per the method to indicate the compound is present, but the concentration is less than the Contract Required Quantitation Limit (CRQL). Also used to indicate tentatively identified compounds (TICs). The value is usable as an estimated result.
UJ	The compound was analyzed for, but not detected. The associated numerical value is the quantitation limit. The value is an estimated quantity due to a QC exceedance. The value is usable as a non-detect at the estimated quantitation limit.

Table 4-6
Summary of Spring Sediment Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 02/01/2006 thru 02/01/2006 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE LAB SAMPLE ID DATE DEPTH (ft) RESULT TYPE	NYSDEC RSCOs	SPRING SED 212033-003 02/01/2006 0.00 Primary	SPRING SED 212033-004 02/01/2006 0.00 Duplicate 1
1,1,1-Trichloroethane	(ug/kg)	800	13U	13U
1,1,2,2-Tetrachloroethane	(ug/kg)	600	13U	13U
1,1,2-Trichloroethane	(ug/kg)		13U	13U
1,1-Dichloroethane	(ug/kg)	200	13U	13U
1,1-Dichloroethene	(ug/kg)	400	13U	13U
1,2,4-Trichlorobenzene	(ug/kg)	3400	13U	13U
1,2-Dibromoethane	(ug/kg)		13U	13U
1,2-Dichlorobenzene	(ug/kg)	7900	13U	13U
1,2-Dichloroethane	(ug/kg)	100	13U	13U
1,2-Dichloropropane	(ug/kg)		13U	13U
1,3-Dichlorobenzene	(ug/kg)	1600	13U	13U
1,4-Dichlorobenzene	(ug/kg)	8500	13U	13U
2-Butanone	(ug/kg)	300	13U	13U
2-Hexanone	(ug/kg)		13U	13U
4-Methyl-2-Pentanone	(ug/kg)	1000	13U	13U
Acetone	(ug/kg)	200	13UJ	13UJ
Benzene	(ug/kg)	60	1J	13U
Bromodichloromethane	(ug/kg)		13U	13U
Bromoform	(ug/kg)		13U	13U
Bromomethane	(ug/kg)		13U	13U
Carbon Disulfide	(ug/kg)	2700	13U	13U
Carbon Tetrachloride	(ug/kg)	600	13U	13U
Chlorobenzene	(ug/kg)	1700	13U	13U
Chloroethane	(ug/kg)	1900	13U	13U
Chloroform	(ug/kg)	300	13U	13U
Chloromethane	(ug/kg)		13U	13U
cis-1,2-Dichloroethene	(ug/kg)		13U	13U
cis-1,3-Dichloropropene	(ug/kg)		13U	13U
Cyclohexane	(ug/kg)		13U	13U
Dibromochloromethane	(ug/kg)		13U	13U
Dibromochloropropane	(ug/kg)		13U	13U
Dichlorodifluoromethane	(ug/kg)		13U	13U
Ethylbenzene	(ug/kg)	5500	13U	13U
Freon 113	(ug/kg)	6000	13U	13U
Isopropylbenzene	(ug/kg)		13U	13U
Methyl Acetate	(ug/kg)		13U	13U
Methyl Cyclohexane	(ug/kg)		13U	13U
Methyl Tertiary Butyl Ether	(ug/kg)	120	13U	13U
Methylene Chloride	(ug/kg)	100	13U	13U

See end notes following the last page of this table.

Table 4-6
Summary of Spring Sediment Sampling Analytical Results
Volatile Organic Compounds (VOCs)
Glen Head Groundwater Plume
Glen Head, New York
Site No. 1-30-098

PERIOD: From 02/01/2006 thru 02/01/2006 - Inclusive
SAMPLE TYPE: Soil

CONSTITUENT	SITE LAB SAMPLE ID DATE DEPTH (ft) RESULT TYPE	NYSDEC RSCOs	SPRING SED 212033-003 02/01/2006 0.00 Primary	SPRING SED 212033-004 02/01/2006 0.00 Duplicate 1
Styrene	(ug/kg)		13U	13U
Tetrachloroethene	(ug/kg)	1400	82J	270J
Toluene	(ug/kg)	1500	0.7J	13U
trans-1,2-Dichloroethene	(ug/kg)	300	13U	13U
trans-1,3-Dichloropropene	(ug/kg)		13U	13U
Trichloroethene	(ug/kg)	700	13U	1J
Trichlorofluoromethane	(ug/kg)		13U	13U
Vinyl chloride	(ug/kg)	200	13U	13U
Xylene (total)	(ug/kg)	1200	13U	13U

See end notes following the last page of this table.

Table 4-6
Summary of Spring Sediment Sampling Analytical Results
Volatile Organic Compounds
Glen Head Groundwater Plume
Glen Head, New York
NYSDEC Site Number 1-30-098

Notes:

- µg/kg = micrograms per kilogram (parts per billion; ppb).
- NYSDEC RSCOs = New York State Department of Environmental Conservation, Recommended Soil Cleanup Objectives.
- Bracketed values indicate exceedances of the Recommended Soil Cleanup Objectives.
- All samples analyzed for Target Compound List (TCL) Volatile Organic Compounds (VOCs) using "*United State Environmental Protection Agency (USEPA) Contract Laboratory Program (CLP) Statement of Work (SOW) for Organics Analysis Low Concentration Water OLM04.2 (February 1996)*".

Qualifiers

no qualifier	The compound was positively identified at the associated numerical value which is the concentration of the compound in the sample.
U	Non Detect. The compound was analyzed for, but not detected. The associated numerical value is the quantitation limit. The value is usable as a non-detect at the quantitation limit.
J	Estimated value. The value was designated as estimated by the laboratory per the method to indicate the compound is present, but the concentration is less than the Contract Required Quantitation Limit (CRQL). Also used to indicate tentatively identified compounds (TICs). The value is usable as an estimated result.
UJ	The compound was analyzed for, but not detected. The associated numerical value is the quantitation limit. The value is an estimated quantity due to a QC exceedance. The value is usable as a non-detect at the estimated quantitation limit.

Environmental Resources Management
520 Broadhollow Rd, Suite 210
Melville, NY 11747
Phone: (631) 756-8900
Fax: (631) 756-8901

Project #:	0030800
Project Name:	NYSDEC-Glen Head Off-site Soil Vapor
Location:	Glen Head, NY
Project Manager:	Michael Mendes

Sample Location:	SGI-01-012 / elementary school	Collector(s):	Kent Murdick, Mike Mattern
Address:	Glen Head		
PID Meter Used: (Model, Serial #)		Building No:	

SUMMA Canister Record:

INDOOR AIR		SUBSTRUCTURE SOIL GAS		OUTDOOR LAWN SOIL GAS	
Canister Serial No.:		Canister Serial No.:		Canister Serial No.:	
Flow Controller Id No:		Flow Controller Id No:		Flow Controller Id No:	
Start Date/Time:		Start Date/Time:		Start Date/Time:	2/01/06 / 1457
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-30
Stop Date/Time:		Stop Date/Time:		Stop Date/Time:	1657
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-2.0
Sample ID:		**Sample ID:**		**Sample ID:**	SGI-01-012

Other Sampling Information:

PID Reading (ppm)		PID Reading (ppm) Room & as purged		PID Reading (ppm)	*yes
Story/Level		Basement or Crawl Space?		Depth of Vapor Probe	10 feet bgs
Room		Floor Slab Thickness (inches) *[if present]*		Distance from Building	>10 feet
Indoor Air Temp (°F)		Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	NA Run ~~Ground Surface~~
Intake Height Above Floor Level (ft.)		Ground Surface Condition (Crawl Space Only)		Intake Tubing used?	~~Yes~~ NA Run
Noticeable Odor?		Noticeable Odor?		Distance to nearest Roadway (ft.)	~ 20 feet
Barometric Pressure ("Hg or mb)		Percent $O_2/CO_2/CH_4$		Noticeable Odor?	none detected
Duplicate Sample?		Duplicate Sample?		Duplicate Sample?	yes

Comments:

Sample line was initially obstructed & no sample could be collected. Nitrogen was pushed through line to clear obstruction & gas could be heard coming up through the borehole. In addition clean sand placed around borehole annulus at surface was disturbed by gas escaping the borehole. Sample line was purged for 15 min with PID at ~ 0.2 liter/min. Sample was then successfully collected.
Purge 3 min
* PID was malfunctioning - would recognize presence of VOCs but specific number unreliable

Signature: _____

Environmental Resources Management
520 Broadhollow Rd, Suite 210
Melville, NY 11747
Phone: (631) 756-8900
Fax: (631) 756-8901

Project #:	0030800
Project Name:	NYSDEC-Glen Head Off-site Soil Vapor
Location:	Glen Head, NY
Project Manager:	Michael Mendes

Sample Location:	Elementary School	**Collector(s):**	Kent Murdick
Address:			mike mendes
PID Meter Used: (Model, Serial #)		**Building No:**	

SUMMA Canister Record:

INDOOR AIR		SUBSTRUCTURE SOIL GAS		OUTDOOR LAWN SOIL GAS	
Canister Serial No.:		Canister Serial No.:		Canister Serial No.:	
Flow Controller Id No:		Flow Controller Id No:		Flow Controller Id No:	
Start Date/Time:		Start Date/Time:		Start Date/Time:	2/01/06 1457
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-29.0
Stop Date/Time:		Stop Date/Time:		Stop Date/Time:	2/01/06 1657
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-2.0
Sample ID:		**Sample ID:**		**Sample ID:**	Dup013106

Other Sampling Information:

PID Reading (ppm)		PID Reading (ppm) Room & as purged		PID Reading (ppm)	*yes
Story/Level		Basement or Crawl Space?		Depth of Vapor Probe	12 feet
Room		Floor Slab Thickness (inches) *[if present]*		Distance from Building	>10 feet
Indoor Air Temp (°F)		Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	NA ~~Ground Surface~~
Intake Height Above Floor Level (ft.)		Ground Surface Condition (Crawl Space Only)		Intake Tubing used?	NA ~~yes~~
Noticeable Odor?		Noticeable Odor?		Distance to nearest Roadway (ft.)	~20 feet
Barometric Pressure ("Hg or mb)		Percent $O_2/CO_2/CH_4$		Noticeable Odor?	no
Duplicate Sample?		Duplicate Sample?		Duplicate Sample?	Yes

Comments:

See comments for SGI-01-012

* PID malfunctioning - would recognize presence of VOC's but specific number unreliable

3 min Purge

Signature: _____

Environmental Resources Management
520 Broadhollow Rd, Suite 210
Melville, NY 11747
Phone: (631) 756-8900
Fax: (631) 756-8901

Project #:	0030800
Project Name:	NYSDEC-Glen Head Off-site Soil Vapor
Location:	Glen Head, NY
Project Manager:	Michael Mendes

Sample Location:	Glen Head Elementary School	Collector(s):	Mike McHern
Address:			Kent Murdock
PID Meter Used: (Model, Serial #)	Mini RAE SN# 110-003451	Building No:	

SUMMA Canister Record:

INDOOR AIR		SUBSTRUCTURE SOIL GAS		OUTDOOR LAWN SOIL GAS	
Canister Serial No.:		Canister Serial No.:		Canister Serial No.:	6131
Flow Controller Id No:		Flow Controller Id No:		Flow Controller Id No:	7340161
Start Date/Time:		Start Date/Time:		Start Date/Time:	1214 2/20/06
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-30
Stop Date/Time:		Stop Date/Time:		Stop Date/Time:	1346 2/20/06
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-29
Sample ID:		Sample ID:		Sample ID:	SG1-01-012

Other Sampling Information:

PID Reading (ppm)		PID Reading (ppm) Room & as purged		PID Reading (ppm)	~~NA~~ 0.0
Story/Level		Basement or Crawl Space?		Depth of Vapor Probe	11'
Room		Floor Slab Thickness (inches) *[if present]*		Distance from Building	> 10'
Indoor Air Temp (°F)		Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	NA
Intake Height Above Floor Level (ft.)		Ground Surface Condition (Crawl Space Only)		Intake Tubing used?	NA
Noticeable Odor?		Noticeable Odor?		Distance to nearest Roadway (ft.),	~ 20'
Barometric Pressure ("Hg or mb)		Percent $O_2/CO_2/CH_4$		Noticeable Odor?	NO
Duplicate Sample?		Duplicate Sample?		Duplicate Sample?	NO

Comments:

3.5 min purge - 0.0 PID - NO sample. probe is blocked - no sample could be collected. The Vac. gauge read only a -2 PSI change. We tried to open/close the valve it was fine. M. Mathern ran a wire down the tubing however we could not have it go down more the 11' BSL. A call was placed to Mr. Mendes to inform him.

Signature:

Environmental Resources Management
520 Broadhollow Rd, Suite 210
Melville, NY 11747
Phone: (631) 756-8900
Fax: (631) 756-8901

Project #:	0030800
Project Name:	NYSDEC-Glen Head Off-site Soil Vapor
Location:	Glen Head, NY
Project Manager:	Michael Mendes

Sample Location:	Elementary school	**Collector(s):**	mike mattern
Address:	Glen Head		Kent Murdick
PID Meter Used: (Model, Serial #)		**Building No:**	

SUMMA Canister Record:

INDOOR AIR		SUBSTRUCTURE SOIL GAS		OUTDOOR LAWN SOIL GAS	
Canister Serial No.:		Canister Serial No.:		Canister Serial No.:	
Flow Controller Id No:		Flow Controller Id No:		Flow Controller Id No:	
Start Date/Time:		Start Date/Time:		Start Date/Time:	1/31/06 1000
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-30.0
Stop Date/Time:		Stop Date/Time:		Stop Date/Time:	1/31/06 1154
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-1.0
Sample ID:		**Sample ID:**		**Sample ID:**	SGJ-01-035

Other Sampling Information:

PID Reading (ppm)		PID Reading (ppm) Room & as purged		PID Reading (ppm)	0 yes
Story/Level		Basement or Crawl Space?		Depth of Vapor Probe	35 feet BGS
Room		Floor Slab Thickness (inches) *[if present]*		Distance from Building	>10 feet
Indoor Air Temp (°F)		Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	NA Kent ~~Ground Surface~~
Intake Height Above Floor Level (ft.)		Ground Surface Condition (Crawl Space Only)		Intake Tubing used?	NA ~~Yes~~ Kent
Noticeable Odor?		Noticeable Odor?		Distance to nearest Roadway (ft.)	~20 feet
Barometric Pressure ("Hg or mb)		Percent $O_2/CO_2/CH_4$		Noticeable Odor?	NO
Duplicate Sample?		Duplicate Sample?		Duplicate Sample?	NO

Comments:

Sampling was unremarkable and according to SOP

* PID was malfunctioning - would recognize presence of VOCs - but specific number was unreliable

4-5 min purge

Signature: _____

Environmental Resources Management
520 Broadhollow Rd, Suite 210
Melville, NY 11747
Phone: (631) 756-8900
Fax: (631) 756-8901

Project #:	0030800
Project Name:	NYSDEC-Glen Head Off-site Soil Vapor
Location:	Glen Head, NY
Project Manager:	Michael Mendes

Sample Location:	Elementary School	Collector(s):	Kent Murdick
Address:			mike Mattern
PID Meter Used: (Model, Serial #)		Building No:	

SUMMA Canister Record:

INDOOR AIR		SUBSTRUCTURE SOIL GAS		OUTDOOR LAWN SOIL GAS	
Canister Serial No.:		Canister Serial No.:		Canister Serial No.:	
Flow Controller Id No:		Flow Controller Id No:		Flow Controller Id No:	
Start Date/Time:		Start Date/Time:		Start Date/Time:	1/31/06 1050
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-30.0
Stop Date/Time:		Stop Date/Time:		Stop Date/Time:	1/31/06 1154
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-1.0
Sample ID:		**Sample ID:**		**Sample ID:**	SGI-01-065

Other Sampling Information:

PID Reading (ppm)		PID Reading (ppm) Room & as purged		PID Reading (ppm)	* 405
Story/Level		Basement or Crawl Space?		Depth of Vapor Probe	65 feet
Room		Floor Slab Thickness (inches) *[if present]*		Distance from Building	> 10 feet
Indoor Air Temp (°F)		Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	NA Kent ~~Ground Surface~~
Intake Height Above Floor Level (ft.)		Ground Surface Condition (Crawl Space Only)		Intake Tubing used?	NA Kent ~~405~~
Noticeable Odor?		Noticeable Odor?		Distance to nearest Roadway (ft.)	~ 25 feet
Barometric Pressure ("Hg or mb)		Percent $O_2/CO_2/CH_4$		Noticeable Odor?	no
Duplicate Sample?		Duplicate Sample?		Duplicate Sample?	no

Comments:

Sampling was unremarkable and according to SOP

* PID was malfunctioning - would recognize presence of VOC's but specific number unreliable

7.5 min purge

Signature: _____

Environmental Resources Management
520 Broadhollow Rd, Suite 210
Melville, NY 11747
Phone: (631) 756-8900
Fax: (631) 756-8901

Project #:	0030800
Project Name:	NYSDEC-Glen Head Off-site Soil Vapor
Location:	Glen Head, NY
Project Manager:	Michael Mendes

Sample Location:	Glen Head Elementary School	Collector(s):	Mike Mendes, Kent Murdick
Address:			
PID Meter Used: (Model, Serial #)	Mini Rae SN# 110-003451	Building No:	

SUMMA Canister Record:

INDOOR AIR		SUBSTRUCTURE SOIL GAS		OUTDOOR LAWN SOIL GAS	
Canister Serial No.:		Canister Serial No.:		Canister Serial No.:	6652
Flow Controller Id No:		Flow Controller Id No:		Flow Controller Id No:	70-5432
Start Date/Time:		Start Date/Time:		Start Date/Time:	1214 2/20/06
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-30
Stop Date/Time:		Stop Date/Time:		Stop Date/Time:	1344 2/20/06
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-0.5
Sample ID:		Sample ID:		Sample ID:	SVE-01-006

Other Sampling Information:

PID Reading (ppm)		PID Reading (ppm) Room & as purged		PID Reading (ppm)	~~Roof~~ 2.9 0.0/NM
Story/Level		Basement or Crawl Space?		Depth of Vapor Probe	12'
Room		Floor Slab Thickness (inches) *[if present]*		Distance from Building	>10'
Indoor Air Temp (°F)		Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	N/A
Intake Height Above Floor Level (ft.)		Ground Surface Condition (Crawl Space Only)		Intake Tubing used?	N/A
Noticeable Odor?		Noticeable Odor?		Distance to nearest Roadway (ft.)	~ 20'
Barometric Pressure (*Hg or mb)		Percent $O_2/CO_2/CH_4$		Noticeable Odor?	NO
Duplicate Sample?		Duplicate Sample?		Duplicate Sample?	NO

Comments:

3.5 min Purge - 0.0 PID Capped bucket w/ in dough - used drill to reach depth of 6' Bgs - refusal - set probe and collected sample reached ~0.5 on regulator before 2 hours - terminated sampling event. Sample collection followed SOP

1.5"-2.0" asphalt
3.0" grave
tight sands

Signature:

Environmental Resources Management
520 Broadhollow Rd, Suite 210
Melville, NY 11747
Phone: (631) 756-8900
Fax: (631) 756-8901

Project #:	0030800
Project Name:	NYSDEC-Glen Head Off-site Soil Vapor
Location:	Glen Head, NY
Project Manager:	Michael Mendes

Sample Location:	Lundy Property	Collector(s):	Kent Murdick
Address:			mike mattern
PID Meter Used: (Model, Serial #)		Building No:	

SUMMA Canister Record:

INDOOR AIR		SUBSTRUCTURE SOIL GAS		OUTDOOR LAWN SOIL GAS	
Canister Serial No.:		Canister Serial No.:		Canister Serial No.:	
Flow Controller Id No:		Flow Controller Id No:		Flow Controller Id No:	
Start Date/Time:		Start Date/Time:		Start Date/Time:	1/31/06 1137
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-30
Stop Date/Time:		Stop Date/Time:		Stop Date/Time:	1/31/06 1305
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-1.0
Sample ID:		**Sample ID:**		**Sample ID:**	SGI-02-012

Other Sampling Information:

PID Reading (ppm)		PID Reading (ppm) Room & as purged		PID Reading (ppm)	43.8
Story/Level		Basement or Crawl Space?		Depth of Vapor Probe	0 feet
Room		Floor Slab Thickness (inches) *[if present]*		Distance from Building	> 10 feet
Indoor Air Temp (°F)		Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	NA ~~Ground Surface~~
Intake Height Above Floor Level (ft.)		Ground Surface Condition (Crawl Space Only)		Intake Tubing used?	~~yes~~ NA
Noticeable Odor?		Noticeable Odor?		Distance to nearest Roadway (ft.)	~ 60 feet
Barometric Pressure (*Hg or mb)		Percent $O_2/CO_2/CH_4$		Noticeable Odor?	no
Duplicate Sample?		Duplicate Sample?		Duplicate Sample?	no

Comments:

3 min purge - PID = 43.8 Sampling was unremarkable and according to SOP

Signature: _____

Environmental Resources Management
520 Broadhollow Rd, Suite 210
Melville, NY 11747
Phone: (631) 756-8900
Fax: (631) 756-8901

Project #:	0030800
Project Name:	NYSDEC-Glen Head Off-site Soil Vapor
Location:	Glen Head, NY
Project Manager:	Michael Mendes

Sample Location:	Lundy Property	Collector(s):	Mike Mattern
Address:			Kent Murdick
PID Meter Used: (Model, Serial #)		Building No:	

SUMMA Canister Record:

INDOOR AIR		SUBSTRUCTURE SOIL GAS		OUTDOOR LAWN SOIL GAS	
Canister Serial No.:		Canister Serial No.:		Canister Serial No.:	
Flow Controller Id No:		Flow Controller Id No:		Flow Controller Id No:	
Start Date/Time:		Start Date/Time:		Start Date/Time:	1131106 1137
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)		Start Pressure: (Inches Hg)	-30+
Stop Date/Time:		Stop Date/Time:		Stop Date/Time:	1313
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-1.0
Sample ID:		**Sample ID:**		**Sample ID:**	SGI-02-060

Other Sampling Information:

PID Reading (ppm)		PID Reading (ppm) Room & as purged		PID Reading (ppm)	81.4
Story/Level		Basement or Crawl Space?		Depth of Vapor Probe	60 feet
Room		Floor Slab Thickness (inches) *[if present]*		Distance from Building	> 10 feet
Indoor Air Temp (°F)		Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	NA ~~Ground Surface~~
Intake Height Above Floor Level (ft.)		Ground Surface Condition (Crawl Space Only)		Intake Tubing used?	~~tape~~ NA
Noticeable Odor?		Noticeable Odor?		Distance to nearest Roadway (ft.)	~60 feet
Barometric Pressure (*Hg or mb)		Percent $O_2/CO_2/CH_4$		Noticeable Odor?	no
Duplicate Sample?		Duplicate Sample?		Duplicate Sample?	no

Comments:

5 min purge PID 81.4 Sampling was uneventable and according to SOP

Signature:

Environmental Resources Management
520 Broadhollow Rd, Suite 210
Melville, NY 11747
Phone: (631) 756-8900
Fax: (631) 756-8901

Project #:	0030800
Project Name:	NYSDEC-Glen Head Off-site Soil Vapor
Location:	Glen Head, NY
Project Manager:	Michael Mendes

Sample Location:	Lundy Property	Collector(s):	Mike McHern
Address:			Kent Murdick
PID Meter Used: (Model, Serial #)		Building No:	

SUMMA Canister Record:

INDOOR AIR		SUBSTRUCTURE SOIL GAS		OUTDOOR LAWN SOIL GAS	
Canister Serial No.:		Canister Serial No.:		Canister Serial No.:	
Flow Controller Id No:		Flow Controller Id No:		Flow Controller Id No:	
Start Date/Time:		Start Date/Time:		Start Date/Time:	1/31/06 1137
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-30
Stop Date/Time:		Stop Date/Time:		Stop Date/Time:	1/31/06 1317
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-1.0
Sample ID:		**Sample ID:**		**Sample ID:**	SG-02-100

Other Sampling Information:

PID Reading (ppm)		PID Reading (ppm) Room & as purged		PID Reading (ppm)	155
Story/Level		Basement or Crawl Space?		Depth of Vapor Probe	100 feet
Room		Floor Slab Thickness (inches) *[if present]*		Distance from Building	> 10 feet
Indoor Air Temp (°F)		Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	NA ~~Ground Surface~~ Kent
Intake Height Above Floor Level (ft.)		Ground Surface Condition (Crawl Space Only)		Intake Tubing used?	NA Kent
Noticeable Odor?		Noticeable Odor?		Distance to nearest Roadway (ft.)	~60 feet
Barometric Pressure ("Hg or mb)		Percent $O_2/CO_2/CH_4$		Noticeable Odor?	no
Duplicate Sample?		Duplicate Sample?		Duplicate Sample?	no

Comments:

9 min purge - PID 155 - Sampling was unremarkable and according to SOP

Signature: _____

Environmental Resources Management
520 Broadhollow Rd, Suite 210
Melville, NY 11747
Phone: (631) 756-8900
Fax: (631) 756-8901

Project #:	0030800
Project Name:	NYSDEC-Glen Head Off-site Soil Vapor
Location:	Glen Head, NY
Project Manager:	Michael Mendes

Sample Location:	Elin Place	**Collector(s):**	mike McHern
Address:			Kent Murdick
PID Meter Used: (Model, Serial #)		**Building No:**	

SUMMA Canister Record:

INDOOR AIR		SUBSTRUCTURE SOIL GAS		OUTDOOR LAWN SOIL GAS	
Canister Serial No.:		Canister Serial No.:		Canister Serial No.:	
Flow Controller Id No:		Flow Controller Id No:		Flow Controller Id No:	
Start Date/Time:		Start Date/Time:		Start Date/Time:	2/01/06 0949
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-30
Stop Date/Time:		Stop Date/Time:		Stop Date/Time:	2/1/06 1149
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-2.0
Sample ID:		**Sample ID:**		**Sample ID:**	SGI-03-0[illegible]

Other Sampling Information:

PID Reading (ppm)		PID Reading (ppm) Room & as purged		PID Reading (ppm)	0.0
Story/Level		Basement or Crawl Space?		Depth of Vapor Probe	12 feet
Room		Floor Slab Thickness (inches) *[if present]*		Distance from Building	> 10 feet
Indoor Air Temp (°F)		Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	NA ~~Ground Surface~~
Intake Height Above Floor Level (ft.)		Ground Surface Condition (Crawl Space Only)		Intake Tubing used?	NA
Noticeable Odor?		Noticeable Odor?		Distance to nearest Roadway (ft.)	in roadway
Barometric Pressure (“Hg or mb)		Percent $O_2/CO_2/CH_4$		Noticeable Odor?	no
Duplicate Sample?		Duplicate Sample?		Duplicate Sample?	no

Comments:

3 min Purge Sampling was unremarkable and according to SOP

Signature: _____

Environmental Resources Management
520 Broadhollow Rd, Suite 210
Melville, NY 11747
Phone: (631) 756-8900
Fax: (631) 756-8901

Project #:	0030800
Project Name:	NYSDEC-Glen Head Off-site Soil Vapor
Location:	Glen Head, NY
Project Manager:	Michael Mendes

Sample Location:	Erin Place	**Collector(s):**	Mike Mattern
Address:			Kant Murdick
PID Meter Used: (Model, Serial #)		**Building No:**	

SUMMA Canister Record:

INDOOR AIR		SUBSTRUCTURE SOIL GAS		OUTDOOR LAWN SOIL GAS	
Canister Serial No.:		Canister Serial No.:		Canister Serial No.:	
Flow Controller Id No:		Flow Controller Id No:		Flow Controller Id No:	
Start Date/Time:		Start Date/Time:		Start Date/Time:	2/01/06 949
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-30
Stop Date/Time:		Stop Date/Time:		Stop Date/Time:	2/01/06 1149
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	0.0
Sample ID:		**Sample ID:**		**Sample ID:**	SGI-03-060 (1)

Other Sampling Information:

PID Reading (ppm)		PID Reading (ppm) Room & as purged		PID Reading (ppm)	0.0
Story/Level		Basement or Crawl Space?		Depth of Vapor Probe	60 feet
Room		Floor Slab Thickness (inches) *[if present]*		Distance from Building	> 10 feet
Indoor Air Temp (°F)		Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	NA
Intake Height Above Floor Level (ft.)		Ground Surface Condition (Crawl Space Only)		Intake Tubing used?	NA
Noticeable Odor?		Noticeable Odor?		Distance to nearest Roadway (ft.)	in roadway
Barometric Pressure (“Hg or mb)		Percent $O_2/CO_2/CH_4$		Noticeable Odor?	no
Duplicate Sample?		Duplicate Sample?		Duplicate Sample?	no

Comments:

4.5 min Purge Sampling was unremarkable and according to SOP regulator registered 0 pressure so another sample was taken. canister will be checked at lab for vacuum. If none is present alternate sample will be analyzed. This was done to preserve QA/QC of sample

Signature: _____

Environmental Resources Management
520 Broadhollow Rd, Suite 210
Melville, NY 11747
Phone: (631) 756-8900
Fax: (631) 756-8901

Project #:	0030800
Project Name:	NYSDEC-Glen Head Off-site Soil Vapor
Location:	Glen Head, NY
Project Manager:	Michael Mendes

Sample Location:	Erin Place	**Collector(s):**	mike mcHern
Address:			Kent murdick
PID Meter Used: (Model, Serial #)		**Building No:**	

SUMMA Canister Record:

INDOOR AIR		SUBSTRUCTURE SOIL GAS		OUTDOOR LAWN SOIL GAS	
Canister Serial No.:		Canister Serial No.:		Canister Serial No.:	
Flow Controller Id No:		Flow Controller Id No:		Flow Controller Id No:	
Start Date/Time:		Start Date/Time:		Start Date/Time:	2/9/16 1153
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-30
Stop Date/Time:		Stop Date/Time:		Stop Date/Time:	2/9/16 1353
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-1.0
Sample ID:		**Sample ID:**		**Sample ID:**	SGI-03-060 (2)

Other Sampling Information:

PID Reading (ppm)		PID Reading (ppm) Room & as purged		PID Reading (ppm)	0.0
Story/Level		Basement or Crawl Space?		Depth of Vapor Probe	60 feet
Room		Floor Slab Thickness (inches) *[if present]*		Distance from Building	> 10 feet
Indoor Air Temp (°F)		Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	NSA
Intake Height Above Floor Level (ft.)		Ground Surface Condition (Crawl Space Only)		Intake Tubing used?	NSA
Noticeable Odor?		Noticeable Odor?		Distance to nearest Roadway (ft.)	in roadway
Barometric Pressure (“Hg or mb)		Percent $O_2/CO_2/CH_4$		Noticeable Odor?	no
Duplicate Sample?		Duplicate Sample?		Duplicate Sample?	no

Comments:

4.5 min purge Sampling was uneventable and according to SOP
See comments for SGI-03-060 (1)

Signature: _____

Environmental Resources Management
520 Broadhollow Rd, Suite 210
Melville, NY 11747
Phone: (631) 756-8900
Fax: (631) 756-8901

Project #:	0030800
Project Name:	NYSDEC-Glen Head Off-site Soil Vapor
Location:	Glen Head, NY
Project Manager:	Michael Mendes

Sample Location:	Erin Place	**Collector(s):**	mike mcHern
Address:			Kent Murdick
PID Meter Used: (Model, Serial #)		**Building No:**	

SUMMA Canister Record:

INDOOR AIR		SUBSTRUCTURE SOIL GAS		OUTDOOR LAWN SOIL GAS	
Canister Serial No.:		Canister Serial No.:		Canister Serial No.:	
Flow Controller Id No:		Flow Controller Id No:		Flow Controller Id No:	
Start Date/Time:		Start Date/Time:		Start Date/Time:	2b/06 0950
Start Pressure: (inches Hg)		Start Pressure: (inches Hg)		Start Pressure: (inches Hg)	-29
Stop Date/Time:		Stop Date/Time:		Stop Date/Time:	2b/06 1150
Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)		Stop Pressure: (inches Hg)	-1.0
Sample ID:		**Sample ID:**		**Sample ID:**	SGT-03-100

Other Sampling Information:

PID Reading (ppm)		PID Reading (ppm) Room & as purged		PID Reading (ppm)	0.0
Story/Level		Basement or Crawl Space?		Depth of Vapor Probe	100 feet
Room		Floor Slab Thickness (inches) *[if present]*		Distance from Building	>10 feet
Indoor Air Temp (°F)		Potential Vapor Entry Points Observed?		Intake Height Above Ground Level (ft.)	NA
Intake Height Above Floor Level (ft.)		Ground Surface Condition (Crawl Space Only)		Intake Tubing used?	NA
Noticeable Odor?		Noticeable Odor?		Distance to nearest Roadway (ft.)	in roadway
Barometric Pressure (*Hg or mb)		Percent $O_2/CO_2/CH_4$		Noticeable Odor?	no
Duplicate Sample?		Duplicate Sample?		Duplicate Sample?	no

Comments:

9 min purge Sampling was unremarkable and according to SOP

Signature: _____

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/12/2005

SAMPLE ID : MW-01

WELL ID : MW-01

SAMPLERS :		Time Onsite:	Time Offsite:
	Ron Taylor	7:00	15:30
	Michel Jean-Baptiste	7:00	15:30

PID reading			
Depth of well (from top of casing)	126.05	Time:	8:15
DNAPL Level (from top of casing)	NA	Time:	8:15
Static water level (from top of casing)	109.95	Time:	8:15
Water level after purging (from top of casing)	112.18	Time:	8:22
Water level before sampling (from top of casing)	112.58	Time:	8:55
Depth of screened interval (from top of casing)	116-126		

Purging Method:

____ Peristaltic ____ Centrifugal

____ Bailer ____ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

			1 volume		3 volumes
2 in. well:	16.1	ft. of water x 0.17 =	2.7	gal. x 3 =	8.21 gal.
4 in. well:		ft. of water x 0.65 =		gal. x 3 =	gal.
6 in. well:		ft. of water x 1.47 =		gal. x 3 =	gal.

Beginning Depth Pump: ~121.0 Purge Start Time: 8:28 (hrs) Purge Duration: 17 (min)

Ending Depth Pump: ~122.0 Purge End Time: 8:45 (hrs) Purge Flow Rate: 0.48 (gpm)

Volume of water removed: ~8.2 gal. >3 volumes: yes X no ____

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial	14.14	6.32	9.51	0.748	830	333
1 Volume	16.29	6.15	8.88	0.805	835	279
2 Volumes	16.44	6.17	8.91	0.821	840	258
3 Volumes	16.45	6.19	8.92	0.821	845	245
After Sample						

Sampling:

Time readings stabilized: 8:45

Sample Start Time: 8:50 Chain of Custody sample time: 8:59

Sample End Time: 9:00 Duration of sample time: 10 min

Collection Method:		Analyses:		Analytical Method:
____	Stainless steel bailer	X	VOCs -	624 ____ 503.1 ____ Other 601
X	Teflon bailer	____	SVOCs	TCL VOCs OLC 02.1
____	Pos. Disp. Pump	____	Metals	
____	Disposable bottom fill bailer	____	PCB/Pest	
____	Dedicated pump	____	Physical	
____	Other: Disposable String	____	Other	

Observations

Weather/Temperature: 33 degrees Sunny No wind

Sample Description: Turbidity: (circle one) 0 X HIGH MODERATE LOW

Free Product? yes ____ no X describe ____

Sheen? yes ____ no X describe ____

Odor? yes ____ no X describe ____

Comments:

Collected Duplicate Sample

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/13/2005

SAMPLE ID : MW-02

WELL ID : MW-02

SAMPLERS :	Time Onsite:	Time Offsite:
Ron Taylor	7:00	15:39
Michel Jean-Baptiste	7:00	15:39

PID reading			
Depth of well (from top of casing)	122.6	Time:	7:40
DNAPL Level (from top of casing).....	NA	Time:	7:40
Static water level (from top of casing)	108.55	Time:	7:40
Water level after purging (from top of casing)	108.55	Time:	8:43
Water level before sampling (from top of casing)	108.52	Time:	8:43
Depth of screened interval (from top of casing)	113-123		

Purging Method:

____ Peristaltic ____ Centrifugal

____ Bailer ____ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

			1 volume		3 volumes
2 in. well:	14.27	ft. of water x 0.17 =	2.43	gal. x 3 =	7.28 gal.
4 in. well:		ft. of water x 0.65 =		gal. x 3 =	gal.
6 in. well:		ft. of water x 1.47 =		gal. x 3 =	gal.

Beginning Depth Pump: ~117 Purge Start Time: 8:19 (hrs) Purge Duration: 11 (min)

Ending Depth Pump: ~118 Purge End Time: 8:30 (hrs) Purge Flow Rate: 1.2 (gpm)

Volume of water removed: ~7.2 gal. >3 volumes: yes X no ____

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial	16.00	5.95	4.88	0.514	823	224
1 Volume	15.4	5.90	4.85	0.639	824	220
2 Volumes	15.3	6.03	5.11	0.637	827	231
3 Volumes	15.3	5.90	5.12	0.632	830	232
After Sample						

Sampling:

Time readings stabilized: 8:30

Sample Start Time: 9:35 Chain of Custody sample time: 9:41

Sample End Time: 9:41 Duration of sample time: 6 min

Collection Method:		Analyses:		Analytical Method:				
____	Stainless steel bailer	X	VOCs -	624 ____	503 ____	Other	601	
X	Teflon bailer	____	SVOCs	TCL VOCs OLC 02.1				
____	Pos. Disp. Pump	____	Metals					
____	Disposable bottom fill bailer	____	PCB/Pest					
____	Dedicated pump	____	Physical					
____	Other: Disposable String	____	Other					

Observations

Weather/Temperature: 38 degrees Sunny SW wind at ~2-8 mph

Sample Description: Turbidity: (circle one) HIGH MODERATE LOW

Free Product? yes ____ no X describe ____

Sheen? yes ____ no X describe ____

Odor? yes ____ no X describe ____

Comments:

Bailer got lost in well. Tried to retrieve it but then just took sample later than stabilization time.

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/12/2005

SAMPLE ID : MW-03

WELL ID : MW-03

SAMPLERS :		Time Onsite:	Time Offsite:
	Ron Taylor	7:00	15:30
	Michel Jean-Baptiste	7:00	15:30

PID reading	NA		
Depth of well (from top of casing)	132.36	Time:	12:39
DNAPL Level (from top of casing)	NA	Time:	12:39
Static water level (from top of casing)	117.12	Time:	12:39
Water level after purging (from top of casing)	117.06	Time:	12:45
Water level before sampling (from top of casing)	117.06	Time:	12:45
Depth of screened interval (from top of casing)	122-132		

Purging Method:

_ Peristaltic _ Centrifugal

_ Bailer _ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

				1 volume		3 volumes
2 in. well:	14.07	ft. of water x 0.17 =	2.39	gal.	x 3 =	7.17 gal.
4 in. well:		ft. of water x 0.65 =		gal.	x 3 =	gal.
6 in. well:		ft. of water x 1.47 =		gal.	x 3 =	gal.

Beginning Depth Pump: ~128.0 Purge Start Time: 12:48 (hrs) Purge Duration: 7 (min)

Ending Depth Pump: ~129.0 Purge End Time: 12:55 (hrs) Purge Flow Rate: 1.00 (gpm)

Volume of water removed: ~7.2 gal. >3 volumes: yes X no _

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial	13.34	6.25	8.05	1.02	1249	286
1 Volume	14.21	6.16	8.1	1.01	1251	272
2 Volumes	14.65	6.15	8.24	1	1253	269
3 Volumes	14.71	6.15	8.32	1	1255	265
After Sample						

Sampling:

Time readings stabilized: 12:55

Sample Start Time: 13:12 Chain of Custody sample time: 13:17

Sample End Time: 13:17 Duration of sample time: 5 min

Collection Method:		Analyses:		Analytical Method:
_	Stainless steel bailer	X	VOCs -	624 _ 503.1 _ Other 601
X	Teflon bailer	_	SVOCs	TCL VOCs OLC 02.1
_	Pos. Disp. Pump	_	Metals	
_	Disposable bottom fill bailer	_	PCB/Pest	
_	Dedicated pump	_	Physical	
_	Other: Disposable String	_	Other	

Observations

Weather/Temperature: 32 degrees Cloudy Slight NW wind at 2-5 mph

Sample Description: Turbidity: (circle one) HIGH MODERATE LOW

Free Product? yes _ no X describe _

Sheen? yes _ no X describe _

Odor? yes _ no X describe _

Comments:

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/13/2005

SAMPLE ID : MW-04

WELL ID : MW-04

		Time Onsite:	Time Offsite:
SAMPLERS :	Ron Taylor	7:00	15:39
	Michel Jean-Baptiste	7:00	15:39

PID reading	NA		
Depth of well (from top of casing)	133.1	Time:	10:18
DNAPL Level (from top of casing)	NA	Time:	10:18
Static water level (from top of casing)	117.36	Time:	10:18
Water level after purging (from top of casing)	117.41	Time:	10:29
Water level before sampling (from top of casing)	117.41	Time:	10:29
Depth of screened interval (from top of casing)	123-133		

Purging Method:

____ Peristaltic ____ Centrifugal

____ Bailer ____ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

				1 volume		3 volumes
2 in. well:	15.74	ft. of water x 0.17 =	2.7	gal.	x 3 =	8.02 gal.
4 in. well:		ft. of water x 0.65 =		gal.	x 3 =	gal.
6 in. well:		ft. of water x 1.47 =		gal.	x 3 =	gal.

Beginning Depth Pump: ~128.0 Purge Start Time: 10:38 (hrs) Purge Duration: 8 (min)

Ending Depth Pump: ~129.0 Purge End Time: 10:46 (hrs) Purge Flow Rate: 1.50 (gpm)

Volume of water removed: ~8.0 gal. >3 volumes: yes X no ____

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial	14.57	5.42	9.63	0.938	1039	273
1 Volume	16.20	6.12	9.51	0.932	1040	253
2 Volumes	16.46	6.11	8.70	0.98	1043	247
3 Volumes	16.3	6.15	8.88	0.98	1046	238
After Sample						

Sampling:

Time readings stabilized: 10:46

Sample Start Time: 10:55 Chain of Custody sample time: 11:01

Sample End Time: 11:01 Duration of sample time: 6 min

Collection Method:		Analyses:		Analytical Method:	
____	Stainless steel bailer	X	VOCs -	624 ____ 503.1 ____	Other 601
X	Teflon bailer	____	SVOCs	TCL VOCs OLC 02.1	
____	Pos. Disp. Pump	____	Metals		
____	Disposable bottom fill bailer	____	PCB/Pest		
____	Dedicated pump	____	Physical		
____	Other: Disposable String	____	Other		

Observations

Weather/Temperature: 28 degrees Sunny Slight NW wing 0-3 mph

Sample Description: Turbidity: (circle one) HIGH MODERATE LOW

Free Product? yes ____ no X describe ____

Sheen? yes ____ no X describe ____

Odor? yes ____ no X describe ____

Comments:

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/12/2005

SAMPLE ID : MW-05

WELL ID : MW-05

SAMPLERS :		Time Onsite:	Time Offsite:
	Ron Taylor	7:00	15:30
	Michel Jean-Baptiste	7:00	15:30

PID reading	NA		
Depth of well (from top of casing)	143.65	Time:	11:05
DNAPL Level (from top of casing)	NA	Time:	11:05
Static water level (from top of casing)	121.15	Time:	11:05
Water level after purging (from top of casing)	121.13	Time:	11:15
Water level before sampling (from top of casing)	121.1	Time:	11:59
Depth of screened interval (from top of casing)	133-143		

Purging Method:

____ Peristaltic ____ Centrifugal

____ Bailer ____ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

				1 volume		3 volumes		
2 in. well:	22.5	ft. of water x 0.17 =	3.825	gal.	x 3 =	11.5	gal.
4 in. well:		ft. of water x 0.65 =		gal.	x 3 =		gal.
6 in. well:		ft. of water x 1.47 =		gal.	x 3 =		gal.

Beginning Depth Pump: ~138.0 Purge Start Time: 11:39 (hrs) Purge Duration: 18 (min)

Ending Depth Pump: ~139.0 Purge End Time: 11:57 (hrs) Purge Flow Rate: 1.00 (gpm)

Volume of water removed: ~11.5 gal. >3 volumes: yes X no ____

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial	14.05	5.85	8.68	1.62	1142	265
1 Volume	15.52	5.75	9.07	1.76	1147	258
2 Volumes	14.61	5.72	9.66	1.78	1153	269
3 Volumes	14.23	5.72	9	1.76	1157	266
After Sample						

Sampling:

Time readings stabilized: 11:57

Sample Start Time: 12:10 Chain of Custody sample time: 12:20

Sample End Time: 12:20 Duration of sample time: 6 min

Collection Method:		Analyses:		Analytical Method:			
____	Stainless steel bailer	X	VOCs -	624 ____	503.1 ____	Other	601
X	Teflon bailer	____	SVOCs	TCL VOCs OLC 02.1			
____	Pos. Disp. Pump	____	Metals				
____	Disposable bottom fill bailer	____	PCB/Pest				
____	Dedicated pump	____	Physical				
____	Other: Disposable String	____	Other				

Observations

Weather/Temperature: 34 degrees Partly Cloudy

Sample Description: Turbidity: (circle one) **HIGH** MODERATE LOW

Free Product? yes ____ no X describe ____

Sheen? yes ____ no X describe ____

Odor? yes ____ no X describe ____

Comments:

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/12/2005

SAMPLE ID : MW-06

WELL ID : MW-06

SAMPLERS :		Time Onsite:	Time Offsite:
	Ron Taylor	7:00	15:30
	Michel Jean-Baptiste	7:00	15:30

PID reading	NA		
Depth of well (from top of casing)	116	Time:	9:29
DNAPL Level (from top of casing)	NA	Time:	9:29
Static water level (from top of casing)	99.80	Time:	9:30
Water level after purging (from top of casing)	99.77	Time:	10:00
Water level before sampling (from top of casing)	99.77	Time:	10:00
Depth of screened interval (from top of casing)	133-143		

Purging Method:

____ Peristaltic ____ Centrifugal

____ Bailer ____ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

			1 volume		3 volumes
2 in. well:	16.2	ft. of water x 0.17 =	2.8	gal. x 3 =	8.3 gal.
4 in. well:		ft. of water x 0.65 =		gal. x 3 =	gal.
6 in. well:		ft. of water x 1.47 =		gal. x 3 =	gal.

Beginning Depth Pump: ~111.0 Purge Start Time: 9:40 (hrs) Purge Duration: 9 (min)

Ending Depth Pump: ~112.0 Purge End Time: 9:49 (hrs) Purge Flow Rate: 1.00 (gpm)

Volume of water removed: ~8.3 gal. >3 volumes: yes X no ____

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial	13.65	6.54	9.52	0.38	941	277
1 Volume	15.02	6.07	9.5	0.304	943	247
2 Volumes	15.1	6.01	9.59	0.303	946	251
3 Volumes	15.18	5.99	9.61	0.302	949	254
After Sample						

Sampling:

Time readings stabilized: 9:49

Sample Start Time: 9:55 Chain of Custody sample time: 10:05

Sample End Time: 10:05 Duration of sample time: 10 min

Collection Method:		Analyses:		Analytical Method:	
____	Stainless steel bailer	X	VOCs -	624 ____ 503.1 ____	Other 601
X	Teflon bailer	____	SVOCs	TCL VOCs OLC 02.1	
____	Pos. Disp. Pump	____	Metals		
____	Disposable bottom fill bailer	____	PCB/Pest		
____	Dedicated pump	____	Physical		
____	Other: Disposable String	____	Other		

Observations

Weather/Temperature: 34 degrees Sunny Slight NW wind Gusts

Sample Description: Turbidity: (circle one) HIGH **MODERATE** LOW

Free Product? yes ____ no X describe ____

Sheen? yes ____ no X describe ____

Odor? yes ____ no X describe ____

Comments:

Collected MS/MSD

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/9/2005

SAMPLE ID : MW-07

WELL ID : MW-07

		Time Onsite:	Time Offsite:
SAMPLERS :	Ron Taylor	7:00	15:45
	Michel Jean-Baptiste	7:00	15:45
PID reading		NA	
Depth of well (from top of casing)		144.3	Time: 14:45
DNAPL Level (from top of casing)		NA	Time: 14:45
Static water level (from top of casing)		129.95	Time: 14:45
Water level after purging (from top of casing)		NA	Time: NA
Water level before sampling (from top of casing)		129.95	Time: 15:07
Depth of screened interval (from top of casing)		134-144	

Purging Method:

____ Peristaltic ____ Centrifugal

____ Bailer ____ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

			1 volume		3 volumes
2 in. well:	14.35	ft. of water x 0.17 =	2.4	gal. x 3 =	7.32 gal.
4 in. well:		ft. of water x 0.65 =		gal. x 3 =	gal.
6 in. well:		ft. of water x 1.47 =		gal. x 3 =	gal.

Beginning Depth Pump: ~141.5 Purge Start Time: 14:50 (hrs) Purge Duration: 10 (min)

Ending Depth Pump: ~142.5 Purge End Time: 15:00 (hrs) Purge Flow Rate: 1.25 (gpm)

Volume of water removed: ~7.3 gal. >3 volumes: yes X no ____

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial	13.28	6.41	9.28	0.397	1452	248
1 Volume	14.32	6.16	9.51	0.4	1454	239
2 Volumes	14.77	6.12	9.74	0.403	1457	239
3 Volumes	14.86	6.11	9.79	0.408	1500	240
After Sample						

Sampling:

Time readings stabilized: 15:00

Sample Start Time: 15:05 Chain of Custody sample time: 15:10

Sample End Time: 15:10 Duration of sample time: 5 min

Collection Method:		Analyses:		Analytical Method:
____	Stainless steel bailer	X	VOCs -	624 ____ 503.1 ____ Other 601
X	Teflon bailer	____	SVOCs	TCL VOCs OLC 02.1
____	Pos. Disp. Pump	____	Metals	
____	Disposable bottom fill bailer	____	PCB/Pest	
____	Dedicated pump	____	Physical	
____	Other: Disposable String	____	Other	

Observations

Weather/Temperature: 35 degrees Sunny Slight SW wind at 2-10 mph

Sample Description: Turbidity: (circle one) HIGH MODERATE LOW

Free Product? yes ____ no X describe ____

Sheen? yes ____ no X describe ____

Odor? yes ____ no X describe ____

Comments:

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/9/2005

SAMPLE ID : MW-08

WELL ID : MW-08

		Time Onsite:	Time Offsite:
SAMPLERS :	Ron Taylor	7:00	15:45
	Michel Jean-Baptiste	7:00	15:45
PID reading		NA	
Depth of well (from top of casing)		143.51	Time: 13:30
DNAPL Level (from top of casing)		NA	Time: 13:30
Static water level (from top of casing)		125.42	Time: 13:30
Water level after purging (from top of casing)		125.46	Time: 13:59
Water level before sampling (from top of casing)		125.46	Time: 13:59
Depth of screened interval (from top of casing)		133-143	

Purging Method:

____ Peristaltic ____ Centrifugal

____ Bailer ____ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

			1 volume		3 volumes	
2 in. well:	18.09	ft. of water x 0.17 =	3.1	gal. x 3 =	9.3	gal.
4 in. well:		ft. of water x 0.65 =		gal. x 3 =		gal.
6 in. well:		ft. of water x 1.47 =		gal. x 3 =		gal.

Beginning Depth Pump: ~140.0 Purge Start Time: 13:35 (hrs) Purge Duration: 16 (min)

Ending Depth Pump: ~141.0 Purge End Time: 13:51 (hrs) Purge Flow Rate: 1.00 (gpm)

Volume of water removed: ~9.3 gal. >3 volumes: yes X no ____

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial	13.71	6.64	9.87	1.48	1337	246
1 Volume	15.43	6.16	8.78	0.95	1341	237
2 Volumes	15.52	5.98	8.53	0.656	1346	240
3 Volumes	15.52	5.96	8.52	0.585	1351	241
After Sample						

Sampling:

Time readings stabilized: 13:51

Sample Start Time: 13:55 Chain of Custody sample time: 14:05

Sample End Time: 14:05 Duration of sample time: 10 min

Collection Method:		Analyses:		Analytical Method:	
____	Stainless steel bailer	X	VOCs -	624 ____ 503.1 ____	Other 601
X	Teflon bailer	____	SVOCs	TCL VOCs OLC 02.1	
____	Pos. Disp. Pump	____	Metals		
____	Disposable bottom fill bailer	____	PCB/Pest		
____	Dedicated pump	____	Physical		
____	Other: Disposable String	____	Other		

Observations

Weather/Temperature: 35 degrees Sunny Slight NW wind 2-5 mph

Sample Description: Turbidity: (circle one) **HIGH** MODERATE LOW

Free Product? yes ____ no X describe ____

Sheen? yes ____ no X describe ____

Odor? yes ____ no X describe ____

Comments:

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/7/2005

SAMPLE ID : MW-09

WELL ID : MW-09

SAMPLERS :		Time Onsite:	Time Offsite:
	Ron Taylor	7:00	15:45
	Michel Jean-Baptiste	7:00	15:45

PID reading	NA		
Depth of well (from top of casing)	NA	Time:	NA
DNAPL Level (from top of casing)	NA	Time:	NA
Static water level (from top of casing)	NA	Time:	NA
Water level after purging (from top of casing)	NA	Time:	NA
Water level before sampling (from top of casing)	NA	Time:	NA
Depth of screened interval (from top of casing)	103-113		

Purging Method:

____ Peristaltic ____ Centrifugal

____ Bailer ____ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

			1 volume		3 volumes
2 in. well:	____	ft. of water x 0.17 =	____	gal. x 3 =	____ gal.
4 in. well:	____	ft. of water x 0.65 =	____	gal. x 3 =	____ gal.
6 in. well:	____	ft. of water x 1.47 =	____	gal. x 3 =	____ gal.

Beginning Depth Pump: ____ Purge Start Time: ____ (hrs) Purge Duration: ____ (min)

Ending Depth Pump: ____ Purge End Time: ____ (hrs) Purge Flow Rate: ____ (gpm)

Volume of water removed: ~9.3 gal. >3 volumes: yes X no ____

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial						
1 Volume						
2 Volumes		NO SAMPLE COLLECTED MONITORING WELL NOT LOCATED.				
3 Volumes						
After Sample						

Sampling:

Time readings stabilized: ____

Sample Start Time: ____ Chain of Custody sample time: ____

Sample End Time: ____ Duration of sample time: min

Collection Method:		Analyses:		Analytical Method:					
____	Stainless steel bailer	X	VOCs -	624	____	503.1	____	Other	601
X	Teflon bailer	____	SVOCs	TCL VOCs OLC 02.1					
____	Pos. Disp. Pump	____	Metals						
____	Disposable bottom fill bailer	____	PCB/Pest						
____	Dedicated pump	____	Physical						
____	Other: Disposable String	____	Other						

Observations

Weather/Temperature: 33 degrees Sunny No wind

Sample Description: Turbidity: (circle one) **HIGH** MODERATE LOW

Free Product? yes ____ no ____ describe ____

Sheen? yes ____ no ____ describe ____

Odor? yes ____ no ____ describe ____

Comments:

Well has been destroyed

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/13/2005

SAMPLE ID : MW-10

WELL ID : MW-10

		Time Onsite:	Time Offsite:
SAMPLERS :	Ron Taylor	7:00	15:45
	Michel Jean-Baptiste	7:00	15:45
PID reading		NA	
Depth of well (from top of casing)		NA	Time: NA
DNAPL Level (from top of casing)		NA	Time: NA
Static water level (from top of casing)		NA	Time: NA
Water level after purging (from top of casing)		NA	Time: NA
Water level before sampling (from top of casing)		NA	Time: NA
Depth of screened interval (from top of casing)		79-89	

Purging Method:

____ Peristaltic ____ Centrifugal

____ Bailer ____ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

		1 volume	3 volumes
2 in. well:	____ ft. of water x 0.17 =	____ gal.	x 3 = ____ gal.
4 in. well:	____ ft. of water x 0.65 =	____ gal.	x 3 = ____ gal.
6 in. well:	____ ft. of water x 1.47 =	____ gal.	x 3 = ____ gal.

Beginning Depth Pump: ____ Purge Start Time: ____ (hrs) Purge Duration: ____ (min)

Ending Depth Pump: ____ Purge End Time: ____ (hrs) Purge Flow Rate: ____ (gpm)

Volume of water removed: ~9.3 gal. >3 volumes: yes X no ____

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial						
1 Volume						
2 Volumes			NO SAMPLE COLLECTED MONITORING WELL NOT LOCATED.			
3 Volumes						
After Sample						

Sampling:

Time readings stabilized: ____

Sample Start Time: ____ Chain of Custody sample time: ____

Sample End Time: ____ Duration of sample time: ____ min

Collection Method:		Analyses:		Analytical Method:
____	Stainless steel bailer	X	VOCs -	624 ____ 503.1 ____ Other 601
X	Teflon bailer	____	SVOCs	TCL VOCs OLC 02.1
____	Pos. Disp. Pump	____	Metals	
____	Disposable bottom fill bailer	____	PCB/Pest	
____	Dedicated pump	____	Physical	
____	Other: Disposable String	____	Other	

Observations

Weather/Temperature: 33 degrees Sunny No wind

Sample Description: Turbidity: (circle one) HIGH MODERATE LOW

Free Product? yes ____ no ____ describe ____

Sheen? yes ____ no ____ describe ____

Odor? yes ____ no ____ describe ____

Comments:

Well could not be located. Tom Romano (Delta) and Ron Taylor (ERM) removed a possible patch over the well. After digging 6-8" bgs there was no well man-hole that was located.

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/12/2005

SAMPLE ID : MW-11

WELL ID : MW-11

SAMPLERS :		Time Onsite:	Time Offsite:
	Ron Taylor	7:00	15:30
	Michel Jean-Baptiste	7:00	15:30

PID reading	NA		
Depth of well (from top of casing)	137.56	Time:	13:41
DNAPL Level (from top of casing)	NA	Time:	13:41
Static water level (from top of casing)	123.35	Time:	13:41
Water level after purging (from top of casing)	NA	Time:	13:43
Water level before sampling (from top of casing)	NA	Time:	NA
Depth of screened interval (from top of casing)	127.5-137.5		

Purging Method:

____ Peristaltic ____ Centrifugal

____ Bailer ____ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

					1 volume		3 volumes
2 in. well:	14.21	ft. of water x 0.17 =	2.4	gal.	x 3 =	7.24	gal.
4 in. well:		ft. of water x 0.65 =		gal.	x 3 =		gal.
6 in. well:		ft. of water x 1.47 =		gal.	x 3 =		gal.

Beginning Depth Pump: ~133.0 Purge Start Time: 13:43 (hrs) Purge Duration: 9 (min)

Ending Depth Pump: ~134.0 Purge End Time: 13:52 (hrs) Purge Flow Rate: 1.00 (gpm)

Volume of water removed: ~7.3 gal. >3 volumes: yes X no ____

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial	13.59	5.44	9.36	0.573	1344	312
1 Volume	15.07	5.31	8.88	0.572	1346	300
2 Volumes	15.17	5.31	8.98	0.574	1343	298
3 Volumes	15.15	5.31	9.03	0.571	1352	299
After Sample						

Sampling:

Time readings stabilized: 13:52

Sample Start Time: 13:55 Chain of Custody sample time: 14:05

Sample End Time: 14:05 Duration of sample time: 10 min

Collection Method:		Analyses:		Analytical Method:				
____	Stainless steel bailer	X	VOCs -	624	____	503.1	____	Other 601
X	Teflon bailer	____	SVOCs	TCL VOCs OLC 02.1				
____	Pos. Disp. Pump	____	Metals					
____	Disposable bottom fill bailer	____	PCB/Pest					
____	Dedicated pump	____	Physical					
____	Other: Disposable String	____	Other					

Observations

Weather/Temperature: 33 degrees ! Cloudy Slight NW wind 2- 10 mph

Sample Description: Turbidity: (circle one) **HIGH** MODERATE LOW

Free Product? yes ____ no X describe ____

Sheen? yes ____ no X describe ____

Odor? yes ____ no X describe ____

Comments:

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/7/2005

SAMPLE ID : TT-MW-06

WELL ID : TT-MW-06

		Time Onsite:	Time Offsite:
SAMPLERS :	Ron Taylor	700	1545
	Michel Jean-Baptiste	700	1545

PID reading ..... NA

Depth of well (from top of casing) ..... 119.80 Time: 757

DNAPL Level (from top of casing)..... NA Time: NA

Static water level (from top of casing)..... DRY Time: 757

Water level after purging (from top of casing)..... NA Time: NA

Water level before sampling (from top of casing) ..... NA Time: NA

Depth of screened interval (from top of casing) ..... ~110-125

Purging Method:

____ Peristaltic ____ Centrifugal

____ Bailer ____ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

3 volumes

2 in. well: ____ ft. of water x 0.17 = ____ gal. x 3 = ____ gal.

4 in. well: ____ ft. of water x 0.65 = ____ gal. x 3 = ____ gal.

6 in. well: ____ ft. of water x 1.47 = ____ gal. x 3 = ____ gal.

Beginning Depth Pump: ____ Purge Start Time: ____ (hrs) Purge Duration: ____ (min)

Ending Depth Pump: ____ Purge End Time: ____ (hrs) Purge Flow Rate: ____ (gpm)

Volume of water removed: ____ gal. >3 volumes: yes ____ no x

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial						
1 Volume						
2 Volumes						
3 Volumes						
After Sample						

Sampling:

Time readings stabilized: ____

Sample Start Time: ____ Chain of Custody sample time: ____

Sample End Time: ____ Duration of sample time: ____ min

Collection Method:		Analyses:		Analytical Method:
____	Stainless steel bailer	X	VOCs -	624 ____ 503.1 ____ Other 601
X	Teflon bailer	____	SVOCs	TCL VOCs OLC 02.1
____	Pos. Disp. Pump	____	Metals	
____	Disposable bottom fill bailer	____	PCB/Pest	
____	Dedicated pump	____	Physical	
____	Other: Disposable String	____	Other	

Observations

Weather/Temperature: 33 degrees Cloudy/Snowing No wind

Sample Description: Turbidity: (circle one) HIGH MODERATE LOW

Free Product? yes ____ no X describe ____

Sheen? yes ____ no X describe ____

Odor? yes ____ no X describe ____

Comments:

Well was dry and yielded no water

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/12/2005

SAMPLE ID : TT-MW-01

WELL ID : TT-MW-01

SAMPLERS :		Time Onsite:	Time Offsite:
	Ron Taylor	7:00	15:45
	Michel Jean-Baptiste	7:00	15:45

PID reading	NA		
Depth of well (from top of casing)	126.05	Time:	11:58
DNAPL Level (from top of casing)	NA	Time:	11:58
Static water level (from top of casing)	109.95	Time:	11:58
Water level after purging (from top of casing)	110.74	Time:	12:15
Water level before sampling (from top of casing)	110.74	Time:	12:19
Depth of screened interval (from top of casing)	110-125		

Purging Method:

____ Peristaltic ____ Centrifugal

____ Bailer ____ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

				1 volume		3 volumes
2 in. well:	16.1	ft. of water x 0.17 =	2.7	gal. x 3 =	8.211	gal.
4 in. well:		ft. of water x 0.65 =		gal. x 3 =		gal.
6 in. well:		ft. of water x 1.47 =		gal. x 3 =		gal.

Beginning Depth Pump: ~123.0 Purge Start Time: 12:00 (hrs) Purge Duration: 13 (min)

Ending Depth Pump: ~124.0 Purge End Time: 12:13 (hrs) Purge Flow Rate: 1.50 (gpm)

Volume of water removed: ~8.3 gal. >3 volumes: yes X no ____

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial	13.99	6.3	8.32	1.80	1202	330
1 Volume	15.63	6.10	7.36	1.95	1205	281
2 Volumes	15.00	6.07	8.32	2.00	1210	276
3 Volumes	15.5	6.66	8.23	2	1213	266
After Sample						

Sampling:

Time readings stabilized: 12:13

Sample Start Time: 12:20 Chain of Custody sample time: 12:29

Sample End Time: 12:29 Duration of sample time: 9 min

Collection Method:		Analyses:		Analytical Method:			
____	Stainless steel bailer	X	VOCs -	624 ____	503.1 ____	Other	601
X	Teflon bailer	____	SVOCs	TCL VOCs OLC 02.1			
____	Pos. Disp. Pump	____	Metals				
____	Disposable bottom fill bailer	____	PCB/Pest				
____	Dedicated pump	____	Physical				
____	Other: Disposable String	____	Other				

Observations

Weather/Temperature: 32 degrees Sunny No wind

Sample Description: Turbidity: (circle one) HIGH MODERATE LOW

Free Product? yes ____ no X describe ____

Sheen? yes ____ no X describe ____

Odor? yes ____ no X describe ____

Comments:

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/8/2005

SAMPLE ID : TT-MW-02

WELL ID : TT-MW-02

SAMPLERS :		Time Onsite:	Time Offsite:
	Ron Taylor	7:00	16:20
	Michel Jean-Baptiste	7:00	15:45

PID reading	NA		
Depth of well (from top of casing)	125.60	Time:	8:48
DNAPL Level (from top of casing)	NA	Time:	8:48
Static water level (from top of casing)	111.28	Time:	8:48
Water level after purging (from top of casing)	NA	Time:	NA
Water level before sampling (from top of casing)	NA	Time:	NA
Depth of screened interval (from top of casing)	110-125		

Purging Method:

____ Peristaltic ____ Centrifugal

____ Bailer ____ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

				1 volume		3 volumes
2 in. well:	14.32	ft. of water x 0.17 =	2.43	gal. x 3 =	7.3	gal.
4 in. well:		ft. of water x 0.65 =		gal. x 3 =		gal.
6 in. well:		ft. of water x 1.47 =		gal. x 3 =		gal.

Beginning Depth Pump: ~123.0 Purge Start Time: 13:55 (hrs) Purge Duration: 11 (min)

Ending Depth Pump: ~124.0 Purge End Time: 14:06 (hrs) Purge Flow Rate: 1.00 (gpm)

Volume of water removed: ~7.3 gal. >3 volumes: yes X no ____

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial	14.20	6.64	5.1	0.239	1357	210
1 Volume	15.30	6.07	4.76	0.247	1400	215
2 Volumes	15.50	6.06	4.83	0.252	1402	216
3 Volumes	15.7	6.02	4.9	0.251	1406	218
After Sample						

Sampling:

Time readings stabilized: 14:06

Sample Start Time: 14:09 Chain of Custody sample time: 14:15

Sample End Time: 14:15 Duration of sample time: 6 min

Collection Method:		Analyses:		Analytical Method:	
____	Stainless steel bailer	X	VOCs -	624 ____ 503.1 ____	Other 601
X	Teflon bailer	____	SVOCs	TCL VOCs OLC 02.1	
____	Pos. Disp. Pump	____	Metals		
____	Disposable bottom fill bailer	____	PCB/Pest		
____	Dedicated pump	____	Physical		
____	Other: Disposable String	____	Other		

Observations

Weather/Temperature: 35 degrees Sunny No wind

Sample Description: Turbidity: (circle one) HIGH MODERATE LOW

Free Product? yes ____ no X describe ____

Sheen? yes ____ no X describe ____

Odor? yes ____ no X describe ____

Comments:

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/9/2005

SAMPLE ID : TT-MW-03

WELL ID : TT-MW-03

SAMPLERS :		Time Onsite:	Time Offsite:
	Ron Taylor	7:00	15:45
	Michel Jean-Baptiste	7:00	15:45

PID reading ..... NA

Depth of well (from top of casing) ..... 122.00 Time: 10:00

DNAPL Level (from top of casing)..... NA Time: 10:00

Static water level (from top of casing) ..... 109.05 Time: 10:00

Water level after purging (from top of casing)..... 109.06 Time: 10:28

Water level before sampling (from top of casing) ..... 109.06 Time: 10:28

Depth of screened interval (from top of casing) 110-125

Purging Method:

____ Peristaltic ____ Centrifugal

____ Bailer ____ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

			1 volume		3 volumes	
2 in. well:	12.95	ft. of water x 0.17 =	2.2	gal. x 3 =	6.6	gal.
4 in. well:		ft. of water x 0.65 =		gal. x 3 =		gal.
6 in. well:		ft. of water x 1.47 =		gal. x 3 =		gal.

Beginning Depth Pump: ~117.5 Purge Start Time: 10:13 (hrs) Purge Duration: 13 (min)

Ending Depth Pump: ~118.5 Purge End Time: 10:26 (hrs) Purge Flow Rate: 1.50 (gpm)

Volume of water removed: ~6.6 gal. >3 volumes: yes X no ____

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial	15.00	5.90	7.78	0.125	1014	238
1 Volume	15.20	5.90	6.80	0.137	1016	240
2 Volumes	15.20	5.71	6.35	0.118	1019	239
3 Volumes	15.3	5.72	6.31	0.119	1024	240
After Sample						

Sampling:

Time readings stabilized: 10:24

Sample Start Time: 10:24 Chain of Custody sample time: 10:26

Sample End Time: 10:28 Duration of sample time: 4 min

Collection Method:		Analyses:		Analytical Method:
____	Stainless steel bailer	X	VOCs -	624 ____ 503.1 ____ Other 601
X	Teflon bailer	____	SVOCs	TCL VOCs OLC 02.1
____	Pos. Disp. Pump	____	Metals	
____	Disposable bottom fill bailer	____	PCB/Pest	
____	Dedicated pump	____	Physical	
____	Other: Disposable String	____	Other	

Observations

Weather/Temperature: 25 degrees Snowing

Sample Description: Turbidity: (circle one) **HIGH** MODERATE LOW

Free Product? yes ____ no X describe ____

Sheen? yes ____ no X describe ____

Odor? yes ____ no X describe ____

Comments:

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/9/2005

SAMPLE ID : TT-MW-04

WELL ID : TT-MW-04

		Time Onsite:	Time Offsite:
SAMPLERS :	Ron Taylor	7:00	15:45
	Michel Jean-Baptiste	7:00	15:45

PID reading	NA		
Depth of well (from top of casing)	132.40	Time:	8:00
DNAPL Level (from top of casing)	NA	Time:	8:00
Static water level (from top of casing)	119.95	Time:	8:00
Water level after purging (from top of casing)	NA	Time:	NA
Water level before sampling (from top of casing)	NA	Time:	NA
Depth of screened interval (from top of casing)	119-129		

Purging Method:

____ Peristaltic ____ Centrifugal

____ Bailer ____ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

			1 volume		3 volumes
2 in. well:	12.45	ft. of water x 0.17 =	2.12 gal.	x 3 =	6.35 gal.
4 in. well:		ft. of water x 0.65 =	____ gal.	x 3 =	____ gal.
6 in. well:		ft. of water x 1.47 =	____ gal.	x 3 =	____ gal.

Beginning Depth Pump: ~128.5 Purge Start Time: 8:02 (hrs) Purge Duration: 14 (min)

Ending Depth Pump: ~129.5 Purge End Time: 8:16 (hrs) Purge Flow Rate: 1.50 (gpm)

Volume of water removed: ~6.4 gal. >3 volumes: yes X no ____

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial	14.00	5.17	5.66	1.090	806	323
1 Volume	15.47	5.19	5.61	1.06	810	317
2 Volumes	15.85	5.23	5.80	1.070	813	315
3 Volumes	15.86	5.16	5.93	1.07	816	318
After Sample						

Sampling:

Time readings stabilized: 8:16

Sample Start Time: 8:25 Chain of Custody sample time: 8:40

Sample End Time: 8:40 Duration of sample time: 15 min

Collection Method:		Analyses:		Analytical Method:				
____	Stainless steel bailer	X	VOCs -	624 ____	503.1 ____	Other	601	
X	Teflon bailer	____	SVOCs	TCL VOCs OLC 02.1				
____	Pos. Disp. Pump	____	Metals					
____	Disposable bottom fill bailer	____	PCB/Pest					
____	Dedicated pump	____	Physical					
____	Other: Disposable String	____	Other					

Observations

Weather/Temperature: 32 degrees Cloudy/Snowing No wind

Sample Description: Turbidity: (circle one) HIGH MODERATE LOW

Free Product? yes ____ no X describe ____

Sheen? yes ____ no X describe ____

Odor? yes ____ no X describe ____

Comments:

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/9/2005

SAMPLE ID : TT-MW-05

WELL ID : TT-MW-05

SAMPLERS :		Time Onsite:	Time Offsite:
	Ron Taylor	7:00	15:45
	Michel Jean-Baptiste	7:00	15:45

PID reading ..... NA

Depth of well (from top of casing) ..... 126.80 Time: 8:50

DNAPL Level (from top of casing)..... NA Time: 8:50

Static water level (from top of casing)..... 116.55 Time: 8:50

Water level after purging (from top of casing)..... 116.55 Time: 8:52

Water level before sampling (from top of casing) ..... NA Time: NA

Depth of screened interval (from top of casing) ..... ~110-125

Purging Method:

____ Peristaltic ____ Centrifugal

____ Bailer ____ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

				1 volume		3 volumes
2 in. well:	10.22	ft. of water x 0.17 =	1.73	gal.	x 3 = 5.2	gal.
4 in. well:		ft. of water x 0.65 =		gal.	x 3 =	gal.
6 in. well:		ft. of water x 1.47 =		gal.	x 3 =	gal.

Beginning Depth Pump: ~123.5 Purge Start Time: 9:05 (hrs) Purge Duration: 9 (min)

Ending Depth Pump: ~124.5 Purge End Time: 8:16 (hrs) Purge Flow Rate: 1.25 (gpm)

Volume of water removed: ~5.2 gal. >3 volumes: yes X no ____

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial	13.86	5.92	6.84	0.510	905	307
1 Volume	14.69	5.89	7.58	0.535	909	299
2 Volumes	15.06	5.81	8.06	0.560	911	295
3 Volumes	15.11	5.87	8.31	0.52	914	293
After Sample						

Sampling:

Time readings stabilized: 9:14

Sample Start Time: 9:20 Chain of Custody sample time: 9:31

Sample End Time: 9:31 Duration of sample time: 11 min

Collection Method:		Analyses:		Analytical Method:
____	Stainless steel bailer	X	VOCs -	624 ____ 503.1 ____ Other 601
X	Teflon bailer	____	SVOCs	TCL VOCs OLC 02.1
____	Pos. Disp. Pump	____	Metals	
____	Disposable bottom fill bailer	____	PCB/Pest	
____	Dedicated pump	____	Physical	
____	Other: Disposable String	____	Other	

Observations

Weather/Temperature: 33 degrees Cloudy/Snowing No wind

Sample Description: Turbidity: (circle one) HIGH **MODERATE** LOW

Free Product? yes ____ no X describe ____

Sheen? yes ____ no X describe ____

Odor? yes ____ no X describe ____

Comments:

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/9/2005

SAMPLE ID : TT-MW-07

WELL ID : TT-MW-07

		Time Onsite:	Time Offsite:
SAMPLERS :	Ron Taylor	7:00	15:45
	Michel Jean-Baptiste	7:00	15:45

PID reading ..... NA

Depth of well (from top of casing) ..... 108.40 Time: 8:31

DNAPL Level (from top of casing)..... NA Time: NA

Static water level (from top of casing)..... DRY Time: NA

Water level after purging (from top of casing)..... NA Time: NA

Water level before sampling (from top of casing) ..... NA Time: NA

Depth of screened interval (from top of casing) 125-150

Purging Method:

____ Peristaltic ____ Centrifugal

____ Bailer ____ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

			1 volume	3 volumes
2 in. well:	____ ft. of water x 0.17 =	____ gal.	x 3 =	____ gal.
4 in. well:	____ ft. of water x 0.65 =	____ gal.	x 3 =	____ gal.
6 in. well:	____ ft. of water x 1.47 =	____ gal.	x 3 =	____ gal.

Beginning Depth Pump: ____ Purge Start Time: ____ (hrs) Purge Duration: ____ (min)

Ending Depth Pump: ____ Purge End Time: ____ (hrs) Purge Flow Rate: ____ (gpm)

Volume of water removed: ~5.2 gal. >3 volumes: yes X no ____

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial						
1 Volume						
2 Volumes						
3 Volumes						
After Sample						

Sampling:

Time readings stabilized: ____

Sample Start Time: ____ Chain of Custody sample time: ____

Sample End Time: ____ Duration of sample time: ____ min

Collection Method:		Analyses:		Analytical Method:	
____	Stainless steel bailer	X	VOCs -	624 ____ 503.1 ____	Other 601
X	Teflon bailer	____	SVOCs	TCL VOCs OLC 02.1	
____	Pos. Disp. Pump	____	Metals		
____	Disposable bottom fill bailer	____	PCB/Pest		
____	Dedicated pump	____	Physical		
____	Other: Disposable String	____	Other		

Observations

Weather/Temperature: 33 degrees Cloudy/Snowing No wind

Sample Description: Turbidity: (circle one) HIGH MODERATE LOW

Free Product? yes ____ no X describe ____

Sheen? yes ____ no X describe ____

Odor? yes ____ no X describe ____

Comments:

Well yielded no water. DRY

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/13/2005

SAMPLE ID : TT-MW-08

WELL ID : TT-MW-08

		Time Onsite:	Time Offsite:
SAMPLERS :	Ron Taylor	700	1545
	Michel Jean-Baptiste	700	1545
PID reading		NA	
Depth of well (from top of casing)		123.40	Time: 1249
DNAPL Level (from top of casing)		NA	Time: NA
Static water level (from top of casing)		109.22	Time: 1249
Water level after purging (from top of casing)		NA	Time: NA
Water level before sampling (from top of casing)		NA	Time: NA
Depth of screened interval (from top of casing)		105.3-120	

Purging Method:

____ Peristaltic ____ Centrifugal

____ Bailer ____ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

3 volumes

2 in. well: ____ ft. of water x 0.17 = ____ gal. x 3 = ____ gal.

4 in. well: ____ ft. of water x 0.65 = ____ gal. x 3 = ____ gal.

6 in. well: ____ ft. of water x 1.47 = ____ gal. x 3 = ____ gal.

Beginning Depth Pump: ____ Purge Start Time: ____ (hrs) Purge Duration: ____ (min)

Ending Depth Pump: ____ Purge End Time: ____ (hrs) Purge Flow Rate: ____ (gpm)

Volume of water removed: ~5.2 gal. >3 volumes: yes X no ____

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial						
1 Volume						
2 Volumes						
3 Volumes						
After Sample						

Sampling:

Time readings stabilized: ____

Sample Start Time: ____ Chain of Custody sample time: ____

Sample End Time: ____ Duration of sample time: ____ min

Collection Method:		Analyses:		Analytical Method:			
____	Stainless steel bailer	X	VOCs -	624 ____	503.1 ____	Other	601
X	Teflon bailer	____	SVOCs	TCL VOCs OLC 02.1			
____	Pos. Disp. Pump	____	Metals				
____	Disposable bottom fill bailer	____	PCB/Pest				
____	Dedicated pump	____	Physical				
____	Other: Disposable String	____	Other				

Observations

Weather/Temperature: 33 degrees Cloudy/Snowing No wind

Sample Description: Turbidity: (circle one) HIGH MODERATE LOW

Free Product? yes ____ no X describe ____

Sheen? yes ____ no X describe ____

Odor? yes ____ no X describe ____

Comments:

NO SAMPLE

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/8/2005

SAMPLE ID : TT-MW-09

WELL ID : TT-MW-09

SAMPLERS :		Time Onsite:	Time Offsite:
	Ron Taylor	12:55	16:20
	Michel Jean-Baptiste	7:00	15:45

PID reading	NA		
Depth of well (from top of casing)	151.08	Time:	14:00
DNAPL Level (from top of casing)	NA	Time:	14:00
Static water level (from top of casing)	111.36	Time:	14:00
Water level after purging (from top of casing)	NA	Time:	NA
Water level before sampling (from top of casing)	NA	Time:	NA
Depth of screened interval (from top of casing)	124.1-149.1		

Purging Method:

____ Peristaltic ____ Centrifugal

____ Bailer ____ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

			1 volume		3 volumes
2 in. well:	39.72	ft. of water x 0.17 =	6.75 gal.	x 3 =	20.3 gal.
4 in. well:		ft. of water x 0.65 =	____ gal.	x 3 =	____ gal.
6 in. well:		ft. of water x 1.47 =	____ gal.	x 3 =	____ gal.

Beginning Depth Pump: ~148.0 Purge Start Time: 14:00 (hrs) Purge Duration: 40 (min)

Ending Depth Pump: ~149.0 Purge End Time: 14:40 (hrs) Purge Flow Rate: 1.25 (gpm)

Volume of water removed: ~20 gal. >3 volumes: yes X no ____

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial	15.51	6.57	9.34	2.160	1412	206
1 Volume	15.50	6.38	7.46	2.23	1420	204
2 Volumes	15.50	6.37	7.08	2.290	1423	203
3 Volumes	15.59	6.37	7.05	2.30	1432	205
After Sample						

Sampling:

Time readings stabilized: 14:32

Sample Start Time: 14:35 Chain of Custody sample time: 14:44

Sample End Time: 14:44 Duration of sample time: 9 min

Collection Method:		Analyses:		Analytical Method:
____	Stainless steel bailer	X	VOCs -	624 ____ 503.1 ____ Other 601
X	Teflon bailer	____	SVOCs	TCL VOCs OLC 02.1
____	Pos. Disp. Pump	____	Metals	
____	Disposable bottom fill bailer	____	PCB/Pest	
____	Dedicated pump	____	Physical	
____	Other: Disposable String	____	Other	

Observations

Weather/Temperature: 35 degrees Partly Cloudy No wind

Sample Description: Turbidity: (circle one) HIGH MODERATE LOW

Free Product? yes ____ no X describe ____

Sheen? yes ____ no X describe ____

Odor? yes ____ no X describe ____

Comments:

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/8/2005

SAMPLE ID : TT-MW-10

WELL ID : TT-MW-10

SAMPLERS :		Time Onsite:	Time Offsite:
	Ron Taylor	12:55	16:20
	Michel Jean-Baptiste	7:00	15:45

PID reading	NA		
Depth of well (from top of casing)	123.00	Time:	15:05
DNAPL Level (from top of casing)	NA	Time:	15:05
Static water level (from top of casing)	111.25	Time:	15:05
Water level after purging (from top of casing)	112.08	Time:	15:15
Water level before sampling (from top of casing)	112.08	Time:	15:30
Depth of screened interval (from top of casing)	105.3-120.3		

Purging Method:

____ Peristaltic ____ Centrifugal

____ Bailer ____ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

					1 volume		3 volumes
2 in. well:	11.75	ft. of water x 0.17 =	2	gal.	x 3 =	6	gal.
4 in. well:		ft. of water x 0.65 =		gal.	x 3 =		gal.
6 in. well:		ft. of water x 1.47 =		gal.	x 3 =		gal.

Beginning Depth Pump: ~119.0 Purge Start Time: 15:15 (hrs) Purge Duration: 11 (min)

Ending Depth Pump: ~120.0 Purge End Time: 15:26 (hrs) Purge Flow Rate: 1.25 (gpm)

Volume of water removed: ~6 gal. >3 volumes: yes X no ____

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial	14.00	6.12	6.54	0.171	1515	230
1 Volume	15.80	5.94	5.51	0.174	1519	206
2 Volumes	15.80	5.87	5.51	0.174	1523	214
3 Volumes	15.8	5.93	5.57	0.17	1526	218
After Sample						

Sampling:

Time readings stabilized: 15:26

Sample Start Time: 15:29 Chain of Custody sample time: 15:38

Sample End Time: 15:38 Duration of sample time: 9 min

Collection Method:		Analyses:		Analytical Method:					
____	Stainless steel bailer	X	VOCs -	624	____	503.1	____	Other	601
X	Teflon bailer	____	SVOCs	TCL VOCs OLC 02.1					
____	Pos. Disp. Pump	____	Metals						
____	Disposable bottom fill bailer	____	PCB/Pest						
____	Dedicated pump	____	Physical						
____	Other: Disposable String	____	Other						

Observations

Weather/Temperature: 32 degrees Snowing No wind

Sample Description: Turbidity: (circle one) HIGH MODERATE LOW

Free Product? yes ____ no X describe ____

Sheen? yes ____ no X describe ____

Odor? yes ____ no X describe ____

Comments:

GROUND WATER SAMPLING RECORD

SITE: NYSDEC Glen Head GW Plume DATE 12/9/2005

SAMPLE ID : TT-MW-11

WELL ID : TT-MW-11

SAMPLERS :		Time Onsite:	Time Offsite:
	Ron Taylor	7:00	15:45
	Michel Jean-Baptiste	7:00	15:45

PID reading	NA		
Depth of well (from top of casing)	153.10	Time:	9:41
DNAPL Level (from top of casing)	NA	Time:	9:41
Static water level (from top of casing)	109.34	Time:	9:41
Water level after purging (from top of casing)	NA	Time:	NA
Water level before sampling (from top of casing)	NA	Time:	NA
Depth of screened interval (from top of casing)	125.3-150.		

Purging Method:

____ Peristaltic ____ Centrifugal

____ Bailer ____ Pos. Displ.

X Submersible Grunsfos Pump

Well Volume Calculation:

			1 volume		3 volumes
2 in. well:	43.76	ft. of water x 0.17 =	7.5	gal. x 3 =	22.3 gal.
4 in. well:		ft. of water x 0.65 =		gal. x 3 =	gal.
6 in. well:		ft. of water x 1.47 =		gal. x 3 =	gal.

Beginning Depth Pump: ~146.0 Purge Start Time: 9:55 (hrs) Purge Duration: 25 (min)

Ending Depth Pump: ~147.0 Purge End Time: 10:20 (hrs) Purge Flow Rate: 1.20 (gpm)

Volume of water removed: ~29.0 gal. >3 volumes: yes X no ____

Field Tests:

	Temp.	pH	DO	Spec. Cond.	TIME	ORP
units	oC		mg/l	mS/cm	minutes	mV
Initial	13.60	6.25	6.33	0.630	955	282
1 Volume	14.53	6.27	5.73	0.6	1001	268
2 Volumes	14.51	6.28	5.67	0.599	1009	261
3 Volumes	14.48	6.27	5.64	0.60	1015	258
After Sample	14.57	6.28	5.6	0.60	1020	254

Sampling:

Time readings stabilized: 10:15

Sample Start Time: 10:30 Chain of Custody sample time: 10:46

Sample End Time: 10:46 Duration of sample time: 16 min

Collection Method:		Analyses:		Analytical Method:
____	Stainless steel bailer	X	VOCs -	624 ____ 503.1 ____ Other 601
X	Teflon bailer	____	SVOCs	TCL VOCs OLC 02.1
____	Pos. Disp. Pump	____	Metals	
____	Disposable bottom fill bailer	____	PCB/Pest	
____	Dedicated pump	____	Physical	
____	Other: Disposable String	____	Other	

Observations

Weather/Temperature: 32 degrees Snowing No wind

Sample Description: Turbidity: (circle one) HIGH MODERATE LOW

Free Product? yes ____ no X describe ____

Sheen? yes ____ no X describe ____

Odor? yes ____ no X describe ____

Comments:

ERM NE

520 Broad Hollow Road, Suite 210, Melville, NY 11747

ERM

BORING LOG

Boring Number: SB-01

Project Name & Location: NYSDEC Glen Head Groundwater Plume	Project Number: 30800	Date & Time Started: 11/28/2005	
		Date & Time Completed: 11/28/2005	
Drilling Company: Delta Well and Pump, Inc.	Foreman: Jim Pedersen	Sampler(s): Michael Mendes	Sampler Hammer: GeoProbe / Drop: NA
Drilling Equipment: GeoProbe	Method: Direct Push	Elevation & Datum	Completion Depth: 32' / Rock Depth: NA
Bit Size(s): GeoProbe	Core Barrel(s): 2"x 4'	Geologist(s): Michael Mendes	

DEPTH (ft below grade)	SAMPLES: Sample Number	Recovery (feet)	FID/ PID (ppm)	Fluoro-scope	USCS/ MUNSELL COLOR CHART	SOIL DESCRIPTION
	LOCATION:					SURFACE DESCRIPTION:
0 to 4			0.00		10 YR 6/3	Sample 0 to -2" bgs: Asphalt. -2" to -4 bgs: Brown fine/med/coarse sand and gravel.
4 to 8			0.00		10YR 6/3	Brown. Fine/med/coarse sand and gravel fill. No staining.
8 to 12			0.00		10YR 6/3	Brown. Fine/med/coarse sand and gravel. Bottom of sample showing evidence of sediments of MH-01.
12 to 16			0.00		NA	Brown. Fine/med/coarse sand and gravel. Trace silts. Soil is moist. No odors.
16 to 20			0.00		NA	Brown. Fine/med/coarse sand and gravel to silt
20 to 24			0.00		NA	Brown. Fine/med/coarse sand and gravel. No Odor.
24 to 28			0.00		NA	Brown. Fine/med/coarse sand and gravel.
28 to 32			0.0		NA	Brown. Fine/med/coarse sand and gravel.

Signature: _____ Date: _____

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520 Broad Hollow Road, Suite 210, Melville, NY 11747

BORING LOG

Boring Number: SB-02

Project Name & Location: NYSDEC Glen Head Groundwater Plume	Project Number: 30800	Date & Time Started: 11/29/2005	
		Date & Time Completed: 11/29/2005	
Drilling Company: Delta Well and Pump, Inc.	Foreman: Jim Pedersen	Sampler(s): Michael Mendes	Sampler Hammer: GeoProbe / Drop: NA
Drilling Equipment: GeoProbe	Method: Direct Push	Elevation & Datum	Completion Depth: 32' / Rock Depth: NA
Bit Size(s): GeoProbe	Core Barrel(s): 2"x 4'	Geologist(s): Michael Mendes	

DEPTH (ft below grade)	SAMPLES: Sample Number	Recovery (feet)	FID/ PID (ppm)	Fluoro-scope	USCS/ MUNSELL COLOR CHART	SOIL DESCRIPTION
	LOCATION:					SURFACE DESCRIPTION:
0 to 4		4.0'	42.2		NA	Sample 0 to -2" bgs: Asphalt. -2" to -1' bgs: PID 42.2 ppm. Brown/ black base below the asphalt. -1 to -2 bgs: Brown (wet) silty-fine sand . High silt/clay content/fill. -2 to -3 bgs: Brown wet clayey silt fill. No odors or stains visible. -3 to -4 bgs: Same.
4 to 8		4.0'	0.00		NA	Sample -5 to -6 bgs: Brown (wet) silty fine sand with some med/coarse sand. Some gravel. -6 to -7 bgs: Brown silty clay. -7 top -8 bgs: Hard packed brown medium sand. Some silt with gravels and med/coarse sand. Some gravel. -6 to -7 bgs: Brown silty clay. -7 top -8 bgs: Hard
8 to 12		4.0'	0.00		NA	Brown. Silty fine sand with interbedded rounded gravels.
12 to 16		4.0'	0.00		NA	Brown. Silty fine sand. Some clays and gravels. No odor.
16 to20		4.0'	0.00		NA	Moist loose iron stained sand. Medium to coarse sand and gravel. No odors
20 to 24		4.0'	0.00		NA	Brown laminated soils. Medium to coarse sand and gravel. Iron stained
24 to 28		4.0'	0.00		NA	Brown medium to coarse sand and gravel. No odors. Some iron staining.
28 to 32		4.0'	0.0		NA	Brown medium to coarse sand and gravel. No odors. No staining.

Signature: _____ Date: _____

ERM NE

520 Broad Hollow Road, Suite 210, Melville, NY 11747

BORING LOG

Boring Number: SB-03

Project Name & Location: NYSDEC Glen Head Groundwater Plume	Project Number: 30800	Date & Time Started: 11/29/2005	
		Date & Time Completed: 11/30/2005	
Drilling Company: Delta Well and Pump, Inc.	Foreman: Jim Pedersen	Sampler(s): Michael Mendes	Sampler Hammer: GeoProbe / Drop: NA
Drilling Equipment: GeoProbe	Method: Direct Push	Elevation & Datum:	Completion Depth: 32' / Rock Depth: NA
Bit Size(s): GeoProbe	Core Barrel(s): 2"x 4'	Geologist(s): Michael Mendes	

DEPTH (ft below grade)	SAMPLES: Sample Number	Recovery (feet)	FID/ PID (ppm)	Fluoro-scope	USCS/ MUNSELL COLOR CHART	SOIL DESCRIPTION
	LOCATION:					SURFACE DESCRIPTION:
0-4		4.0'	0.00		NA	0 to -2" bgs: Asphalt. -2" to -1'bgs: Brown, fine to medium sand and silt. No Odors. -1 to -1 bgs: Brown fine to medium sand. Trace graves with some silt. -3 to -4 bgs: Brown. Fine to medium sand with some gravel.
4-8		4.0'	0.00		NA	Sample -4 to -5 bgs: Brown. Medium to coarse sand and gravel. No odor. -5 to -6 bgs: Brown. Medium to coarse sand and gravel with trace fines. -6 to -8 bgs: Brown. Fine/medium/coarse sand and gravel. trace fines.
8-12		4.0'	0.00		NA	Sample -8 to -9 bgs: Brown. Fine to medium sand. Some coarse sand and gravel. -9 to -10 bgs: Brown. Fine/medium/coarse sand and gravel. -10 to -11 bgs: Brown. Fine/medium/coarse sand and gravel. No odors. Iron staining. -11 to -12 bgs: Brown, medium to coarse sand.
12-16		4.0'	0.00		NA	Sample -12 to -13 bgs: Brown. Fine/medium/coarse sand and gravel. Some iron staining and large gravel. -13 to -14 bgs: Brown. Fine/med./ coarse sand and gravel. No odor. -14 to -15 bgs: Brown/rusty medium to coarse sand and gravels. No odor. -15 to -16 bgs: Same as above fine)
16-20		4.0'	0.00		NA	Brown. Medium to coarse sand. Some gravel. Trace fines.
20-24		4.0'	0.00		NA	Brown (wet). Medium to coarse sand and gravel. Trace fines. No odor.
24-28		4.0'	0.00		NA	Light Tan with red banding. Fine to medium sub-rounded sand/clay. Some sub-rounded gravel. Unsaturated. Top -25 bgs: Light Tan. Some red iron banding. -26 bgs: Turns to completely red iron sands. Some intermittent light tan banding.
28-32		3.0'	0.0		NA	Light reddish to light tan. Fine to medium sub-rounded sand with red varves throughout sample. Some sub-rounded gravel. 6" gravel layer at -26.5 bgs. Unsaturated.

Signature: _____ Date: _____

ERM NE

520 Broad Hollow Road, Suite 210, Melville, NY 11747

BORING LOG

Boring Number: SB-04

Project Name & Location: NYSDEC Glen Head Groundwater Plume	Project Number: 30800	Date & Time Started: 12/1/2005	
		Date & Time Completed: 12/1/2005	
Drilling Company: Delta Well and Pump, Inc.	Foreman: Jim Pedersen	Sampler(s): **Ron Taylor**	Sampler Hammer: GeoProbe / Drop:
Drilling Equipment: GeoProbe	Method: Direct Push	Elevation & Datum:	Completion Depth: 32' / Rock Depth: NA
Bit Size(s): GeoProbe	Core Barrel(s): 2"x 4'	Geologist(s): **Ron Taylor**	

DEPTH (ft below grade)	SAMPLES: Sample Number	Recovery (feet)	FID/PID (ppm)	Fluoro-scope	USCS/ MUNSELL COLOR CHART	SOIL DESCRIPTION
	LOCATION:					SURFACE DESCRIPTION:
0 to 4		4.0'	0.00		NA	Fill material
4 to 8		4.0'	0.00		NA	Fill Material to -6.5 bgs. -6.5 bgs to -7.25 bgs: Light reddish brown with Fine to Coarse sub-rounded sands and gravels. Little sub-rounded gravels. -7.25 bgs to -7.75 bgs: Dark Brown to Light reddish brown Fine to Medium sub-rounded sands/gravels
8 to 12		2.5'	0.00		NA	Dark Brown at ~ -9 bgs to Light Tan at -12 bgs. Fine to coarse sub rounded sands/clays/gravels and lithic fragments. Little sub-rounded gravels throughout sample. Sands are fining downward. Unsaturated.
12 to 16		3.5'	0.00		NA	Sample -12 to -14 bgs: Dark Brown with fine to medium sub-rounded sands. Some sub-rounded gravels. -14 to -16 bgs: -14 bgs starts natural formation. Light Tan with fine to coarse sub-rounded sands. Abundant sub-rounded gravels. Unsaturated.
16 to 20		4.0'	0.00		NA	Sample -16 to -17.5 bgs: Dark Tan with oxidation staining. Fine to coarse sub-rounded sands/gravels. Some sub-rounded gravels. -17.5 to 18.75 bgs: Light Tan with oxidation varves. Fine to coarse sub-rounded sands. Mainly small sub-rounded gravels starting at -17.5 bgs.
20 to 24		2.5'	0.00		NA	Sample -21.5 to -22 bgs has Black staining. Fine to medium sub-rounded sands with no gravel. -22 to -24 bgs: Light Tan with fine to coarse sub-rounded sub-angular sands. Some sub-rounded gravels. Unsat.
24 to 28		2.5'	0.00		NA	Light Tan with fine to medium sub-rounded sands. Little sub-rounded gravels/dropstones.
28 to 32		3.75'	0.00		NA	Light Tan with fine to medium sub-rounded sands. Little sub-rounded gravels. Moist and fining downward.

Signature: _____ Date: _____

ERM NE

520 Broad Hollow Road, Suite 210, Melville, NY 11747

BORING LOG

Boring Number: SB-05

Project Name & Location: NYSDEC Glen Head Groundwater Plume	Project Number: 30800	Date & Time Started: 11/30/2005	
		Date & Time Completed: 11/30/2005	
Drilling Company: Delta Well and Pump, Inc.	Foreman: Jim Pedersen	Sampler(s): Ron Taylor	Sampler Hammer: Donut Hammer / Drop: 140 lbs.
Drilling Equipment: Tripod Split Spoon	Method: Direct Push	Elevation & Datum	Completion Depth: 32' / Rock Depth: NA
Bit Size(s): GeoProbe	Core Barrel(s): 2"x 4'	Geologist(s): Michael Mendes and Ron Taylor	

DEPTH (ft below grade)	SAMPLES: Sample Number	Recovery (feet)	FID/ PID (ppm)	Fluoro-scope	USCS/ MUNSELL COLOR CHART	SOIL DESCRIPTION
	LOCATION:					SURFACE DESCRIPTION:
0 to 4		1.0'	0.00		NA	Sample 0 to -2 bgs: Brown topsoil. Fine to medium sand. No staining or odors. Sample -2 to -4 bgs: 1' of recovery. No evidence of staining.
4 to 8		0.00'	0.00		NA	No recovery
8 to 12		1.0'	0.00		NA	Sample -8 to -10 bgs: Brown. Medium to coarse sand and gravel. Wet. Sample -10 to -12 bgs: Brown. Medium to coarse sand and gravel. Wet with no odors. No staining.
12 to 16		4.0	0.00		NA	Sample -12 to -14 bgs: Brown. Medium to coarse sand and gravel. Some trace silts, no odor or staining. -14 to -16 bgs: Brown. Medium to coarse sand and gravel. Some trace silts, no odor or staining. Soil collapsing in hole. Water was between pods at -12 bgs.

Signature: _____ Date: _____

ERM NE

520 Broad Hollow Road, Suite 210, Melville, NY 11747

BORING LOG

Boring Number: SB-06

Project Name & Location	Project Number	Date & Time Started:	12/1/2005	
NYSDEC Glen Head Groundwater Plume	30800	Date & Time Completed:	12/1/2005	
Drilling Company	Foreman	Sampler(s)	Sampler Hammer	Drop
Delta Well and Pump, Inc.	Jim Pedersen	Ron Taylor	GeoProbe	NA
Drilling Equipment	Method	Elevation & Datum	Completion Depth	Rock Depth
GeoProbe	Direct Push		32'	NA
Bit Size(s)	Core Barrel(s)	Geologist(s)		
GeoProbe	2"x 4'	Ron Taylor		

DEPTH (ft below grade)	SAMPLES: Sample Number	Recovery (feet)	FID/ PID (ppm)	Fluoro-scope	USCS/ MUNSELL COLOR CHART	SOIL DESCRIPTION
	LOCATION:					SURFACE DESCRIPTION:
0 to 4		2'	0.00		NA	Sample from -1 to -4 bgs: Light Tan to Light Brownish. Fine to medium sub-rounded sands. Some sub-rounded gravels.
4 to 8		2.5	0.00		NA	Sample -5.5 to -6.5 bgs: Dark Brown with fine to medium sub-rounded sands and lithics. Some sub-rounded gravels. -6.5 to -8.0 bgs: Dark to light Tan. Fine to medium sub-rounded sands. Little sub-rounded gravels. Moist.
8 to 12		2.5'	0.00		NA	Sample -9 to -10 bgs: Dark Reddish Brown. Fine to medium sub-rounded sand. No Gravel. -10 to -12 bgs: Light Tan Fine to coarse sub-rounded sands. Some sub-rounded gravels. Moist
12 to 16		3.5'	0.00		NA	Sample -12 to -13.5 bgs: Light Tan, Fine to medium sub-rounded sand. Sample -13.5 to -14 bgs: Dark Staining. Fine to medium sub-rounded sand. Very Little gravel. -14 to -16 bgs. Light Tan with light brown at 15.5 bgs. Fine to medium sub-rounded sands and gravels.
16 to 20		3.5'	0.00		NA	Sample -16 to -17.5 bgs: Dark Brown. Fine to medium sub-rounded sands. Little sub-rounded gravels. -17.5 to -18 bgs: Dark Staining. Fine to medium sub-rounded sands. No Gravel. -18 to -20 bgs: Light Tan with red varves. Fine to medium sub-rounded sands. Abundant gravel.
20 to 24		3.5'	0.00		NA	Sample -20 to -22 bgs: Dark Tan. Fine to medium sub-rounded sands. Some sub-rounded gravel. Dark stain at -22 bgs. -22 to -24 bgs: Light Tan with fine to medium sub-rounded sand. Some sub-rounded gravel.
24 to 28		2.5'	0.00		NA	Sample -24 to -28 bgs: Light Tan. Fine to medium sub-rounded sand. Little sub-rounded gravel. Some dropstones. Moist.
28 to 32		3.0'	0.0		NA	Sample -28 to -30.5 bgs: Dark Brown. Fine to medium sub-rounded sand. Little sub-rounded gravel. -30.5 to -32 bgs: Light Tan. Fine to medium sub-rounded sand. Little sub-rounded gravel. Moist.

Signature: _____ Date: _____

ERM NE

520 Broad Hollow Road, Suite 210, Melville, NY 11747

BORING LOG

ERM

Boring Number: SB-07

Project Name & Location: NYSDEC Glen Head Groundwater Plume	Project Number: 30800	Date & Time Started: 12/2/2005			
		Date & Time Completed: 12/2/2005			
Drilling Company: Delta Well and Pump, Inc.	Foreman: Jim Pedersen	Sampler(s): Ron Taylor	Sampler Hammer: GeoProbe	Drop: NA	
Drilling Equipment: GeoProbe	Method: Direct Push	Elevation & Datum	Completion Depth: 32'	Rock Depth: NA	
Bit Size(s): GeoProbe	Core Barrel(s): 2"x 4'	Geologist(s): Ron Taylor			

DEPTH (ft below grade)	SAMPLES: Sample Number	Recovery (feet)	FID/ PID (ppm)	Fluoro-scope	USCS/ MUNSELL COLOR CHART	SOIL DESCRIPTION
	LOCATION:					SURFACE DESCRIPTION:
0 to 4		2.5"	0.00		NA	Sample 0 to -1 bgs: Black Asphalt fill. -1.5 to -3 bgs: Light Br. Sand/silt clay fill. -3 to -4 bgs: Dark Brown sand/silt/clay fill.
4 to 8		3.0'	0.00		NA	Dark Tan (4') to Light Tan (8'). Fine to medium sub-rounded sand. Little sub-rounded gravels. Moist. Mostly fill next to storm drain. Black staining at -4.25 bgs.
8 to 12		4.0'	0.00		NA	Light Tan. Fine to medium sub-rounded sand. Little sub-rounded gravel. Saturated. Dark staining at ~ -9 bgs.
12 to 16		4.0'	0.00		NA	Sample -12 to -13 bgs: Dark Tan backfill. Fine to medium sand and clay. Saturated. -13 to -14 bgs: Gravel layer and biotite schist debris. Sample -14 to -15 bgs: Dark Tan backfill. Fine to medium sub-rounded sand/silt/clay. -15 to -16 bgs: Lt. Tan. Fine to coarse sand and gravel.
16 to 20		2.5'	0.00		NA	Light Tan. Fine to medium sub-rounded sand. Some sub-rounded gravels. Red varves throughout sample. Top -.75 bgs is clay (-16'). Biotite layer at -17 to -17.5 bgs.
20 to 24		3.0'	0.00		NA	Light Tan. Fine to medium sub-rounded sand. Some sub-rounded gravel. Moist. Red varves throughout 3' sample. Abundant amount of lithic fragments.
24 to 28		2.5'	0.00		NA	Light Tan. Fine to coarse sub-rounded sand /silts/clays with lithic fragments. Abundant sub-rounded gravels. Moist. Variations to reddish brown varves throughout sample.
28 to 32		2.5'	0.0		NA	Light Tan. Fine to medium sub-rounded sands/silts/clays. Some sub-rounded gravels. Moist.

Signature: _____ Date: _____

ERM NE

520 Broad Hollow Road, Suite 210, Melville, NY 11747

BORING LOG

Boring Number: SB-08

Project Name & Location	Project Number	Date & Time Started:	12/2/2005		
NYSDEC Glen Head Groundwater Plume	30800	Date & Time Completed:	12/2/2005		
Drilling Company	Foreman	Sampler(s)	Sampler Hammer	Drop	
Delta Well and Pump, Inc.	Jim Pedersen	Ron Taylor	GeoProbe		NA
Drilling Equipment	Method	Elevation & Datum	Completion Depth	Rock Depth	
GeoProbe	Direct Push		32'		NA
Bit Size(s)	Core Barrel(s)	Geologist(s)			
GeoProbe	2"x 4'	Ron Taylor			

DEPTH (ft below grade)	SAMPLES: Sample Number	Recovery (feet)	FID/ PID (ppm)	Fluoro-scope	USCS/ MUNSELL COLOR CHART	SOIL DESCRIPTION
	LOCATION:					SURFACE DESCRIPTION:
0 to 4		2.5'	0.00		NA	Sample 0 to -2 bgs: Black organics. Fine sand/silts/clays. -2 to -3 bgs: Light Brown. Fine sub-rounded sands/silts/clays with little sub-rounded gravel. -3 to -4 bgs: Dark Red at -3.1 bgs and continues to black organics. Fine sand/silt/clays
4 to 8		4.0'	0.00		NA	Sample -4 to -5 bgs: Black organics. Fine sand/silt/clays. -5 to -8 bgs: Light Brown. Fine grained sand/silt/clays. No gravel. Saturated.
8 to 12		4.0'	0.00		NA	Sample -8 to -8 bgs: Light Brown. Fine to medium sub-rounded sand silt/clay. Saturated. No gravel. -9 to -9.25 bgs: Dark Black. Fine to medium sub-rounded sand/silt/clay. Little sub-rounded gravel. Saturated. -9.25 to -12 bgs: Lt. Br. Fine to med. Sand/silt/clay. Some gr.
12 to 16		3.75'	0.00		NA	Light Brown. Fine to medium sub-rounded sand/silt/clay. Some sub-rounded gravel. Granite from -14.5 to -15 bgs. Saturated.
16 to 20		3.5'	0.00		NA	Sample -16 to -19.5 bgs: Dark Tan. Fine to medium sub-rounded sand and silt. Some sub-rounded gravel. Saturated. -19.5 to -20 bgs: Dark Red. Fine to coarse sub-rounded sand/silt/clay. Abundant sub-rounded gravel. Moist.
20 to 24		3.5'	0.00		NA	Sample -20.5 to -23 bgs: Light Brown. Fine to medium sub-rounded sand/silt/clay. Little sub-rounded gravel. Saturated. -23 to -24 bgs: Light Tan/reddish. Fine to coarse sub-rounded sand/silt. Some sub-rounded gravel. Moist.
24 to 28		2.5'	0.00		NA	Light Tan. Fine to medium sub-rounded sand. Abundant sub-rounded gravel.
28 to 32		2.5'	0.0		NA	Sample -28.5 to -30.5 bgs: Dark Tan. Fine to medium sub-rounded sand. Little sub-rounded gravel. Saturated. -30.5 to -32 bgs: Light Tan/red. Fine to medium sub-rounded gravel. Saturated.

Signature: _____ Date: _____

ERM Inc.

WELL : SGI-01-012

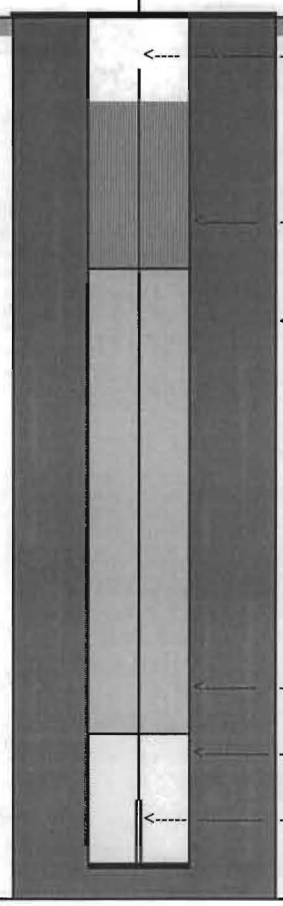
520 Broad Hollow Rd. Ste. 210 Melville, NY 11747

SOIL VAPOR IMPLANT CONSTRUCTION LOG

Project Name & Location	Project No.	Water Level(s) (ft below top of PVC casing)			Site Elevation Datum (feet)
NYSDEC Glen Head	0030800				
Drilling Company	Foreman	Date	Time	Level (feet)	Ground Elevation (feet)
EPI	Joe Abell				130.48
Surveyor		NA	NA	NA	Top of Protective Steel Cap Elevation (feet)
A.J.DeBruin and Sons					
Date and Time of Completion	Geologist				Top of Riser Pipe Elevation (feet)
1/5/2006 16:32	Ron Taylor				

Generalized Soil Description	**Depth	**Elevation
	0.00	130.5
	0.50	129.98
	5.99	124.49
	9.00	121.48
	12.00	118.48
	12.00	

CONSTRUCTION DETAILS



PROTECTIVE STEEL CAP FLUSH WITH GROUND

GROUND SURFACE

--- TEFLON LINED TUBING WITHIN 3 INCH MANHOLE

--- BENTONITE SEAL

<----FORMATION

--- WASHED SAND

---- GLASS BEADS

TYPE: Rounded glass beads

----SOIL VAPOR IMPLANT

TYPE: Stainless Steel

BOTTOM OF BOREHOLE

REMARKS SVI-01-012 was reinstalled at 7 School Street. Original point was not functional.

* Elevation (feet) above mean sea level unless noted ** Depth in feet below ground surface

ERM Inc.

WELL : SGI-01-035

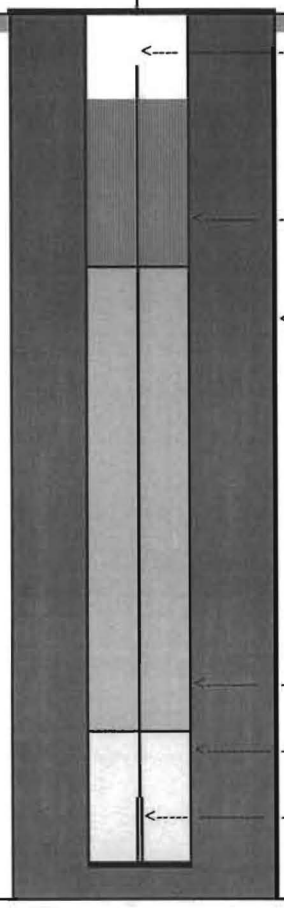
520 Broad Hollow Rd. Ste. 210 Melville, NY 11747

SOIL VAPOR IMPLANT CONSTRUCTION LOG

Project Name & Location	Project No.	Water Level(s) (ft below top of PVC casing)			Site Elevation Datum (feet)
NYSDEC Glen Head	0030800				
Drilling Company	Foreman	Date	Time	Level (feet)	Ground Elevation (feet)
EPI	Joe Abell				130.48
Surveyor		NA	NA	NA	Top of Protective Steel Cap Elevation (feet)
A.J.DeBruin and Sons					
Date and Time of Completion	Geologist				Top of Riser Pipe Elevation (feet)
1/5/2006 15:33	Ron Taylor				

Generalized Soil Description	**Depth	**Elevation
	0.00	130.5
	0.50	129.98
	28.00	102.48
	32.00	98.48
	35.00	95.48
	35.00	

CONSTRUCTION DETAILS



PROTECTIVE STEEL CAP FLUSH WITH GROUND

GROUND SURFACE

<---- --- TEFLON LINED TUBING WITHIN 3 INCH MANHOLE

--- BENTONITE SEAL

<----FORMATION

--- WASHED SAND

---- GLASS BEADS

TYPE: Rounded glass beads

<----- ---- SOIL VAPOR IMPLANT

TYPE: Stainless Steel

BOTTOM OF BOREHOLE

REMARKS _____

* Elevation (feet) above mean sea level unless noted ** Depth in feet below ground surface

ERM Inc.

WELL : SGI-01-065

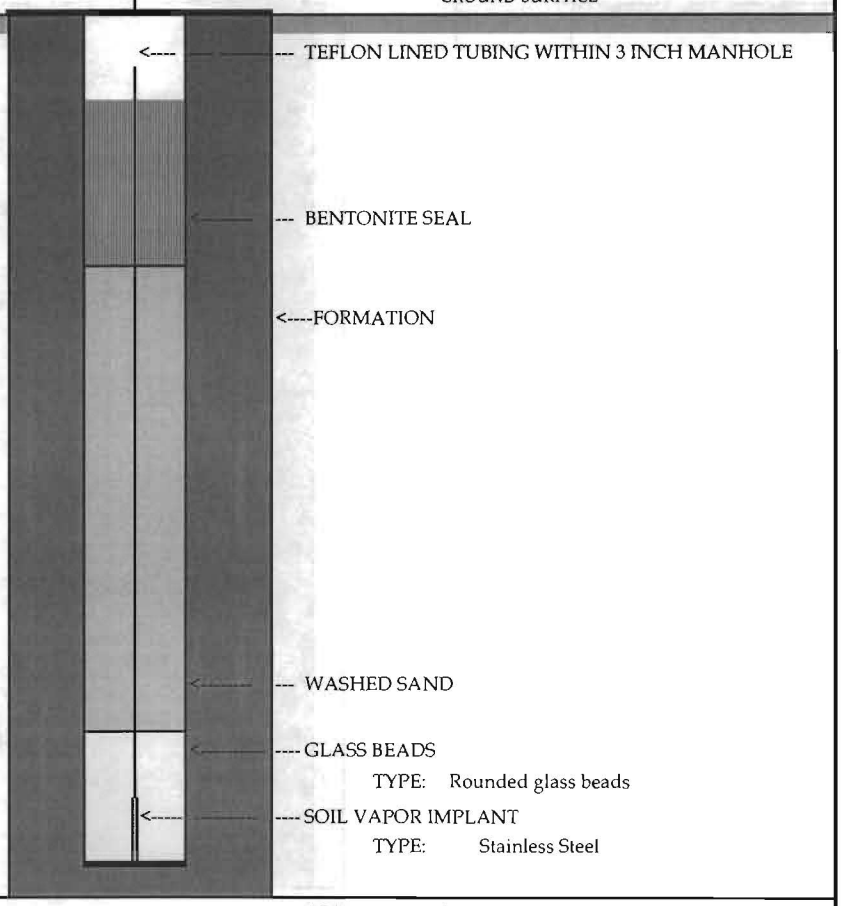
520 Broad Hollow Rd. Ste. 210 Melville, NY 11747

SOIL VAPOR IMPLANT CONSTRUCTION LOG

Project Name & Location	Project No.	Water Level(s) (ft below top of PVC casing)			Site Elevation Datum (feet)
NYSDEC Glen Head	0030800				
Drilling Company	Foreman	Date	Time	Level (feet)	Ground Elevation (feet)
EPI	Joe Abell				130.59
Surveyor		NA	NA	NA	Top of Protective Steel Cap Elevation (feet)
A.J.DeBruin and Sons					
Date and Time of Completion	Geologist				Top of Riser Pipe Elevation (feet)
1/4/2006 17:00	Ron Taylor				

Generalized Soil Description	**Depth	**Elevation
	130.59	130.6
	0.50	130.09
	56.99	73.60
	62.00	68.59
	65.00	65.59
	65.00	

CONSTRUCTION DETAILS



REMARKS _____

* Elevation (feet) above mean sea level unless noted ** Depth in feet below ground surface

ERM Inc.

WELL : SGI-02-012

520 Broad Hollow Rd. Ste. 210 Melville, NY 11747

SOIL VAPOR IMPLANT CONSTRUCTION LOG

Project Name & Location	Project No.	Water Level(s) (ft below top of PVC casing)			Site Elevation Datum (feet)
NYSDEC Glen Head	0030800				
Drilling Company	Foreman	Date	Time	Level (feet)	Ground Elevation (feet)
EPI	Joe Abell				175.14
Surveyor		NA	NA	NA	Top of Protective Steel Cap Elevation (feet)
A.J.DeBruin and Sons					
Date and Time of Completion	Geologist				Top of Riser Pipe Elevation (feet)
1/4/2006 8:10	Ron Taylor				

Generalized Soil Description	**Depth	**Elevation	CONSTRUCTION DETAILS
			PROTECTIVE STEEL CAP FLUSH WITH GROUND
	175.14	175.1	GROUND SURFACE
			<---- --- TEFLON LINED TUBING WITHIN 3 INCH MANHOLE
	0.50	174.64	
			--- BENTONITE SEAL
	5.00	170.14	
			<----FORMATION
			--- WASHED SAND
	9.00	166.14	
			----GLASS BEADS
			TYPE: Rounded glass beads
			<---- ----SOIL VAPOR IMPLANT
	12.00	163.14	TYPE: Stainless Steel
	12.00		BOTTOM OF BOREHOLE

REMARKS _____

_____

_____

* Elevation (feet) above mean sea level unless noted ** Depth in feet below ground surface

ERM Inc.

WELL : SGI-02-060

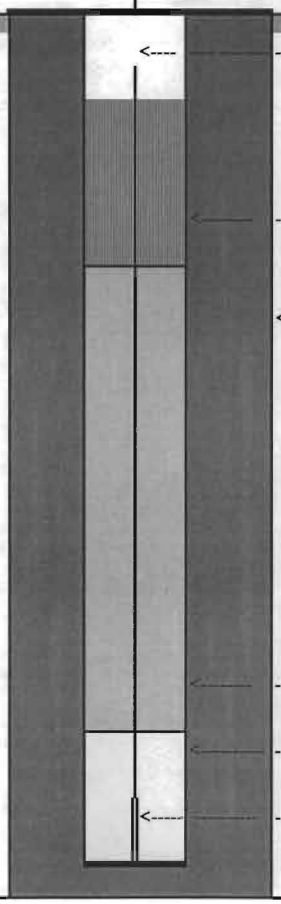
520 Broad Hollow Rd. Ste. 210 Melville, NY 11747

SOIL VAPOR IMPLANT CONSTRUCTION LOG

Project Name & Location	Project No.	Water Level(s) (ft below top of PVC casing)			Site Elevation Datum (feet)
NYSDEC Glen Head	0030800				
Drilling Company	Foreman	Date	Time	Level (feet)	Ground Elevation (feet)
EPI	Joe Abell				175.45
Surveyor		NA	NA	NA	Top of Protective Steel Cap Elevation (feet)
A.J.DeBruin and Sons					
Date and Time of Completion	Geologist				Top of Riser Pipe Elevation (feet)
1/4/2006 10:03	Ron Taylor				

Generalized Soil Description	**Depth	**Elevation
	175.45	175.5
	0.50	174.95
	5.00	170.45
	57.00	118.45
	60.00	115.45
	60.00	

CONSTRUCTION DETAILS



PROTECTIVE STEEL CAP FLUSH WITH GROUND

GROUND SURFACE

<---- --- TEFLON LINED TUBING WITHIN 3 INCH MANHOLE

--- BENTONITE SEAL

<----FORMATION

--- WASHED SAND

---- GLASS BEADS

TYPE: Rounded glass beads

<---- ---- SOIL VAPOR IMPLANT

TYPE: Stainless Steel

BOTTOM OF BOREHOLE

REMARKS _____

* Elevation (feet) above mean sea level unless noted ** Depth in feet below ground surface

ERM Inc.

WELL : SGI-01-100

520 Broad Hollow Rd. Ste. 210 Melville, NY 11747

SOIL VAPOR IMPLANT CONSTRUCTION LOG

Project Name & Location	Project No.	Water Level(s) (ft below top of PVC casing)			Site Elevation Datum (feet)
NYSDEC Glen Head	0030800				
Drilling Company	Foreman	Date	Time	Level (feet)	Ground Elevation (feet)
EPI	Joe Abell				175.77
Surveyor		NA	NA	NA	Top of Protective Steel Cap Elevation (feet)
A.J.DeBruin and Sons					
Date and Time of Completion	Geologist				Top of Riser Pipe Elevation (feet)
1/4/06 1556	Ron Taylor				

Generalized Soil Description	**Depth	**Elevation	CONSTRUCTION DETAILS
			PROTECTIVE STEEL CAP FLUSH WITH GROUND
	175.77	175.8	GROUND SURFACE
			<---- --- TEFLON LINED TUBING WITHIN 3 INCH MANHOLE
	0.50	175.27	
			--- BENTONITE SEAL
	5.00	170.77	
			<----FORMATION
			--- WASHED SAND
	97.00	78.77	
			----GLASS BEADS
			TYPE: Rounded glass beads
			<----- ----SOIL VAPOR IMPLANT
	100.00	75.77	TYPE: Stainless Steel
	100.00		BOTTOM OF BOREHOLE

REMARKS _____

_____

_____

* Elevation (feet) above mean sea level unless noted ** Depth in feet below ground surface

ERM Inc.

WELL : SGI-03-012

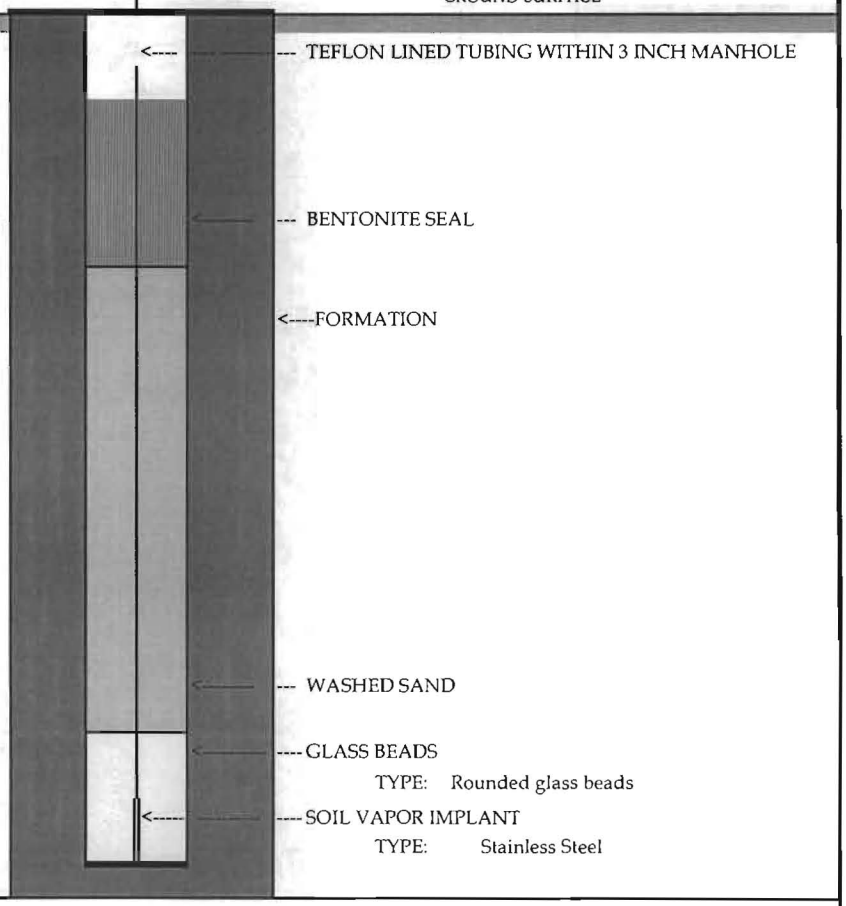
520 Broad Hollow Rd. Ste. 210 Melville, NY 11747

SOIL VAPOR IMPLANT CONSTRUCTION LOG

Project Name & Location	Project No.	Water Level(s) (ft below top of PVC casing)			Site Elevation Datum (feet)
NYSDEC Glen Head	0030800				
Drilling Company	Foreman	Date	Time	Level (feet)	Ground Elevation (feet)
EPI	Joe Abell				165.25
Surveyor		NA	NA	NA	Top of Protective Steel Cap Elevation (feet)
A.J.DeBruin and Sons					
Date and Time of Completion	Geologist				Top of Riser Pipe Elevation (feet)
1/31/2006	Ron Taylor				

Generalized Soil Description	**Depth	**Elevation
	165.25	165.3
	0.50	164.75
	5.99	159.26
	9.00	156.25
	12.00	153.25
	12.00	

CONSTRUCTION DETAILS



REMARKS _____

* Elevation (feet) above mean sea level unless noted ** Depth in feet below ground surface

ERM Inc.

WELL : SGI-03-060

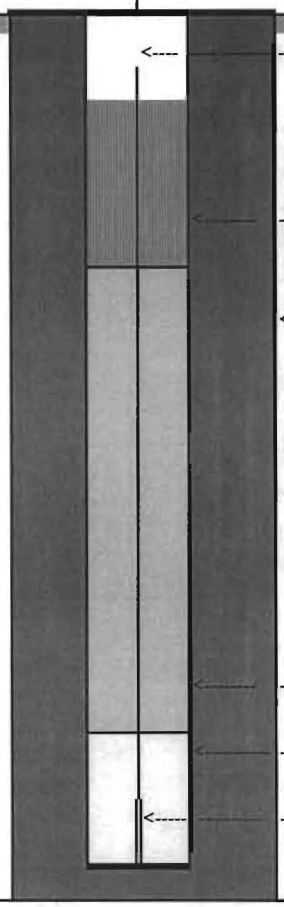
520 Broad Hollow Rd. Ste. 210 Melville, NY 11747

SOIL VAPOR IMPLANT CONSTRUCTION LOG

Project Name & Location	Project No.	Water Level(s) (ft below top of PVC casing)			Site Elevation Datum (feet)
NYSDEC Glen Head	0030800				
Drilling Company	Foreman	Date	Time	Level (feet)	Ground Elevation (feet)
EPI	Joe Abell				165.31
Surveyor		NA	NA	NA	Top of Protective Steel Cap Elevation (feet)
A.J.DeBruin and Sons					
Date and Time of Completion	Geologist				Top of Riser Pipe Elevation (feet)
1/31/2006	Ron Taylor				

Generalized Soil Description	**Depth	**Elevation
	165.31	165.3
	0.50	164.81
	5.00	160.31
	57.00	108.31
	60.00	105.31
	60.00	

CONSTRUCTION DETAILS



PROTECTIVE STEEL CAP FLUSH WITH GROUND

GROUND SURFACE

<---- --- TEFLON LINED TUBING WITHIN 3 INCH MANHOLE

--- BENTONITE SEAL

<----FORMATION

--- WASHED SAND

---- GLASS BEADS

TYPE: Rounded glass beads

<---- ----SOIL VAPOR IMPLANT

TYPE: Stainless Steel

BOTTOM OF BOREHOLE

REMARKS _____

* Elevation (feet) above mean sea level unless noted ** Depth in feet below ground surface

ERM Inc.

WELL : SGI-03-100

520 Broad Hollow Rd. Ste. 210 Melville, NY 11747

SOIL VAPOR IMPLANT CONSTRUCTION LOG

Project Name & Location	Project No.	Water Level(s) (ft below top of PVC casing)			Site Elevation Datum (feet)
NYSDEC Glen Head	0030800				
Drilling Company	Foreman	Date	Time	Level (feet)	Ground Elevation (feet)
EPI	Joe Abell				165.33
Surveyor		NA	NA	NA	Top of Protective Steel Cap Elevation (feet)
A.J.DeBruin and Sons					
Date and Time of Completion	Geologist				Top of Riser Pipe Elevation (feet)
1/31/2006	Ron Taylor				

Generalized Soil Description	**Depth	**Elevation	CONSTRUCTION DETAILS
			PROTECTIVE STEEL CAP FLUSH WITH GROUND
	165.33	165.3	GROUND SURFACE
			<---- --- TEFLON LINED TUBING WITHIN 3 INCH MANHOLE
	0.50	164.83	
			--- BENTONITE SEAL
	5.00	160.33	
			<----FORMATION
			--- WASHED SAND
	97.00	68.33	
			---- GLASS BEADS
			TYPE: Rounded glass beads
			<------ ----SOIL VAPOR IMPLANT
	100.00	65.33	TYPE: Stainless Steel
	100.00		BOTTOM OF BOREHOLE

REMARKS _____

* Elevation (feet) above mean sea level unless noted ** Depth in feet below ground surface

3653

EarthCare
North Star Waste Co.

Making Water Clean Again

Site # 3121
WO. # 552684
Date: 5-23-06 PO#

972 Nicolls Road • Deer Park, NY 11729 • (631) 586-0002 • Fax (631) 586-0530

Service Address

Customer Name: Metro Environmental
Address: 1 Robert Lane
City/State: Glen Head, NY Zip
Contact:

Billing Address

Customer Name: Metro Environmental
Address: 690-A N. Queens Ave.
City/State: Lindenhurst, NY Zip

Time Record:

Departure
Arrival 2:15
Departure from Customer 2:??
Arrival at Disposal Site
Departure from Disposal Site
Total Time
Reason for Delay

Invoice Data

Gal. 250 gal @
Tons/Yards @
Jet / Vactor Rate Hrs.
Gross Weight Lbs.
Tare Weight Lbs.
Net Weight Lbs.
Labor
Miscellaneous
EMERGENCY CHARGE

Sub Total
Tax
Total

Waste Type

☐ Hazard Class or Division
I.D. Number
Packing Group Waste No.

☐ Raw Sewage ☐ Grease Trap
☐ Sewage Sludge ☐ Alum
☐ Leachate ☐ Industrial
☐ Septic Tank/Cesspool ☐ Wet Well / Ejector Pit
☐ Holding Tank ☑ Other Lubrication

Customer's Signature: John Mulcox
Driver/Helper Name:

Customer Disclosure: In the event of payment delinquency, EARTHCARE is a consumer reporting company, in accordance with the Fair Debt Reporting and Fair Debt Collection Practices. Reasonable costs associated with the collection of past due or delinquent accounts are the full responsibility of the customer..

Comments / Notes: Pumped out of 5 (550-) barrels 250 gals

Disposal Ticket # Manifest #