Site Characterization Report

Elks Plaza LLC - Site# 130193
157-189 West Merrick Road
Freeport, New York

10/20/09

Prepared For:

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Submitted To:

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October 2009

ELKS PLAZA, LLC.
157 - 189 West Merrick Road, Freeport, New York
Site# 130193

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SECTION 1 - INTRODUCTION

This Site Characterization Report (SCR) was prepared by Preferred Environmental Services (Preferred) on behalf of Elks Plaza LLC. This SCR has been prepared in accordance with the requirements set forth in the Order on Consent and Administrative Settlement, Index #W1-1120-08-04, between by the New York State Department of Environmental Conservation (NYSDEC) and Elks Plaza LLC signed and executed on September 6, 2008.

This Site Characterization Report follows the guidelines set forth in the "*Draft Division of Environmental Remediation (DER)-10 Technical Guidance for Site Investigation and Remediation, dated December 2002*". The Site Characterization performed consisted of a public file records search, site survey (as part of Records Research Report), collection and analysis of subsurface soil samples, sub-slab, indoor air and soil vapor sampling, vertical profiling of groundwater quality via the installation of temporary groundwater monitoring wells and private water supply analysis. The Records Research Report was submitted as a stand alone document in September 2008. Results of the Records Research Report are also detailed in the operational history and previous investigation sections of this report. This report contains the following sections:

- **Section 1 – Introduction** - This section presents the Site background and history, location, operational and remedial history, potential sources, as well as the project objectives.
- **Section 2 – Physical Setting** - This section presents the physical conditions of the Site and surroundings, including a general description of soils, geology, hydrogeology, and topography, as well as the groundwater flow direction.
- **Section 3 – Field Investigation** - This section provides the details of the investigation.
- **Section 4 – Site Characterization Analytical Results** - This section presents and evaluates the analytical results of the soil, groundwater, and soil vapor samples collected at the Site in comparison to acceptable New York State criteria.
- **Section 5 – Summary and Conclusions** - This section presents the conclusions based upon the analytical results of the Site Investigation and presents recommendations.

1.1 Site Description and Background

Elks Plaza is a retail shopping plaza (Subject Property) designated with street addresses between 157, 169-187 and 189 West Merrick Road, Village of Freeport, New York. The areal extent of the property is recorded as approximately 3.41 acres. The development at the subject property contains three (3) one-story commercial, masonry and steel buildings located at the southern side of West Merrick Road, immediately south of its intersection with South Bergen Place (**Figures 1 and 2**).

The multi-tenant building located at 165 through 187 West Merrick Road was constructed in 1984, is an "L"-shaped building which has an approximate footprint of 42,876 square feet; and is currently occupied with 14 retail shopping-tenants with one vacant tenant space. The building located at 189 West Merrick Road was constructed in 1984, has an approximate footprint of 7,120 square feet; and is currently used as a bank branch (Bank of America). The building located at 157 West Merrick Road was constructed in 1984, has an approximate footprint of 3,713 square feet; and is currently used as a food franchise (McDonald's).

The three buildings are serviced by the municipal sewer system and each has a roof-mounted natural gas-fired HVAC units. The land surface area of the subject property consists of asphalt parking areas with limited vegetated landscaping. Twenty (20) Class V underground injection well (UIW) storm water drywells are present on site that receive storm water runoff. The subject property exhibits generally low topographic relief (less than three percent slopes).

1.2 Operational History

Review of the available historical records indicates that the subject property was initially developed with residential dwellings and sheds from at least 1910 to 1925. From 1928 to 1980 the subject property maintained a structure utilized by the Elks Club. The three existing buildings were constructed in 1984.

A more detailed description obtained from a review of available Sanborn Maps for the subject property revealed that in 1910, 1917, 1925, the property maintained a dwelling on the northern portion of the Site. Six structures labeled as a shed, carriage house, and a chicken coop are depicted on the central portion of the Site. In 1928, 1941, 1951, and 1961, the subject property is depicted as maintaining an Elks Club House and a private automobile garage. In 1969 the subject property is depicted as maintaining an Elks Club House. In 1984, the subject property is depicted as maintaining three commercial structures. The development is labeled as maintaining Elks Plaza Shopping Center.

Based upon observations made during a September 19, 2008 site inspection conducted by Preferred Environmental Services, the current tenants of the three buildings are depicted within **Figure 2**.

The surrounding properties were also identified immediately adjacent to the Subject Property as follows:

North:	West Merrick Road, Residential Apt Buildings
East:	Residential Apartments, Professional Building
South:	Residential Apartments, Commercial Bld, Residential Home
West:	Commercial Building and school

Review of historical documentation reveals that the retail property had two main historic uses of potential environmental concern: dry-cleaning and printing operations at 171, 179A, and 181Tenant units. The historic tenant units, occupants, length of occupancy is depicted on Figure 3. Detailed history of occupancy of these units was provided in the Record Research Report previously provided to NYSDEC. As only the 165-187 West Merrick Road Building has tenants of potential environmental concern, the information provided in this site characterization work plan is pertinent to only that building.

1.3 Previous Environmental Investigations

Summaries of existing historic investigations or assessments performed at the Subject Property were previously provided in the Record Research Report dated September 2008. Two main studies were available: 1) a Phase I Environmental Site Assessment (ESA) performed for the subject property dated October 16, 2006; and 2) a Phase II subsurface investigation completed in response to recommendations established in the Phase I ESA. The findings of these studies are summarized below:

Phase I Environmental Site Assessment (ESA)

A Phase I Environmental Site Assessment titled *"Environmental Site Assessment; Phase I Investigation"* was performed at 157-189 Merrick Road, Freeport, New York for the purpose of identifying Potential Environmental Condition (PECs) or Recognized Environmental Conditions (RECs). The Phase I ESA was conducted by Impact Environmental and prepared for Citibank, N.A. in 2006, with a report date of October 16, 2006.

At the time of the Phase I ESA, the subject property consisted of the current development - three one-story masonry and steel buildings with addresses of 157, 169-187 and 189 Merrick Road. Eighteen various tenants occupied the existing buildings at the time of the Phase I ESA. The Phase I ESA documented several recognized environmental conditions due to historical operations within Tenant units 171, 179A and 181 of the plaza. Due to the findings of the Phase I ESA, a Phase II ESA was recommended be performed to investigate subsurface conditions for environmental impacts.

Phase II Environmental Site Assessment

A Phase II Environmental Site Assessment was performed by Associated Environmental Services, Ltd. (Associated) in November and December of 2006 at 157-189 Merrick Road, Freeport, New York for the purpose of investigating soil and groundwater conditions at specific areas of recognized environmental conditions identified in the Phase I ESA. The Phase II ESA field activities were conducted on November 13, 2006 and December 6, 2006 with a report issued on December 18, 2006.

Soil and groundwater samples were collected in locations where the prior Recognized Environmental Conditions were noted within the Phase I ESA. The subsurface investigation consisted of a series of soil and groundwater sampling locations both upgradient and downgradient from potential contaminant sources. Five soil samples collected from ten to twelve feet below grade surface (bgs) and six groundwater samples were submitted for laboratory analysis for Volatile Organic Compounds (VOCs) via EPA Method 8260.

Laboratory analysis of the soil samples revealed no actionable impacts to subsurface soils from historic operations. Two groundwater samples, designated B-2 and B-5 in the Phase II ESA, located to the south and downgradient of the Laundromat (south of the former dry cleaners in Tenant unit 181) contained concentrations of cis-1,2-Dichloroethene (cis-12 DCE), Tetrachloroethene (PCE), and Trichloroethene (TCE) above NYSDEC Class GA Groundwater Standards and Guidance Values (SGVs)[1]. Subsequent to the review of analytical results, NYSDEC Spill No. 06-10549 was assigned to the subject property. The spill was closed in December of 2006 as the case was re-assigned to the Hazardous Waste Remediation Unit.

1. 4 Site Characterization Objectives

Per the Order on Consent, the objective of this project was for the expedited investigation of the Subject Property and to identify the need for remediation, if deemed necessary.

Task 1 – Work Plan Development

A site-specific work plan including a site specific Quality Assurance Project Plan (QAPP) and Health and Safety Plan (HASP) were developed, submitted in February 2009, and approved by the NYSDEC.

Task 2 – Records Research Report

Pertinent public record files were identified and reviewed to determine the existence of site plans that indicate the presence of significant environmental features. Facility occupants were also identified to the extent possible to identify a history of site use and contaminants used/stored on-site. The Record Research Report was provided to NYSDEC as a standalone document, submitted in September 2008.

Task 3 – Field Investigation

The field investigation performed included the characterization of the subsurface soils, underlying groundwater, private supply wells, sub-slab vapors, indoor air and soil vapor at the Subject Property.

[1]As set forth in NYSDEC TOGS 111 reissued June 1998; 2000 and 2004.

SECTION 2 - PHYSICAL SETTING

2.1 Environmental Setting

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

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.

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.

During the Wisconsinan glacial advance, the ice reached a position represented on most of Long Island by the Ronkonkoma terminal moraine. In the latter part of this stage, the ice sheet receded from a point east of Lake Success. This caused the terminal moraine/deposits in Nassau County to form a wide band of irregular topography occupying the northern half of the county, while in adjacent Suffolk County the terminal moraine deposits were far enough apart to be two distinct 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, 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, is 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 interstadial period, marine and/or 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.

Direction and rate of groundwater flow are controlled by the rate and distribution of water entering and leaving the aquifer systems, the geometry of these systems, and the distribution of water transmitting and

storage properties of these aquifer systems. Based upon a projection from review of Nassau County Water Table Maps, local groundwater flow direction in the shallowest aquifer (the Upper Glacial aquifer) is expected to be to the south (either southwest or southeast) dependent upon local discharge patterns to surface water headwater areas. Published literature values for estimated average hydraulic conductivity for the Upper Glacial Aquifer is 270 feet per day horizontal with rates of 27 feet per day for vertical flow.

Groundwater flow at the Subject Property is in Hydrogeologic Zone VII: South Shore Shallow Flow Discharge System. Zone VII is located south of the Magothy recharge zone on the South Shore and discharges to Nassau and western Suffolk South Shore bays where tidal exchange facilitates the dilution and dispersion of contaminants. Zone VII is a shallow flow zone, thus contamination from activities in Zone VII mainly affects the Glacial aquifer.

From inspection it is confirmed that the area encompassing the study site is highly urbanized with surrounding residential, commercially and industrially-developed parcels. Therefore, groundwater in this area generally is vulnerable to potential contamination from this type of land use. Depth to groundwater has been identified during prior environmental assessment to be at a depth of 12 feet below grade surface (bgs). Regional flow direction is toward the southeast. A regional groundwater elevation and flow map is provided as **Figure 3**.

SECTION 3 - FIELD INVESTIGATION

3.1 Field Investigation (Table 1)

The following subsections describe the field investigation that was conducted from April to May, 2009. The investigation was conducted in accordance with the NYSDEC-approved February 2009 Site Characterization Work Plan. The field investigation included the following as further detailed in **Figures 4-7**:

- Conduct of a magnetometer and void survey to identify potential features of concern;
- Sampling of an out-of-service private supply well (Well #1) and the in-service private supply well (Well #2) to ascertain water quality as depicted on **Figure 6**.
- Four (4) borings were advanced as foliows with further detail shown within **Appendix A** and **Figure 4**: adjacent to a drywell structure (SB-1); adjacent to a magnetometer anomaly (SB-2); and former dry-cleaning machine area within Tenant unit 181 (SB-4) and exterior to Tenant unit 171 at an historic dumpster location (SB-3).
- Four (4) soil samples were collected as follows **(Figure 4)**: former dry-cleaning machine area within Tenant unit 181 (SB-4); the former locations of each dumpster used by Tenant units 171 (SB-3) and 181 (SB-1); and storm water drywell structure (D-1).
- Groundwater was sampled at nine (9) locations via temporary monitoring wells as follows **(Figure 4)**: an upgradient location (GW-2); one (1) temporary monitoring well at each of the former dumpster locations for historic dry-cleaning operations (Tenant units 171 (GW-7) and 181 (GW-1)); four (4) temporary monitoring wells installed in a linear transect (GW-3, GW-4, GW-6 and GW-9), including one temporary well adjacent to a suspect drywell (GW-3); and lastly two (2) temporary monitoring wells (GW-5 and GW-8) installed at the downgradient property perimeter. Two groundwater samples were collected from each temporary monitoring well (identified as GW-1 through GW-9) at two vertical sample collection depths, one depth shallow within two feet of the water table surface and the second within ten feet below the water table surface (Tables 3 and 4). An additional water sample was collected from an active septic tank located at the southeast corner (ST-1). A total of twenty-one (21) groundwater/water samples were collected and submitted for laboratory analysis. **Figure 6** displays detailed results for the groundwater samples.
- In order to address the requirement for sub slab vapor, soil vapor, indoor and outdoor air sampling, nine (9) locations interior and exterior of the building were evaluated **(Figure 4)**. This included a sub-slab sample (SS-1) and an indoor air sample (IA-1) collected within former dry cleaning Tenant unit 181. A basement exists below Tenant unit 171 thus preventing such a sample to be collected. Additionally, four (4) soil vapor (SV) and one (1) outdoor air (OA-1) samples were collected along the western and southern boundaries of property.

- Analytical testing for site media was targeted for Volatile Organic Compounds (VOCs) as these are the specific compounds of potential environmental concern at Subject Property. The specific VOCs of concern were determined to be halogenated VOCs, such as those commonly used in the dry-cleaning process (Tetrachloroethylene (PCE) and its associated degradation or daughter breakdown products). **Table 1** provides a summary of the media samples, and testing parameters and QA/QC samples collected.

These samples were collected in accordance with the Quality Assurance Project Plan (QAPP) contained within the NYSDEC-approved Site Characterization Work Plan. Photographs taken during the field investigation are provided in **Appendix A**. A dedicated field notebook was maintained by the field technician overseeing the site activities.

Magnetometer and Void Survey

A magnetometer (Fischer M-Scope TW-6) and Whites TM 508 void detector were used to screen the portions of the property exterior to the building. These surveys were performed to confirm the absence of unidentified subgrade features that could yield a void and/or a magnetic signal, representative of buried metal (buried tanks, metal reinforced drainage structures, etc.) or other suspect features. Any anomalies identified were to be further investigated during the site investigation via the installation of soil borings by Geoprobe. One circular anomaly (approximately nine feet in diameter) was identified near the southwest corner of the building. This structure may be a subgrade drywell or similar type structure. A soil boring and temporary groundwater monitoring well (SB-2/GW-3) were installed adjacent to same. No other anomalies indicative of unidentified subgrade features of potential environmental concern were identified during these site surveys.

Sampling of In-Service/Out-of-Service Private Supply Wells and Septic Tank

Water samples were collected from both of the private supply wells; one was in-service (Well #2) and one (Well #1) has been out-of-service (OOS) for at least ten years. Preferred was not able to confirm the depth of completion of either of these wells. The out-of-service well still retained a former pump so interior access was limited. The OOS well was purged using a low flow peristaltic pump and tubing. A total of 35 gallons was purged and the well was pumped 3.5 hours. The in-service well (10-inch diameter) was pumped a minimum of 25 minutes to ensure that the well was adequately purged prior to sampling. This sample was collected prior to any filtration or holding tanks. A liquid sample was also procured from an active septic tank using a bailer to determine effluent water quality flowing into the municipal sewer system. Samples were collected and containerized in appropriate glassware and transported to the laboratory under appropriate chain of custody.

Soil Sampling and Groundwater Profiling

A subsurface soil and groundwater investigation was conducted at the site to evaluate if groundwater and soils had been impacted by historic uses of the site and to determine if applicable criteria and guidance values have been exceeded. As discussed, the specific VOCs of concern were Tetrachloroethylene (PCE) and its associated degradation or daughter breakdown product such as cis-1,2-Dichloroethene (cis-12 DCE), Trichloroethene (TCE) and potentially vinyl chloride (VC). Soil borings were installed at the following areas

depicted on **Figure 4 & 6.**

- Former dry-cleaning machine area (Tenant unit 181)[2] (SB-4);
- Adjacent to a subgrade anomaly located off the southwest corner of the building (SB-2);
- Former dumpster locations (Tenant units 171 (SB-3) and 181(SB-1)); and
- Bottom sediments of one proximate drainage structure (a stormwater drywell located at the southwest corner of property) (D-1);

A Geoprobe direct push sampling rig was mobilized for the collection of soil samples at the projected former dumpster locations (Tenant units 171(SB-3) and 181 (SB-1)). The soil borings were installed to a total depth of 12 feet below grade surface (bgs) (approximate water table interface). A five-foot long soil sampling tool (macro core) was attached to the Geoprobe drive rods for the collection of continuous undisturbed soil samples. The soil samples were protected in a polyethylene liner to prevent the loss of VOCs prior to field analysis/screening and containerization for laboratory analysis.

The interior location of the former dry-cleaning machine location (SB-4) in Tenant unit 181 was sampled using a rotary core drill with auger flytes, followed by a decontaminated stainless steel hand auger, to access soils within a 0-4 foot zone (below concrete floor). The 0-4 feet bgs depth is the preferential depth at which soil impacts, if present, would be identified. Before the advance of the rotary core drill, a small diameter core drill was used to create small concrete penetrations at four locations in order to conduct a limited soil gas screening using a Photoionization Detector (PID). No elevated PID responses were noted at any of the four locations.
A soil boring (SB-4) was installed within the footprint of the former dry cleaning machine area. During the installation of the boring, No elevated PID responses were noted in soils at any of the subsurface depths with the exception of a low level response (3.1 parts per million Response Units) at 3-4 feet bgs. A soil sample was collected from this depth as representative of the former dry cleaning machine area; data is provided in **Table 2.**

Only one (1) stormwater drywell was present at the rear of the property, proximate to the tenant units of potential environmental concern. A representation of the environmental condition of this structure was obtained via a sample of the bottom sediment sampling collected using the Geoprobe. The depth to bottom of the structure was noted at 11.5 feet with ten feet of standing liquid. A sample (D-1) was collected from 12-14 feet bgs; data is provided in **Table 2.**

Each soil/sediment, water and groundwater sample was logged to document subsurface conditions including soil types and description of non-soil materials, field instrument measurements and depth to groundwater, when encountered. There was additional documentation, if present, of soil mottling, presence of odor, vapors, and soil discoloration. A portion of each soil/sediment sample was placed in a resealable plastic bag and screened for total volatile organic compounds using the PID. Between each sampling event all equipment will be decontaminated following approved protocols. All soils were logged by Preferred and boring logs are

[2] Tenant unit 171 underlain by a basement, thereby rendering soil or sub-slab vapor sampling of the former dry cleaner machine area unnecessary.

included in **Appendix B.**

Nine (9) of the soil borings were deepened into temporary monitoring wells as depicted on **Figure 6**, with sampling of groundwater at two vertical depths (upper shallow water table and 10 feet below water table) as follows:

- Property perimeter, as an upgradient location (west of Tenant unit 179A/181) (GW-2);
- Former dumpster locations associated with Tenant units 171 and 181, respectively (GW-7 and GW-1);
- Four (4) temporary monitoring well locations, installed as a linear transect, encompassing the former groundwater sampling locations B-2 and B-5, including one adjacent to the anomaly identified adjacent to the southwest corner of the building (GW-3, GW-4, GW-6 and GW-9);
- Two (2) temporary monitoring wells, along a west-east linear transect, downgradient of prior groundwater sampling locations B-2 and B-5, preferentially located along the southern property boundary (GW-5 and GW-8); and
- A liquid sample from the septic tank at the southwest corner of the Subject Property (ST-1).

Temporary groundwater monitoring wells were installed at the locations depicted in **Figures 4 and 6** using the Geoprobe direct push sampling rig. As regional groundwater flow direction is anticipated to be to the southeast (toward the closest surface water body), these locations were preferentially selected to evaluate the previously reported VOCs. Groundwater samples were collected via preferentially decontaminated stainless steel mill-slotted screen. Groundwater samples were collected within the upper water table (approximately 12-14 feet bgs) as well as 10 feet below the upper water table at a depth of 22-24 feet bgs for vertical profiling.

Since the primary potential VOC of concern, Tetrachloroethene, has physical characteristics of a Dense Non-Aqueous Phase Liquid (DNAPL), groundwater grab samples were collected from the bottom of the mill-slotted screen. This was achieved by lowering the new disposable poly tubing through the probe rods to the bottom of the slotted screen with purging and sampling using a peristaltic pump with a low-flow rate (less than 100 ml/minute).

Upon completion of each day's sample collection, the samples were transported under strict chain-of-custody to an NYSDOH-ELAP certified laboratory (H2M Labs) for analysis by EPA Method 8260 -Target Compound List (TCL) Organics by GC/MS and Tentatively Identified Compounds (TICs) with NYSDEC ASP B deliverables. After collection of the groundwater samples, the borings were abandoned to grade via front after sampling. Results of the groundwater sample analysis are listed in **Tables 3 and 4** and depicted in **Figure 6.**

Sub-Slab and Soil Vapor Investigation

As depicted on **Figure 5**, a sub-slab vapor (SS-1) sample was collected within the former dry cleaning equipment location within Tenant unit 181. In association with the SS-1 sample, an indoor air sample (IA-1) was collected. A total of four (4) soil vapor (SV) samples were collected exterior proximate to the property perimeters. One of the locations was within the asphalt-paved driveway between the exterior western wall

of Tenant unit 181 and the western property line (SV-1), two (2) locations were within asphalt-paved parking area to the south of Tenant units 179A and 171 (SV-2 and SV-3), and the fourth location (SV-4) was at the southeastern corner of the property, adjacent to the neighboring apartment complex. An outdoor ambient air sample (OA-1) was also collected to provide correlative control data for the soil vapor and sub-slab vapor sampling.

All sampling was conducted in accordance the protocols established by the NYSDOH October 2006 *Guidance for Evaluating Soil Vapor Intrusion in New York State (e.g., use of helium tracer gas, completion of NYSDOH Inventory Forms, Inspections, etc.).* The laboratory and sampling technique were selected to ensure that the minimum detection limits for Trichloroethene, vinyl chloride and carbon tetrachloride of 0.25 micrograms per cubic meter ($\mu g/m^3$) or less could be achieved.

Prior to the collection of these samples, Preferred completed the appropriate NYSDOH Questionnaire and Inventory form which included a product inventory survey documenting sources of volatile chemicals present in the accessible portions of the building during the indoor air sampling that could potentially influence the sample results (**Appendix B**).

Sub-Slab Vapor Samples

A sub-slab vapor sample (SSV-1) was collected via the installation of a small corehole in the concrete floor utilizing a rotary core hammer drill proximate to the former location of the dry cleaning equipment within Tenant unit 181. The drill created an approximate 5/8-inch diameter hole through the concrete slab floor. A length of polyethylene tubing was inserted within the two- inch void located directly below the concrete slab. The annular space surrounding the tubing was sealed utilizing hydraulic cement. The sample was collected in laboratory-supplied, pre-cleaned, 6-Liter summa canisters for laboratory testing. The regulator was set for an eight (8) hour sampling interval and care was exerted to ensure that vacuum remained within the canister.

Soil Vapor Samples

With the Geoprobe equipped with a Post-Run Tubing System (PRT), soil vapor samples were collected from a depth of nine (9) feet below grade surface(bgs), equivalent to adjoining basement structures (e.g., apartment buildings or other). Sampling boreholes were sealed at the land surface using bentonite/quick dry cement in the paved asphalt areas. Again, the soil vapor samples were collected in 6-Liter summa canisters over 8-hour time interval for laboratory analysis. During sampling events, a helium tracer was introduced within a confined space surrounding the sample tubing. A direct reading helium detector was utilized to evaluate the integrity of the soil gas sample. As per the NYSDOH Guidance Document, a sample may contain up to 20% of the tracer gas (helium) and be considered valid. All of the aforementioned samples did not exhibit short-circuiting as instrument readings confirmed the complete absence of helium.

Upon completion of each day's sample collection, the summa canisters were transported under strict chain-of-custody to an NYSDOH-ELAP certified laboratory for analysis for the Volatile Organic Compounds (VOC) by EPA Method TO-15. After the air sample collected, a PID was used to screen tubing remaining in the sampling location. Screening of the sealed tubing with the PID indicated readings of 0.0 ppm response units

at all of the soil vapor screening locations. After sample collection and screening, the borings were abandoned with grout to grade.

Indoor and Outdoor Air Samples

An indoor air (IA-1) sample was collected from within Tenant unit 181, in addition to the sub-slab sample (SS-1). One outdoor (ambient) air sample (OA-1) was collected as shown on **Figure 5** (eastern property line). The canisters were set at a height between three and five feet above grade so that samples collected are representative of the breathing zone. The indoor air samples were collected utilizing 6-Liter summa canisters with regulators set to an 8 hour sampling interval.

During all of the sub slab, soil vapor, outdoor and indoor air sampling, the field sampling team maintained a sample log sheet summarizing the following:

a. sample identification,
b. date and time of sample collection,
c. sampling height/depth,
d. identity of samplers,
e. sampling methods and devices,
f. depending upon the method, volume of air sampled,
g. vacuum of canisters before and after samples collected, and
h. chain of custody protocols and records used to track samples from sampling point to analysis.

Results of the sub-slab sample, soil vapor samples, indoor air sample and outdoor air sample analyses are listed in **Table 5** and depicted in **Figure 5**.

3.2 Quality Assurance/Quality Control

Laboratory Analysis and Validation

All samples were analyzed by H2M Labs, an NYSDOH approved ELAP-certified laboratory under strict chain-of-custody protocol. **Table 1** provides a summary of the analyses performed on each sample matrix and Quality Assurance and Quality Control (QA/QC) samples. Laboratory reports are provided electronically as a supplement to this document as **Appendix B**.

All samples were validated by Premier Services, an independent, qualified data validator in accordance with the NYSDEC Data Usability Summary Report (DUSR) guidance, and a usability analysis is attached as **Appendix D**.

SECTION 4 - SITE CHARACTERIZATION ANALYTICAL RESULTS

This section presents the analytical test results for the sampling conducted during the site characterization investigation. Only validated data was used in the evaluation of the site conditions and/or remedial decision making. A copy of the data validation package is provided in **Appendix D**.

The soil analytical results were compared to the Part 375 Table 375-6.8(a) Unrestricted Use Soil Cleanup Objectives. The soil sample analytical results are presented in **Table 2**. The private supply well, septic tank, liquid sample and groundwater analytical results (**Tables 3 and 4**) were compared to New York State Standards and Guidance Values for Class GA Groundwater (NYSDEC TOGS 1.1.1). The sub-slab vapor, soil vapor and ambient air sample results (**Table 5**) were compared to NYSDOH Soil Vapor/Indoor Air Matrix 1 and Matrix 2 guidance, and EPA 2001 BASE Database (Appendix C of NYSDOH guidance) where applicable.

4.1 Soil Sampling Analytical Testing Results (Table 2)

A total of five soil borings was installed between April 9-17, 2009 to collect samples at the following areas[3]:

- Former dry cleaning machine area (SB-4[4] at 3-4 feet bgs at Tenant unit 181);
- Former dumpster locations (SB-3 at 1-3 feet bgs for Tenant unit 171 and SB-4 at 1-3 feet bgs for Tenant unit 181);
- A soil boring (SB-2) was installed adjacent to a circular anomaly identified near the southwest corner of the building (no soil samples were selected for laboratory analysis); and
- Bottom sediments of a stormwater drywell structure (D-1 at a depth of 12-14 feet bgs) located at the southwest corner of property proximate to the dumpster for Tenant unit 181;

Four soil/sediment samples were collected from the five soil borings during the field investigation as described above. No VOCs were detected above their applicable SCOs at any of the soil borings. Estimated concentrations of three VOCs were quantified at the drywell location (D-1); toluene at 5J *micrograms per kilogram* (µg/kg), total xylenes at 4 J µg/kg, and acetone at 24 µg/kg. The estimated concentration of these VOCs are well below any associated applicable SCOs for these compounds. PCE was reported at a concentration of 26 µg/kg in the soil sample collected inside Tenant unit 181 (SB-4 at 3-4 ft bgs); this concentration is well below its applicable SCO. Sample locations are shown on **Figures 4 and 6** with soil sample analytical results summarized on **Table 2**.

[3]No soil sample was collected at the SB-2 sampling location as no significant field evidence of suspect conditions was present, and a groundwater sample was being collected at this location.

[4]No soil boring could be installed interior to the former dry cleaning machine area in Tenant unit 171 as a basement structure is present.

4.2 Water and Groundwater Sampling Analytical Testing Results (Tables 3 &4)

Groundwater

Between April 9 and 10, 2009 groundwater sampling with vertical profiling was completed at the study site. This included the installation of nine (9) groundwater locations via temporary monitoring wells, with up to two depths of completion (14-16 feet[5] bgs and 24-26 feet bgs). Sampling locations included an upgradient sampling location, former dumpster locations; proximate or downgradient of former dry-cleaning machine areas, and in downgradient linear transects at the property perimeter.

A common VOC associated with laboratory sampling cross-contamination, methylene chloride, present in soil samples, was dismissed as insignificant during data validation. Similarly, acetone was noted in many of the groundwater samples; this compound was also dismissed as irrelevant during data validation.

A total of eighteen (18) groundwater samples were collected and submitted for analysis exclusive of QA/QC samples. No VOCs were reported at the upgradient sampling location, (GW-2) at either depth interval. GW-1 was installed directly adjacent to the stormwater drywell at the southwest corner of the property. Only estimated concentrations of 4J micrograms per liter (µg/L) of PCE and 2 J µg/L of 2-Butanone were noted at a depth of 12-14 feet bgs at the GW-1 location, while the deeper sampled interval, (22-24 feet bgs), PCE and related VOCs were non-detect.

GW-3 was installed directly downgradient of the suspect anomaly (possible drywell) off the southwest corner of the property. Concentrations of PCE, TCE and 1,2-Dichloroethene (1,2-DCE) exceeded their NYSDEC standard or guidance values (SGVs) of 5 µg/L at the shallow sample (14-16 feet bgs) at respective concentrations of 180 µg/L, 39 µg/Land 31 µg/L. The coincident deeper sampling interval (24-26 feet bgs) at GW-3 noted the following VOCs and concentrations: PCE (25 µg/L), TCE (25 µg/L), 1,2-DCE (45 µg/L) and vinyl chloride (VC) at 4 J µg/L.

A short linear (west-east) transect of three groundwater sampling locations (GW-4, GW-6 and GW-9) were installed directly downgradient of Tenant unit 181. At GW- 4, the western end of the transect, the following VOCs were noted within the shallow sampling interval of 14-16 feet bgs: PCE (50 µg/L), TCE (3J µg/L), and 1,2-DCE (1J µg/L). The deeper sampling interval (24-26 feet bgs) reported only an estimated concentration of PCE (1 J µg/L).

At GW-6, the middle location of the transect, the following VOCs were noted within the shallow sampling interval of 14-16 feet bgs: PCE (53 µg/L) and TCE (2 J µg/L). Deeper sampling interval (24-26 feet bgs) at GW-6 reported only an estimated concentration of PCE (2 J µg/L).

At GW-9, the eastern location of the transect, only one VOC at a low concentration was noted within the shallow sampling interval of 14-16 feet bgs; PCE (7 J µg/L). Deeper sampling (24-26 feet bgs) at GW-9 again reported only an estimated concentration of PCE (1 J µg/L).

[5]Depth for the shallow groundwater varied several feet across the subject property.

Two groundwater sampling locations (GW-5 and GW-8) were installed to complete a linear transect with GW-1, at the southern property boundary (downgradient of GW-4, GW-6 and GW-9).

At GW-5, the middle location of the transect, the following VOCs were noted within the shallow sampling interval of 14-16 feet bgs: PCE (68 µg/L), TCE (11 µg/L) and 1,2-DCE (8 J µg/L). Deeper sampling (24-26 feet bgs) at GW-5 reported the following estimated concentrations of three VOCs: PCE (9 J µg/L), TCE (3 J µg/L) and 1,2-DCE (2 J µg/L).

At GW-8, the eastern location, two VOCs were noted within the shallow sampling interval of 14-16 feet bgs as follows: PCE (3 J µg/L) and 2-Butanone (2 J µg/L). Deeper sampling (24-26 feet bgs) at GW-8 reported only an estimated concentration of PCE (1 J µg/L).

Based upon the above data, the highest concentrations of VOCs in groundwater were located in the middle sampling location (downgradient of Tenant unit 181), and within the shallow groundwater. The southern-most linear transect of groundwater sampling locations confirmed the same overall same relationship as the other transect, with the highest concentrations of VOCs noted in the centrally located sample (downgradient of GW-3 and GW-4), and within the shallow groundwater zone.

Private Supply Wells

A water sampled collected from the out-of service private supply well reported a PCE concentration of 12 µg/L. The depth of completion of this well and/or its integrity is not known. No VOCs were noted in the sample collected from the in-service private supply well.

Septic Tank

The water sample collected from the septic tank did not report elevated concentrations of dry-cleaning related chemicals. Two incidental VOCs such as acetone[6] and chloroform were reported within the water sample obtained from the in-service septic system. Therefore, based upon the data collected during this site characterization, no inadvertent discharges to the municipal sewer are occurring relative to the current operations at the Subject Property.

4.3 Sub-Slab, Soil Vapor and Ambient Air Sampling Results (Table 5)

One sub-slab vapor sample (SSV-1) was collected within Tenant unit 181 in addition to a concurrent indoor air sample (IA-1). Four soil vapor (SV) samples (SV-1 to SV-4) were collected within the surrounding asphalt paved property perimeter as shown on the attached **Figure 5.** An ambient air sample (OA-1) was also collected in the parking lot at the northeastern portion of the property.

Analytical results for the soil vapor intrusion investigation are presented in **Table 5.** The 2006 NYSDOH Vapor Intrusion guidance indicates that the State of New York does not have any standards, criteria, or

[6]This was an estimated concentration and influenced by laboratory analysis as same was in a blank sample.

guidance values for soil vapors. However, the NYSDOH has established Air Guidance Values for Indoor Air for select VOC compounds. The EPA 2001 *Building Assessment and Survey Evaluation (BASE) Database,* also provides background concentrations of VOCs expected in typical indoor and outdoor locations. This data is provided in Appendix C of the NYSDOH soil vapor guidance. VOCs were detected in the sub-slab, soil vapor, indoor and outdoor air samples collected at the Subject Property.

The results for TCE and PCE concentrations were compared to Matrix 1and Matrix 2 of the NYSDOH soil vapor guidance relative to the Subject Property and the potential for vapor intrusion. Therefore, comparisons made to the NYSDOH Vapor Intrusion guidance and EPA 2001 BASE Database serve as guidelines and are for reference purposes only.

Analysis of sub-slab vapors collected from SS-1 installed in the concrete floor at Tenant unit 181 reported a concentration of PCE of 14,900 micrograms per cubic meter ($\mu g/m^3$), TCE of 171 $\mu g/m^3$ and Toluene of 125 $\mu g/m^3$. An indoor air quality sample collected in the same Tenant space reported a concentration of PCE of 3.33 $\mu g/m^3$ and TCE of 0.186 $\mu g/m^3$. Numerous other VOCs were reported in the indoor air sample. Reference is made to the NYSDOH questionnaire for other VOC influences at the Tenant unit. The sub-slab vapor sample (SS-1) had concentrations of PCE significantly higher than the EPA 2001 BASE Database for indoor air 90th percentile concentration of 15.9 $\mu g/m^3$. TCE was also reported higher than the 2001 BASE Database for indoor air (90th percentile concentration) of <1.8 $\mu g/m^3$. Also the review of the PCE concentration noted an exceedance of the NYSDOH Matrix 2 concentration of 100 $\mu g/m^3$, indicating that soil vapor intrusion may occur and that mitigation is required. A review of the TCE concentration indicates that there is no exceedance of the indoor air NYSDOH Matrix 1 concentration (<0.25 $\mu g/m^3$) based upon a sub-slab concentration of 250 $\mu g/m^3$; therefore, generally only monitoring is required with respect to this compound. However, the concentration of PCE exceeds the regulatory potentially actionable concentration.

The SV-1 sampling location installed at the western side of the property, reported a concentration of PCE of 73.8 $\mu g/m^3$. SV-2 installed within the area of the property wherein groundwater VOC impacts were identified (downgradient of Tenant unit 181) reported PCE at 71.3 $\mu g/m^3$, TCE at 46.7 $\mu g/m^3$, and 1,2-DCE at 22.3 $\mu g/m^3$. SV-3 installed downgradient of Tenant unit 171 reported a non-detection of PCE and TCE; a concentration of 2,280 $\mu g/m^3$ of chloroform was detected. SV-4 located at the southeastern corner of the Subject Property reported only PCE at 7.56 $\mu g/m^3$.

Other VOCs were present such as Benzene, Trimethylbenzenes, Xylenes, Toluene, et al. at the majority of soil vapor sampling locations. The non-halogenated VOCs are not considered to be site-related VOCs of concern and are not discussed further.

The soil vapor samples from two of the four sampling locations (SV-1 and SV-2) had concentrations of PCE higher than the EPA 2001 BASE Database for indoor air 90th percentile concentration of 15.9 $\mu g/m^3$. SV-2 also reported TCE and 1,2-DCE higher than the 2001 BASE Database for indoor air 90th percentile concentration of 4.2 $\mu g/m^3$ and <1.8 $\mu g/m^3$, respectively. SV-4 reported only PCE at 7.56 $\mu g/m^3$, less than the 2001 BASE Database for indoor air 90th percentile concentration.

None of the four soil vapor locations reported PCE concentrations exceeding the NYSDOH Matrix 2 concentration of 100 $\mu g/m^3$. Therefore, it would be unlikely that PCE concentrations located farther off-site,

toward the developed areas surrounding the subject property, would exceed the New York State Department of Health, (NYSDOH) air quality guidelines of 100 $\mu g/m^3$.

Only one of the four soil vapor samples (SV-2) reported concentrations of TCE higher than the lowest potentially actionable NYSDOH Matrix 1 concentration of 5 $\mu g/m^3$ for sub slab samples. This soil vapor sampling location abuts the empty undeveloped lot to the south that extends to the south, between 160 -190 feet (**Figure 7**).

SECTION 5 - SUMMARY AND CONCLUSIONS

5.1 Summary

A site characterization investigation was performed for the Elks Plaza retail shopping plaza located at 157, 169-187 and 189 West Merrick Road, Village of Freeport, New York in April-May 2009. The field investigation performed included the characterization of the subsurface soils, underlying groundwater, septic tank water, private supply wells, sub-slab vapors, soil gas, and indoor air at the Subject Property.

Soil Sampling Results

Five (5) soil borings were installed with four soil/sediment samples analyzed to evaluate a former dry cleaning machine area, former dumpster locations, an anomaly identified near the southwest corner of the building, and a stormwater drywell located at the southwest corner of property, proximate to the former dumpster area for Tenant unit 181. Analytical testing of representative soil samples did not report any dry-cleaning related VOCs above their applicable SCOs.

Groundwater Sampling Results

Groundwater sampling with vertical profiling was performed at nine locations to provide a representation of site groundwater quality conditions. This included an upgradient sampling location, two former dumpster locations, adjacent to a subgrade anomaly, adjacent to a stormwater drywell, and two west-east linear transects at the southern (downgradient) property perimeter.

No VOCs were reported at the upgradient sampling location. A low estimated concentration (4J µg/L) of PCE was noted in the shallow groundwater directly adjacent to the stormwater drywell. Groundwater quality downgradient of a suspect anomaly (possible subgrade drywell) was determined to contain concentrations of PCE and degradation/daughter products, TCE and 1,2-DCE above their respective NYSDEC SGVs in both the shallow and deeper groundwater sampling intervals, inclusive of a low level estimated concentration of vinyl chloride in the deeper groundwater. This location reported the overall highest concentrations of dry-cleaning related chemicals.

Analysis of groundwater from the linear transect of temporary monitoring wells, located closest to the building, also reported the detection of PCE, TCE and 1,2-DCE, with the highest concentrations in the middle sampling location (downgradient of Tenant unit 181), and within the shallow groundwater. The southern-most linear transect of groundwater sampling locations confirmed the same overall same relationship as the other transect, with the highest concentrations of VOCs noted in the centrally-located sample (downgradient of GW-3 and GW-4), and within the shallow groundwater zone.

The width of the VOC impacts has been adequately delineated during the site characterization study. The width is relatively narrow, approximately 60 feet wide, with its western boundary approximately 20 feet from the western property line. As the groundwater flow direction is to the southeast, groundwater is flowing toward the undeveloped lot to the south. The groundwater quality downgradient of Tenant unit 171 did not reveal significant concentrations of VOCs.

Although PCE (12 µg/L) was reported at the sample collected from the OOS private supply well, the significance of this detection is unknown as information about well construction is not verifiable. It is unknown if the OOS well still possesses integrity. No VOCs were reported in the sample collected from the in-service private supply well. No dry-cleaning chemicals were reported in the water sample collected from the septic tank (only VOCs present were chloroform and acetone at minor concentrations).

Sub-Slab Soil Vapor and Indoor/Outdoor Air Sampling Results

A sub-slab vapor (SSV-1) sample was collected within Tenant unit 181 in addition to an indoor air sample (IA-1). Four soil vapor samples (SV-1 to SV-4) were collected around the southern property perimeter. An ambient air sample (OA-1) was also collected in the parking lot at the northeastern portion of the property.

The sub-slab vapor sample within Tenant unit 181 reported elevated concentrations of PCE (14,900 $\mu g/m^3$) in exceedance of the NYSDOH Matrix 2 concentration of 100 $\mu g/m^3$. Indoor air within Tenant unit 181 reported low concentrations of PCE. These data imply a potential for soil vapor intrusion and potentially the need for mitigation such as a Sub-Slab Depressurization System (SSDS).

None of the four soil vapor locations reported PCE concentrations exceeding the NYSDOH Matrix 2 concentration of 100 $\mu g/m^3$. Only one of the four soil vapor samples (SV-2) reported concentrations of TCE higher than the lowest potentially actionable NYSDOH Matrix 1 concentration of 5 $\mu g/m^3$. This location abuts an unoccupied undeveloped lot to the south.

5.2 Conclusions

No soil source areas of dry-cleaning related chemicals were identified during the site characterization at Tenant unit 181. As there is a basement underlying Tenant unit 171, no subgrade soil source areas can exist associated with this Tenant unit. A suspect subgrade feature (9-foot diameter circular anomaly) exists as determined from a magnetometer study and groundwater sampling downgradient of Tenant unit 181. This feature should be further examined to ascertain the relationship with any former operations at the Subject Property.

Based on the vertical profiling groundwater results, groundwater contamination, consisting of PCE and its daughter/degradation products, is present at the Subject Property likely associated with the former operations at the Tenant unit 181. The highest concentrations of VOCs appear to be located downgradient of a subsurface anomaly and/or Tenant unit 181. These VOCs appear to be predominantly present in the shallow upper groundwater zone, with a significant decrease in concentration with increased depth below grade, and lateral distance, within the property boundaries. The width of the VOC impacts in groundwater has been adequately delineated. Groundwater flow direction is to the southeast, and toward the undeveloped vegetated lot to the south.

No dry-cleaning related VOCs were noted at the currently in-service private supply well or in the discharges from the septic system to the municipal sewer system. Analysis of sub-slab vapors confirm the potential for subsurface vapor intrusion at Tenant unit 181. Based upon this data, the reduction and mitigation of sub-slab vapors may be prudent at the Subject Property relative to Tenant unit 181 and possibly adjoining tenant units.

None of the four soil vapor locations reported PCE concentrations exceeding the NYSDOH Matrix 2 concentration of 100 $\mu g/m^3$. Therefore, it would be unlikely that PCE concentrations located farther off-site, toward the developed areas surrounding the subject property, would exceed the NYSDOH indoor air quality guidelines of 100 $\mu g/m^3$. Only one of the four soil vapor samples (SV-2) reported concentrations of TCE higher than the NYSDOH Matrix 1 concentration of 5 $\mu g/m^3$. This location abuts an empty undeveloped lot to the south.

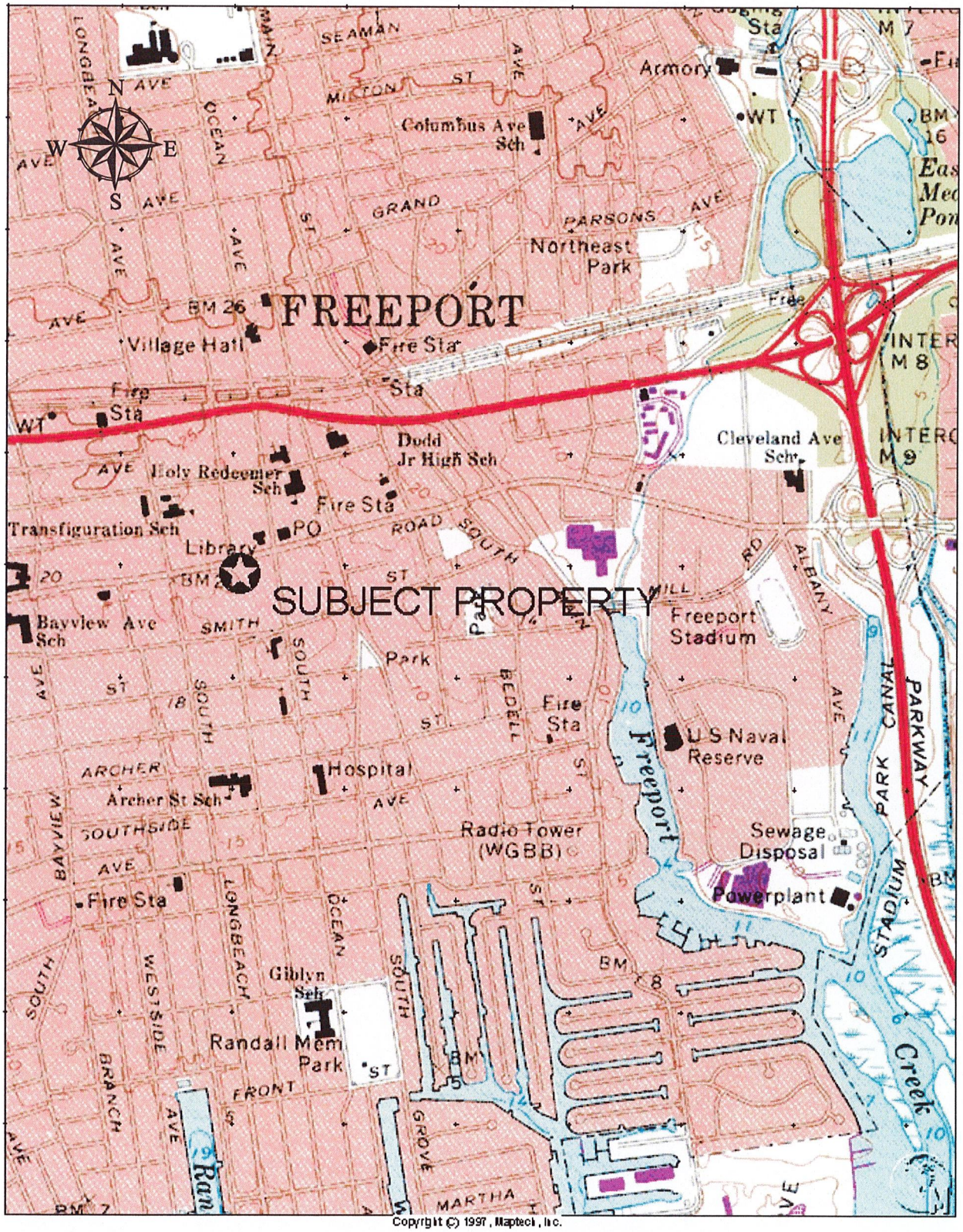

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Figure 1- Site Location

PREFERRED ENVIRONMENTAL SERVICES
323 Merrick Avenue - North Merrick, New York 11566
Tel: (516) 546-1100 Fax : (516) 213-8156

- Location of Subject Property

Client: Elks Plaza LLC.

Site: 157 through 189 West Merrick Road
Freeport, New York

Date: April 2009

Current Occupants

157 - McDonald's
165 - NY Elite Limousine
169 - The Wine Cellar Liquor Store
171 - Ebony Beauty Supply
173 - Jade Garden Chinese Food
173 - 99c Super Discount Store
175 - South Shore Medical & Rehabilitation
177 - Bagel Store
177A -Solgar Health Foods
179 - XTC Hair Salon
179A-181A - Laundry Palace
183 - Five Star Nails & Spa
183A - Rene's Gift Shop and 30 Minute Photo
185 - Eye World Ooptical
185A - Vacant
187 - Raimo's Pizzeria
189 - Bank of America

Figure 2 - Current Site Occupants

PREFERRED ENVIRONMENTAL SERVICES
323 Merrick Avenue - North Merrick, New York 11566
Tel: (516) 546-1100 Fax : (516) 213-8156

- Property Border

Client: Elks Plaza LLC.
Site: 157 through 189 West Merrick Road
Freeport, New York
Date: 9-19-2008

Figure 3 - Nassau County Groundwater Elevation Map

PREFERRED ENVIRONMENTAL SERVICES

323 Merrick Avenue - North Merrick, New York 11566
Tel: (516) 546-1100 Fax : (516) 213-8156

⊗ - Approximate Site Location

Client: Elks Plaza LLC.
Site: 157 through 189 West Merrick Road Freeport, New York
Date: 10-17-08

Tenant Units 181 and 171 are former Dry Cleaners

Scale: 0 — 35 ft

Figure 4 - April 2009 Site Characterization Sampling Locations

PREFERRED ENVIRONMENTAL SERVICES

323 Merrick Avenue - North Merrick, New York 11566

Tel: (516) 546-1100 Fax : (516) 213-8156

- Soil Sample Location
- Water Sample Location
- Soil Vapor Sample Location
- Temporary Groundwater Monitoring Well Location
- Soil Boring and Temporary Monitoring Well Location
- Soil Sample Locations & Indoor Air and Sub-slab Vapor Sampling

Client: Elks Plaza LLC.

Site: 157 through 189 West Merrick Road Freeport, New York

Date: April 2009

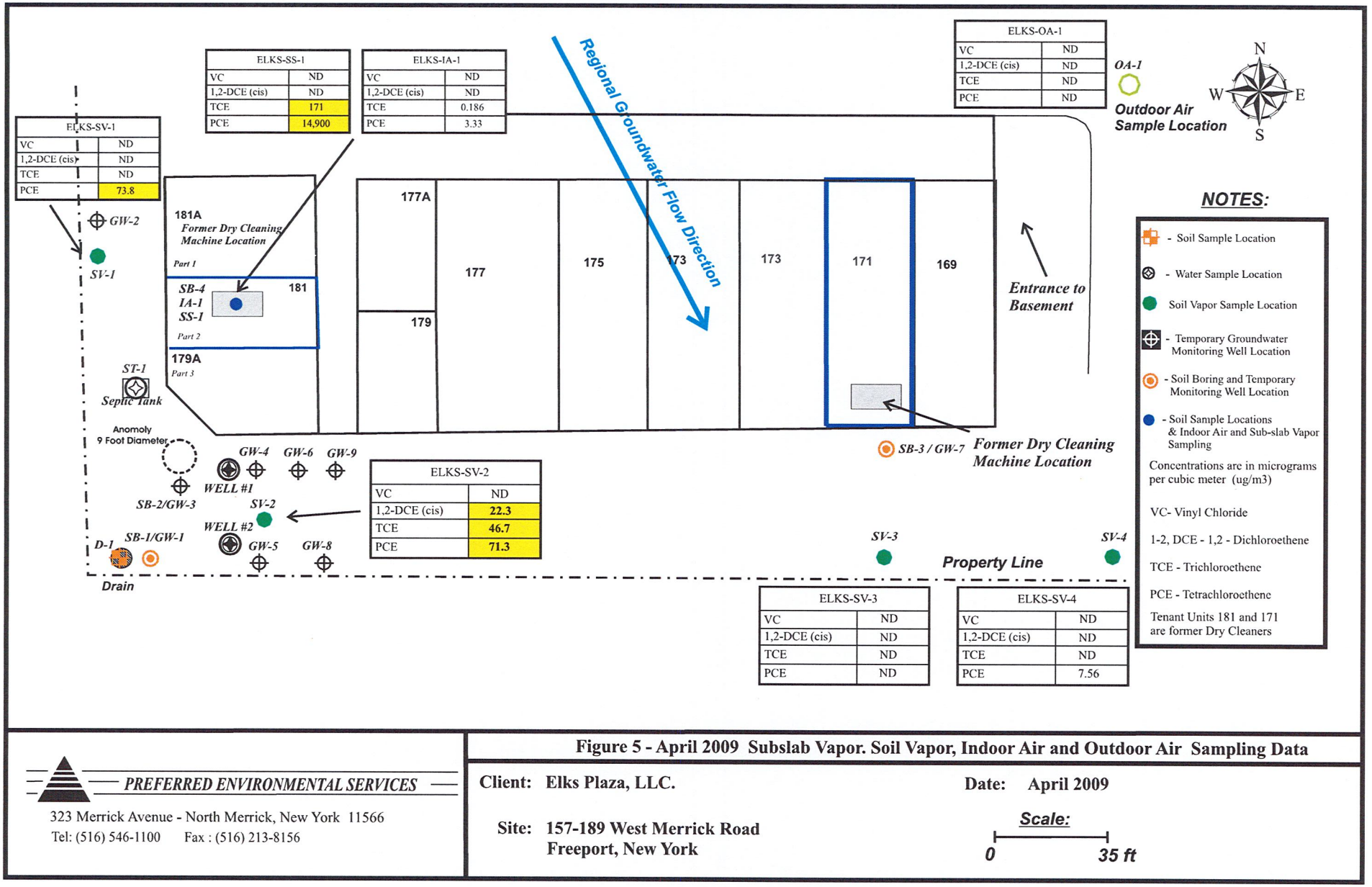


Figure 5 - April 2009 Subslab Vapor. Soil Vapor, Indoor Air and Outdoor Air Sampling Data

PREFERRED ENVIRONMENTAL SERVICES
323 Merrick Avenue - North Merrick, New York 11566
Tel: (516) 546-1100 Fax : (516) 213-8156

Client: Elks Plaza, LLC.

Date: April 2009

Site: 157-189 West Merrick Road
Freeport, New York

Scale: 0 — 35 ft

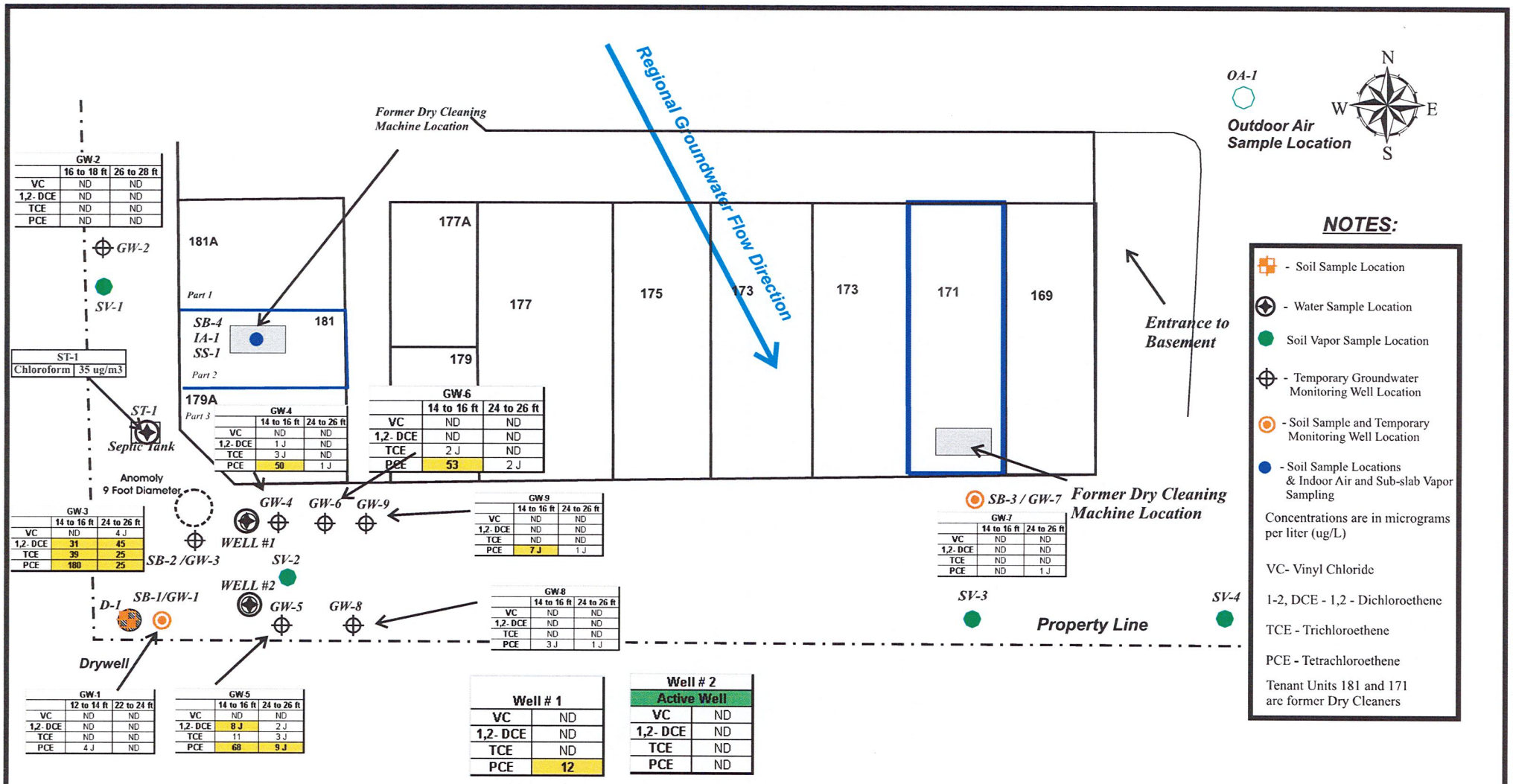


Figure 6- April 2009 - Groundwater, Septic Tank and Private Supply Well Sampling Data

PREFERRED ENVIRONMENTAL SERVICES

323 Merrick Avenue - North Merrick, New York 11566

Tel: (516) 546-1100 Fax : (516) 213-8156

Client: Elks Plaza, LLC.

Date: April 2009

Site: 157-189 West Merrick Road
Freeport, New York

Scale: 0 — 35 ft

Figure 7- Aerial Photograph of Elks Plaza and Surrounding Properties

-Approximate Lot Line of Subject Property

-Soil Vapor Sample Location

Client: Elks Plaza LLC.
Site: 157 through 189 West Merrick Road Freeport, New York
Date: 9/14/2009

PREFERRED ENVIRONMENTAL SERVICES
323 Merrick Avenue - North Merrick, New York 11566
Tel: (516) 546-1100 Fax : (516) 213-8156

Table 1
Scope of Work for Site Characterization Investigation - Elks Plaza

Activity (Task)/ Location (in bold)	# Sampling Points	Location See Figure 4	No. Of Samples/Parameters	QA/QC Samples
Task 1 - Site Feature Evaluation and Magnetometer/Void Survey; Private supply wells and municipal sewer discharge.	Three	Abandoned private supply well, in-service private supply well, and septic tank (municipal discharge).	Three water samples: TCL VOC analysis by EPA Method 8260 plus TICs with NYSDEC ASP B deliverables.	One Matrix Spikes (MS)and Matrix Spike Duplicates (MSD) collected per twenty (20) samples/ one per media (soil or groundwater). One field blank per 20 samples per media with analysis for same analytes and one trip blank per field day (VOCs only).[1]
Task 2 - Soil and Drainage Investigation	Five	Former dry cleaning machine area (Tenant Unit 181); former dumpster locations (Tenant units 171 and 181); and one drainage structure.	Four soil samples: TCL VOC analysis by EPA Method 8260 plus TICs with NYSDEC ASP B deliverables.	MS/MSDs, field blank and trip blanks.
Task 3- Groundwater Investigation	Nine locations-two depths	Groundwater: upgradient location (west); One temporary well at each of the former dumpster locations (tenant units 171 and 181); four temporary wells in a linear transect (two vertical depths); two temporary wells at downgradient property perimeter (two vertical depths)and adjacent to a stormwater drywell.	18 groundwater samples: TCL VOC analysis by EPA Method 8260 plus TICs with NYSDEC ASP B deliverables.	MS/MSDs, field blank and trip blanks.

[1]The MS/MSD serves as a duplicate soil sample for NYSDEC ASP-B deliverables. No trip blanks are required to be collected for soil samples (only) for NYSDEC ASP-B deliverables.

Activity (Task)/ Location (in bold)	# Sampling Points	Location See Figure 4	No. Of Samples/Parameters	QA/QC Samples
Task 4 - Sub Slab Vapor, Soil Vapor, Indoor and Outdoor Air Sampling	Seven Locations inside and outside of building	Sub slab samples and indoor air samples were to be collected within former dry cleaning Tenant unit 181. Soil vapor and outdoor air samples were collected along western and southern boundaries of the property.	7 samples for VOCs by TO-15 method.	Helium Tracer on the soil gas samples and outdoor ambient sample for comparison values.

Elks Plaza
Freeport, New York
Soil Samples- April 2009

TABLE 2 - SUMMARY OF VOLATILE ORGANIC COMPOUNDS DETECTED AND/OR ELEVATED ABOVE NYSDEC SOIL CLEAN-UP OBJECTIVES

Sampling Date:			4/9/2009	Qualifier	4/9/2009	Qualifier	4/10/2009	Qualifier	4/17/2009	Qualifier	Part 375 Table 375 - 6.8 (a) Unrestricted Use Soil Cleanup Objectives (ug/kg)
Project Location:			Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		
Sample ID:			D-1 (12-14)		SB-1 (1-3)		SB-3 (1-3)		SB-4 (3-4 FT BG)		
Laboratory ID:			0904473-001A		0904473-002A		0904506-001A		0904747-001A		
Cas #	Analyte	Units:									
74-87-3	Chloromethane	ug/kg	ND		ND		ND		ND		NA
75-01-4	Vinyl Chloride	ug/kg	ND		ND		ND		ND		20
75-00-3	Chloroethane	ug/kg	ND		ND		ND		ND		NA
75-35-4	1,1-Dichloroethene	ug/kg	ND		ND		ND		ND		330
540-59-0	1,2-Dichloroethene (total)	ug/kg	ND		ND		ND		ND		NA
67-64-1	Acetone	ug/kg	24		ND		ND		ND		50
75-15-0	Carbon Disulfide	ug/kg	ND		ND		ND		ND		NA
75-09-2	Methylene Chloride	ug/kg	6	BJ	4	BJ	3	BJ	6	BJ	50
1634-04-4	Methyl tert-butyl ether	ug/kg	ND		ND		ND		ND		930
75-34-3	1,1-Dichloroethane	ug/kg	ND		ND		ND		ND		270
78-93-3	2-Butanone	ug/kg	ND		ND		ND		ND		NA
67-66-3	Chloroform	ug/kg	ND		ND		ND		ND		370
71-55-6	1,1,1-Trichloroethane	ug/kg	ND		ND		ND		ND		680
56-23-5	Carbon Tetrachloride	ug/kg	ND		ND		ND		ND		760
71-43-2	Benzene	ug/kg	ND		ND		ND		ND		60
107-06-2	1,2-Dichloroethane	ug/kg	ND		ND		ND		ND		20 c
79-01-6	Trichloroethene	ug/kg	ND		ND		ND		ND		470
78-87-5	1,2-Dichloropropane	ug/kg	ND		ND		ND		ND		NA
75-27-4	Bromodichloromethane	ug/kg	ND		ND		ND		ND		NA
10061-01-5	cis-1,3-Dichloropropene	ug/kg	ND		ND		ND		ND		NA
108-10-1	4-Methyl-2-pentanone	ug/kg	ND		ND		ND		ND		NA
108-88-3	Toluene	ug/kg	5	J	ND		ND		ND		700
10061-02-6	trans-1,3-Dichloropropene	ug/kg	ND		ND		ND		ND		NA
79-00-5	1,1,2-Trichloroethane	ug/kg	ND		ND		ND		ND		NA
127-18-4	Tetrachloroethene	ug/kg	ND		ND		ND		26		1,300
591-78-6	2-Hexanone	ug/kg	ND		ND		ND		ND		NA
124-48-1	Dibromochloromethane	ug/kg	ND		ND		ND		ND		NA
108-90-7	Chlorobenzene	ug/kg	ND		ND		ND		ND		1,100
100-41-4	Ethylbenzene	ug/kg	ND		ND		ND		ND		1,000
1330-20-7	Xylene (total)	ug/kg	4	J	ND		ND		ND		260
100-42-5	Styrene	ug/kg	ND		ND		ND		ND		NA
75-25-2	Bromoform	ug/kg	ND		ND		ND		ND		NA
79-34-5	1,1,2,2-Tetrachloroethane	ug/kg	ND		ND		ND		ND		NA

Notes:
NYSDEC - Soil Cleanup Objectives
Part 375 Table 375 - 6.8(a)
ND - Analyte was not detected above method detection limit.
NA - Not Analyzed / Not Available.
Bolded values indicates detected concentration exceeded NYSDEC.
MDL - Method Detection Limit
J - Indicates that the contaminant was detected at a concentration below its applicable MDL.
B - Analyte detecetd is associated blank as well as the sample
c- For constituants where the calculated SCO is lower than the rural background concentations as determined by the DEC/DOH rural soil survey the rural soil background concentration is used as the Track 1 SCO value for the use of this site.

TABLE 3 - SUMMARY OF VOLATILE ORGANIC COMPOUNDS DETECTED AND/OR ELEVATED ABOVE NYSDEC CLASS GA AMBIENT WATER QUALITY STANDARDS AND GUIDANCE VALUES IN GROUNDWATER SAMPLES GW-1 to GW-5

Elks Plaza,
Freeport, New York
Soil Samples- April 2009

			GW-1				GW-2				GW-3				GW-4				GW-5				
	Sampling Date:		4/9/2009		4/9/2009		4/9/2009		4/9/2009		4/9/2009		4/9/2009		4/9/2009		4/9/2009		4/9/2009		4/9/2009		NYSDEC Class GA Ambient Water Quality Standards and Guidance Values (ug/L)
	Project Location:		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		
	Sample ID:		GW-1 (12-14)	Qualifier	GW-1 (22-24)	Qualifier	GW-2 (16-18)	Qualifier	GW-2 (26-28)	Qualifier	GW-3 (14-16)	Qualifier	GW-3 (24-26)	Qualifier	GW-4 (14-16)	Qualifier	GW-4 (24-26)	Qualifier	GW-5 (14-16)	Qualifier	GW-5 (24-26)	Qualifier	
	Laboratory ID:		0904471-001A		0904471-002A		0904471-003A		0904471-004A		0904471-005A		0904471-006A		0904471-007A		0904471-008A		0904471-009A		0904471-010A		
Cas #	Analyte	Units:																					
74-87-3	Chloromethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		NA
75-01-4	Vinyl Chloride	ug/L	ND		ND		ND		ND		ND		**4**	J	ND		ND		ND		ND		**2**
75-00-3	Chloroethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		**50**
75-35-4	1,1-Dichloroethene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		**5**
540-59-0	1,2-Dichloroethene (total)	ug/L	ND		ND		ND		ND		**31**		**45**		1	J	ND		**8**	J	2	J	**5**
67-64-1	Acetone	ug/L	7	UJ	3	UJ	6	UJ	8	UJ	3	UJ	5	UJ	3	UJ	4	UJ	ND	UJ	3	UJ	**50**
75-15-0	Carbon Disulfide	ug/L	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	**50**
75-09-2	Methylene Chloride	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		**5**
1634-04-4	Methyl tert-butyl ether	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		**10**
75-34-3	1,1-Dichloroethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		**5**
78-93-3	2-Butanone	ug/L	2	J	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	**50**
67-66-3	Chloroform	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		**7**
71-55-6	1,1,1-Trichloroethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		**5**
56-23-5	Carbon Tetrachloride	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		**5**
71-43-2	Benzene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		**0.7**
107-06-2	1,2-Dichloroethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		**5**
79-01-6	Trichloroethene	ug/L	ND		ND		ND		ND		**39**		**25**		3	J	ND		**11**		3	J	**5**
78-87-5	1,2-Dichloropropane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		**1**
75-27-4	Bromodichloromethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		**50**
10061-01-5	cis-1,3-Dichloropropene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		**5**
108-10-1	4-Methyl-2-pentanone	ug/L	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	**50**
108-88-3	Toluene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		**5**
10061-02-6	trans-1,3-Dichloropropene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		NA
79-00-5	1,1,2-Trichloroethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		**5**
127-18-4	Tetrachloroethene	ug/L	4	J	ND		ND		ND		**180**		**25**		**50**		1	J	**68**		**9**	J	**5**
591-78-6	2-Hexanone	ug/L	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	**50**
124-48-1	Dibromochloromethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		NA
108-90-7	Chlorobenzene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		**5**
100-41-4	Ethylbenzene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		**5**
1330-20-7	Xylene (total)	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		**5**
100-42-5	Styrene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		**5**
75-25-2	Bromoform	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		**50**
79-34-5	1,1,2,2-Tetrachloroethane	ug/L	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	**5**

Notes:
J- Indicates an estimated value
B- Indicates that the analyte is found in the associated blank as well as the sample
NYSDEC Class GA Ambient Water Quality Standards and Guidance Values,
Reissued June 1998
NA - Not Available
Bolded values indicate detected above NYSDEC Class GA Ambient Water Quality Standards

TABLE 4 - SUMMARY OF VOLATILE ORGANIC COMPOUNDS DETECTED AND/OR ELEVATED ABOVE NYSDEC CLASS GA AMBIENT WATER QUALITY STANDARDS IN GROUNDWATER SAMPLES GW-6 to GW-9 & SEPTIC TANK, & WELL # 1 AND 2

Elks Plaza,
Freeport New York
Soil Samples- April 2009

			GW-6				GW-7				GW-8				GW-9				Septic Tank		Supply Wells				
	Sampling Date: Project Location: Sample ID: Laboratory ID:		4/10/2009 Elks Plaza GW-6 (14-16) 0904503-001A	Qualifier	4/10/2009 Elks Plaza GW-6 (24-26) 0904503-002A	Qualifier	4/10/2009 Elks Plaza GW-7 (13-15) 0904503-003A	Qualifier	4/10/2009 Elks Plaza GW-7 (23-25) 0904503-004A	Qualifier	4/10/2009 Elks Plaza GW-8 (14-16) 0904503-005A	Qualifier	4/10/2009 Elks Plaza GW-8 (24-26) 0904503-006A	Qualifier	4/10/2009 Elks Plaza GW-9 (14-16) 0904503-007A	Qualifier	4/10/2009 Elks Plaza GW-9 (24-26) 0904503-008A	Qualifier	4/10/2009 Elks Plaza ST-1 0904503-009A	Qualifier	4/10/2009 Elks Plaza WELL #1 0904503-010A OOS WELL	Qualifier	4/17/2009 Elks Plaza Well #2 0904738-001A ACTIVE WELL	Qualifier	NYSDEC Class GA Ambient Water Quality Standards and Guidance Values (ug/L)
Cas #	Analyte	Units:																							
74-87-3	Chloromethane	ug/L	ND		ND		ND		ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND		NA
75-01-4	Vinyl Chloride	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		2
75-00-3	Chloroethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		50
75-35-4	1,1-Dichloroethene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
540-59-0	1,2-Dichloroethene (total)	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
67-64-1	Acetone	ug/L	5	UJ	3	UJ	2	UJ	2	UJ	10	UJ	4	UJ	3	UJ	3	UJ	110	BJ	4	UJ	ND		50
75-15-0	Carbon Disulfide	ug/L	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND		50
75-09-2	Methylene Chloride	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
1634-04-4	Methyl tert-butyl ether	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		10
75-34-3	1,1-Dichloroethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
78-93-3	2-Butanone	ug/L	ND	UJ	ND	UJ	ND	UJ	ND	UJ	2	J	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND		50
67-66-3	Chloroform	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		3	J	ND		ND		7
71-55-6	1,1,1-Trichloroethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
56-23-5	Carbon Tetrachloride	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
71-43-2	Benzene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		0.7
107-06-2	1,2-Dichloroethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
79-01-6	Trichloroethene	ug/L	2	J	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
78-87-5	1,2-Dichloropropane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		1
75-27-4	Bromodichloromethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		50
10061-01-5	cis-1,3-Dichloropropene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
108-10-1	4-Methyl-2-pentanone	ug/L	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND		50
108-88-3	Toluene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
10061-02-6	trans-1,3-Dichloropropene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		NA
79-00-5	1,1,2-Trichloroethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
127-18-4	Tetrachloroethene	ug/L	53		2	J	ND		1	J	3	J	1	J	7	J	1	J	ND		12		ND		5
591-78-6	2-Hexanone	ug/L	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND		50
124-48-1	Dibromochloromethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		NA
108-90-7	Chlorobenzene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
100-41-4	Ethylbenzene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
1330-20-7	Xylene (total)	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
100-42-5	Styrene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
75-25-2	Bromoform	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		50
79-34-5	1,1,2,2-Tetrachloroethane	ug/L	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND		5

Notes
J- Indicates an estimated value
B- Indicates that the analyte is found in the associated blank as well as the sample
NYSDEC Class GA Ambient Water Quality Standards and Guidance Values.
Reissued June 1998
NA - Not Available
Bolded values indicate detected above NYSDEC Class GA Ambient Water Quality Standards

Elks Plaza
Freeport New York
Air Samples- April 2009

TABLE 5 - SUMMARY OF VOLATILE ORGANIC COMPOUNDS DETECTED IN SOIL GAS AND/OR ELEVATED ABOVE NYSDOH AIR GUIDANCE VALUES

	Sampling Date:		4/10/2009		4/17/2009		4/17/2009		4/17/2009		4/17/2009		4/17/2009		4/17/2009		NYSDOH Study		NYSDOH Air Guidance Values	BASE Values (90th Percentile)
	Project Location:		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		Homes in NYS 1997 - 2003			
	Sample ID:		Elks- IA-1		Elks- OA-1		Elks-SS-1		Elks-SV-1		Elks-SV-2		Elks-SV-3		Elks-SV-4					
	Laboratory ID:		0904888-01		0904793-001A		0904793-002A		0904793-003A		0904793-004A		0904793-005A		0904793-006A		Indoor: 25% to 75%	Outdoor: 25% to 75%	(Specific to Indoor Air)	
Cas #	Analyte	Units:		Qualifier		Qualifier		Qualifier		Qualifier		Qualifier		Qualifier		Qualifier				
74-87-3	Chloromethane	ug/m3	2.91		1.18		ND		ND		ND		ND		ND		<0.25 - 1.8	<0.25 - 1.8	NA	NA
75-01-4	Vinyl Chloride (SIM)	ug/m3	ND		ND		ND		ND		ND		ND		ND		<0.25	<0.25	NA	<1.9
75-00-3	Chloroethane	ug/m3	ND		ND		ND		ND		ND		ND		ND		<0.25	<0.25	NA	NA
75-35-4	1,1-Dichloroethene	ug/m3	ND		ND		ND		ND		ND		ND		ND		<0.25	<0.25	NA	<1.4
95-63-6	1,2,4-Trimethylbenzene	ug/m3	0.985		ND		ND		24.4		37.2		16.2		45.8		0.69 - 4.3	<0.25 - 0.81	NA	NA
108-76-8	1,3,5-Trimethylbenzene	ug/m3	ND		ND		ND		8.04		12.0		ND		14.2		<0.27 - 1.7	< 0.25 -0.34	NA	NA
67-64-1	Acetone	ug/m3	969	E	11.8	J	ND		653	J	192	J	105	J	207	J	9.9 - 52	3.4 - 14	NA	NA
75-15-0	Carbon Disulfide	ug/m3	ND		ND		ND		ND		5.76		ND		ND		NA	NA	NA	NA
75-09-2	Methylene Chloride	ug/m3	ND		ND		ND		ND		ND		**43.5**		ND		0.31 - 6.6	<0.25 - 0.73	60	10
1634-04-4	Methyl tert-butyl ether	ug/m3	ND		ND		ND		ND		ND		ND		ND		<0.25 - 5.6	<0.25 - 0.86	NA	NA
75-34-3	1,1-Dichloroethane	ug/m3	ND		ND		ND		ND		ND		ND		ND		<0.25	<0.25	NA	NA
78-93-3	2-Butanone	ug/m3	2.21		1.21		ND		279		33.0		15.9		34.9		NA	NA	NA	NA
67-66-3	Chloroform	ug/m3	4.13		ND		ND		58.3		4.25		2260		ND		<0.25 - 0.54	<0.25	NA	NA
71-55-6	1,1,1-Trichloroethane	ug/m3	ND		ND		ND		ND		ND		ND		ND		<0.25 - 1.1	<0.25 - 0.33	NA	20.6
56-23-5	Carbon Tetrachloride (SIM)	ug/m3	0.583		0.543		ND		ND		ND		ND		ND		<0.25 - 0.59	<0.25 - 0.6	NA	NA
71-43-2	Benzene	ug/m3	2.15		1.00		ND		15.1		15.2		10.5		16.4		1.1 - 5.9	0.57 - 2.3	NA	NA
107-06-2	1,2-Dichloroethane	ug/m3	0.906		ND		ND		ND		ND		ND		ND		<0.25	<0.25	NA	NA
79-01-6	Trichloroethene (SIM)	ug/m3	0.186		ND		**171**		ND		**46.7**		ND		ND		<0.25	<0.25	5	4.2
78-87-5	1,2-Dichloropropane	ug/m3	ND		ND		ND		ND		ND		ND		ND		<0.25	<0.25	NA	NA
75-27-4	Bromodichloromethane	ug/m3	ND		ND		ND		ND		ND		51.6		ND		NA	NA	NA	NA
156-59-2	cis-1,2-Dichloroethene	ug/m3	ND		ND		ND		ND		22.3		ND		ND		<0.25	<0.25	NA	<1.9
10061-01-5	cis-1,3-Dichloropropene	ug/m3	ND		ND		ND		ND		ND		ND		ND		<0.25	<0.25	NA	NA
108-10-1	4-Methyl-2-pentanone	ug/m3	ND		ND		ND		ND		2.85		ND		4.43		NA	NA	NA	NA
108-88-3	Toluene	ug/m3	19.8		2.34		125		299		393		168		368		3.5 - 24.8	0.60 - 2.4	NA	NA
156-60-5	trans-1,2-Dichloroethene	ug/m3	ND		ND		ND		ND		2.92		ND		ND		NA	NA	NA	NA
10061-02-6	trans-1,3-Dichloropropene	ug/m3	ND		ND		ND		ND		ND		ND		ND		<0.25	<0.25	NA	NA
79-00-5	1,1,2-Trichloroethane	ug/m3	ND		ND		ND		ND		ND		ND		ND		<0.25	<0.25	NA	NA
127-18-4	Tetrachloroethene	ug/m3	3.33		ND		**14,900**		**73.8**		**71.3**		ND		7.56		<0.25 - 1.1	<0.25 - 0.34	100	15.9
591-78-6	2-Hexanone	ug/m3	ND		ND		ND		ND		ND		ND		ND		NA	NA	NA	NA
124-48-1	Dibromochloromethane	ug/m3	ND		ND		ND		ND		ND		ND		ND		NA	NA	NA	NA
75-71-8	Dichlorodifluoromethane	ug/m3	2.27		2.57		ND		ND		2.63		ND		3.05		<0.25 - 4.1	<0.25 - 4.2	NA	NA
108-90-7	Chlorobenzene	ug/m3	ND		ND		ND		ND		ND		ND		ND		<0.25	<0.25	NA	NA
100-41-4	Ethylbenzene	ug/m3	ND		ND		ND		29.7		47.2		14.7		45.0		0.41 - 2.8	<0.25 - 0.48	NA	NA
1330-20-7	m/p-Xylene	ug/m3	2.00		ND		ND		103		147		49.1		142		0.50 - 4.6	<0.25 - 0.48	NA	NA
95-47-6	o-Xylene	ug/m3	ND		ND		ND		31.2		50.8		17.1		44.7		0.39 - 3.1	<0.25 - 0.56	NA	NA
100-42-5	Styrene	ug/m3	ND		ND		ND		7.29		10.5		ND		10.9		0.25 - 0.64	<0.25	NA	NA
75-25-2	Bromoform	ug/m3	ND		ND		ND		ND		ND		ND		ND		NA	NA	NA	NA
75-69-4	Trichlorofluoromethane	ug/m3	6.81		1.36		ND		ND		ND		ND		ND		1.1 - 5.4	<0.25 - 2.2	NA	NA
106-46-7	1,4-Dichlorobenzene	ug/m3	1.22		ND		ND		ND		ND		ND		ND		<0.25 - 0.54	<0.25	NA	NA
79-34-5	1,1,2,2-Tetrachloroethane	ug/m3	ND		ND		ND		ND		ND		ND		ND		<0.25	<0.25	NA	NA

Notes:

NYSDOH Study is the *Summary of Indoor and Outdoor Levels of Volatile Organic Compounds From Fuel Oil Heated Home in NYS, 1997 to 2003.* Unpublished. New York State Department of Health, Bureau of Toxic Substance Assessment

Target Indoor Shallow Soil Concentration are presented in the November 2002 USEPA *Draft Guidance For Evaluating The Vapor Intrusion to Indoor Air Pathway From Groundwater and Soils*

The NYSDOH Air Guidelines Values are provided in the *NYSDOH Guidance for Evaluating Soil Vapor Intrusion in the State of New York* issued for Public Comment in February of 2005

Building Assessment and Survey Evaluation (BASE '94-'98). Unpublished. Indoor Environments Division, United States Environmental Protection Agency, Washington D.C.

ug/m^3 - micrograms per cubic meter

ND - Analyte no detected at concentration exceeding method detection limit

Bolded Value indicates that the VOC was detected at a concentration exceeding its USEPA BASE 90th Percentile Value

NA - Not Available/Not Analyzed

E- Elevated detection limits due to the dilutions required by the elevated concentrations of non-target compounds in the samples

B - Analyte detecetd is associated blank as well as the sample

SIM-Indicates the analyte was quantitated using SIM Analysis

Elks Plaza, Freeport
New York Soil Samples-
April 2009

TABLE 6- QA/QC SAMPLES SUMMARY

	Sampling Date:		4/17/2009		4/9/2009		4/10/2009		4/9/2009		4/9/2009		4/9/2009	
	Project Location:		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza	
	Sample ID:		Trip Blank		TB #1		TB #2		FB#1 Soil		FB #2		SB 040909	
	Laboratory ID:		0904738-002A	Qualifier	0904471-012A	Qualifier	0904503-011A	Qualifier	0904473-003A	Qualifier	0904471-011A	Qualifier	0904471-013A	Qualifier
Cas #	Analyte	Units:												
74-87-3	Chloromethane	ug/L	ND		ND		ND	UJ	ND		ND		ND	U
75-01-4	Vinyl Chloride	ug/L	ND		ND		ND		ND		ND		ND	
75-00-3	Chloroethane	ug/L	ND		ND		ND		ND		ND		ND	
75-35-4	1,1-Dichloroethene	ug/L	ND		ND		ND		ND		ND		ND	
540-59-0	1,2-Dichloroethene (total)	ug/L	ND		ND		ND		ND		ND		ND	
67-64-1	Acetone	ug/L	ND		ND	UJ	2	BJ	3	UJ	3	UJ	2	UJ
75-15-0	Carbon Disulfide	ug/L	ND		ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
75-09-2	Methylene Chloride	ug/L	ND		ND		ND		ND		ND		4	J
1634-04-4	Methyl tert-butyl ether	ug/L	ND		ND		ND		ND		ND		ND	
75-34-3	1,1-Dichloroethane	ug/L	ND		ND		ND		ND		ND		ND	
78-93-3	2-Butanone	ug/L	ND		ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
67-66-3	Chloroform	ug/L	ND		ND		ND		ND		ND		ND	
71-55-6	1,1,1-Trichloroethane	ug/L	ND		ND		ND		ND		ND		ND	
56-23-5	Carbon Tetrachloride	ug/L	ND		ND		ND		ND		ND		ND	
71-43-2	Benzene	ug/L	ND		ND		ND		ND		ND		ND	
107-06-2	1,2-Dichloroethane	ug/L	ND		ND		ND		ND		ND		ND	
79-01-6	Trichloroethene	ug/L	ND		ND		ND		ND		ND		ND	
78-87-5	1,2-Dichloropropane	ug/L	ND		ND		ND		ND		ND		ND	
75-27-4	Bromodichloromethane	ug/L	ND		ND		ND		ND		ND		ND	
10061-01-5	cis-1,3-Dichloropropene	ug/L	ND		ND		ND		ND		ND		ND	
108-10-1	4-Methyl-2-pentanone	ug/L	ND		ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
108-88-3	Toluene	ug/L	ND		ND		ND		ND		ND		ND	
10061-02-6	trans-1,3-Dichloropropene	ug/L	ND		ND		ND		ND		ND		ND	
79-00-5	1,1,2-Trichloroethane	ug/L	ND		ND		ND		ND		ND		ND	
127-18-4	Tetrachloroethene	ug/L	ND		ND		ND		ND		ND		ND	
591-78-6	2-Hexanone	ug/L	ND		ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ
124-48-1	Dibromochloromethane	ug/L	ND		ND		ND		ND		ND		ND	
108-90-7	Chlorobenzene	ug/L	ND		ND		ND		ND		ND		ND	
100-41-4	Ethylbenzene	ug/L	ND		ND		ND		ND		ND		ND	
1330-20-7	Xylene (total)	ug/L	ND		ND		ND		ND		ND		ND	
100-42-5	Styrene	ug/L	ND		ND		ND		ND		ND		ND	
75-25-2	Bromoform	ug/L	ND		ND		ND		ND		ND		ND	
79-34-5	1,1,2,2-Tetrachloroethane	ug/L	ND		ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ

Notes:
ND - Analyte was not detected above method detection limit.

APPENDIX A

Field Investigation
Photo Documentation

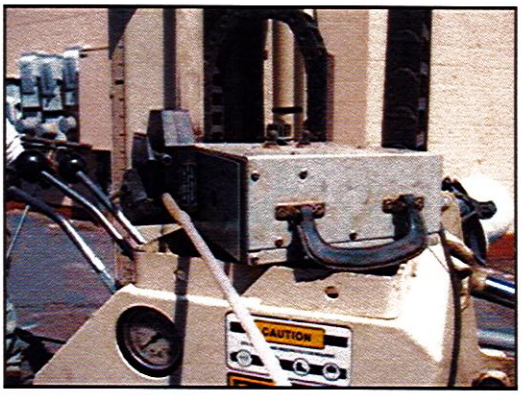
PREFERRED ENVIRONMENTAL SERVICES

323 Merrick Avenue - North Merrick, New York 11566
Tel: (516) 546-1100 Fax : (516) 213-8156

Photograph No. 1 – Subject property located at 157-189 West Merrick Road, Freeport, New York.

Photograph No. 4 – Medium to coarse sand and gravel encountered within soil borings exterior to the building.

Photograph No. 2 – Geoprobe set up on location SB-2/GW-3 for groundwater sampling.



Photograph No. 5 - Low flow pump utilized for purging of groundwater prior to sample collection.

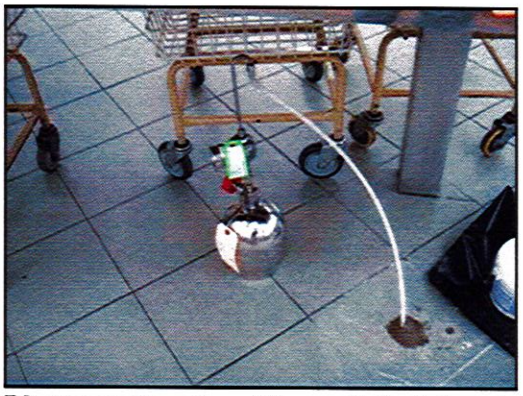
Photograph No. 3 – Sludge sample D-1 collected from drain located at the southwest corner of the property.

Photograph No. 6 – Geoprobe set up at location GW-5.

Photograph No. 7 – Purging of Well #1 utilizing the low flow pump.

Photograph No. 8 – Interior of Septic Tank where sample ST-1 was collected.

Photograph No. 9 – Soil Vapor sample SV-1 is being helium tested prior to final sample collection.



Photograph No. 10 – Sub-slab air sampling location within Laundromat.

Photograph No. 11 – Measurement of parameters during purging of Private Supply Well #2.

Photograph No. 12 – Soil Boring SB-4 installed within the Laundromat.

Photograph No. 13 – Outdoor air sample location OA-1 located at the northeastern portion of the building.

APPENDIX B

Boring Logs

PREFERRED ENVIRONMENTAL SERVICES
323 Merrick Avenue - North Merrick, New York 11566
Tel: (516) 546-1100 Fax : (516) 213-8156

PREFERRED ENVIRONMENTAL SERVICES 323 Merrick Avenue - North Merrick, New York 11566 Tel: (516) 546-1200 Fax: (516) 213-8356	**PROJECT:** Elks Plaza Shopping Center **LOCATION:** 157-189 West Merrick Road, Freeport, New York	**SOIL BORING/MONITORING WELL CONSTRUCTION LOG** **BORING NO.:** SB-1 / GW-1 **MON WELL ID:** NA
	DATE: April 9, 2009	**SHEET** 1 **OF** 1

BORING LOCATION: Southwest corner of property	**LOGGED BY:** William Schlageter
GROUND SURFACE ELEVATION: NA	**MEASURING POINT ELEVATION:** NA
START TIME: NA **DATE:** 4-9-09	**DRILLING CO.:** Berning Environmental Inc.
FINISH TIME: NA **DATE:** 4-9-09	**DRILLERS NAME:** Jon Mangano ; Eusi Watkins
SAMPLING METHOD: Continuous Soil Screening to groundwater	**GROUNDWATER OBSERVATIONS**
DRILLING METHOD AND RIG TYPE: Geoprobe 6610DT Dual tube sampling method	

DATE	TIME	DEPTH	CASING	NOTES
4/9/2009	AM	12 ft	NA	NA

DEPTH (FT)	SAMPLE DEPTH (FT)	SAMPLE REC. (IN.)	SAMPLE BLOWS/ 6 IN.	SAMPLE PID (PPM)	GRAPHIC LOG	MATERIAL DESCRIPTION
1 2 3 4 5	0-5	30	NA	0.0		12" Asphalt base; Brown silty sand and Brown medium to coarse sand and gravel; No odors or staining; Dry
6 7 8 9 10	5-10	31	NA	0.0		Reddish tan medium sand and little fine gravel; No odors or staining; Dry
11 12 ▼ 13 14 15	10-15	29	NA	0.0		Reddish tan medium sand and little fine gravel; No odors or staining; Wet at 12 feet below grade.

MONITORING WELL CONSTRUCTION DETAILS

DEPTH (FT): NA	**RISER INTERVAL:** NA	**MANHOLE:** NA
DIA. (IN.): NA	**DEPTH/TYPE PACK:** NA	**WELL ENDCAP:** NA
WELL MATERIAL: NA	**DEPTH/TYPE SEAL:** NA	**WELL CAP:** NA
SCREEN SLOT SIZE: NA	**BACKFILL OVER SEAL:** NA	
SCREEN INTERVAL: NA	**SURFACE SEAL:** NA	

Notes:
Soil sample from 1-3 feet below grade retained for labortaory analysis.
Groundwater samples from 22-24 feet and 12-14 feet below grade collected and submitted for laboratory analysis.

PREFERRED ENVIRONMENTAL SERVICES
123 Merrick Avenue - North Merrick, New York 11566
Tel: (516) 546-1100 Fax: (516) 213-8156

PROJECT: Elks Plaza Shopping Center

LOCATION: 157-189 West Merrick Road, Freeport, New York

SOIL BORING/MONITORING WELL CONSTRUCTION LOG

BORING NO.: SB-2 / GW-3
MON WELL ID: NA

DATE: April 10, 2009

SHEET 1 **OF** 1

BORING LOCATION: Adjacent to Magnetometer Anaomoly

LOGGED BY: William Schlageter

GROUND SURFACE ELEVATION: NA

MEASURING POINT ELEVATION: NA

START TIME: NA **DATE:** 4-10-09

DRILLING CO.: Berning Environmental Inc.

FINISH TIME: NA **DATE:** 4-10-09

DRILLERS NAME: Jon Mangano ; Eusi Watkins

SAMPLING METHOD: Continuous Soil Screening to groundwater

DRILLING METHOD AND RIG TYPE: Geoprobe 6610DT Dual tube sampling method

GROUNDWATER OBSERVATIONS

DATE	TIME	DEPTH	CASING	NOTES
4/10/2009	AM	14 ft	NA	NA

DEPTH (FT)	SAMPLE DEPTH (FT)	SAMPLE REC. (IN.)	SAMPLE BLOWS/ 6 IN.	SAMPLE PID (PPM)	GRAPHIC LOG	MATERIAL DESCRIPTION
1 2 3 4 5	0-5	24	NA	0.0		6" Asphalt base and Fill; Brown medium sand; No odor or staining; Dry
6 7 8 9 10	5-10	18	NA	0.0		Brown medium to coarse sand; No odors or staining; Dry
11 12 13 14 ▼ 15	10-15	29	NA	0.0		Brown medium to coarse sand; No odors or staining; Wet at 14 feet below grade.

MONITORING WELL CONSTRUCTION DETAILS

DEPTH (FT): NA	**RISER INTERVAL:** NA	**MANHOLE:** NA
DIA. (IN.): NA	**DEPTH/TYPE PACK:** NA	**WELL ENDCAP:** NA
WELL MATERIAL: NA	**DEPTH/TYPE SEAL:** NA	**WELL CAP:** NA
SCREEN SLOT SIZE: NA	**BACKFILL OVER SEAL:** NA	
SCREEN INTERVAL: NA	**SURFACE SEAL:** NA	

Notes:
No soil sample for SB-2 submitted for laboratory analysis
Groundwater sample from 24-26 feet and 14-16 feet below grade collected and submitted for laboratory analysis.

PREFERRED ENVIRONMENTAL SERVICES 325 Merrick Avenue - North Merrick, New York 11566 Tel: (516) 546-7100 Fax: (516) 223-8156	**PROJECT:** Elks Plaza Shopping Center **LOCATION:** 157-189 West Merrick Road, Freeport, New York	**SOIL BORING/MONITORING WELL CONSTRUCTION LOG** **BORING NO.:** SB-3 / GW-7 **MON WELL ID:** NA
	DATE: April 10, 2009	**SHEET** 1 **OF** 1

BORING LOCATION: Southern exterior portion of unit # 171	**LOGGED BY:** William Schlageter
GROUND SURFACE ELEVATION: NA	**MEASURING POINT ELEVATION:** NA
START TIME: NA **DATE:** 4-10-09	**DRILLING CO.:** Berning Environmental Inc.
FINISH TIME: NA **DATE:** 4-10-09	**DRILLERS NAME:** Jon Mangano ; Eusi Watkins
SAMPLING METHOD: Continuous Soil Screening to groundwater	**GROUNDWATER OBSERVATIONS**
DRILLING METHOD AND RIG TYPE: Geoprobe 6610DT Dual tube sampling method	

DATE	TIME	DEPTH	CASING	NOTES
4/10/2009	AM	13 ft	NA	NA

DEPTH (FT)	SAMPLE DEPTH (FT)	SAMPLE REC. (IN.)	SAMPLE BLOWS/ 6 IN.	SAMPLE PID (PPM)	GRAPHIC LOG	MATERIAL DESCRIPTION
1 2 3 4 5	0-5	30	NA	0.0		6" asphalt; Brown silty sand and gravel; No odors or staining; Dry
6 7 8 9 10	5-10	30	NA	0.0		Brown medium sand and gravel; No odors or staining; Dry
11 12 13 ▼ 14 15	10-15	26	NA	0.0		Brown medium sand and gravel; No odors or staining; Wet at 13 feet below grade.

MONITORING WELL CONSTRUCTION DETAILS

DEPTH (FT): NA	**RISER INTERVAL:** NA	**MANHOLE:** NA
DIA. (IN.): NA	**DEPTH/TYPE PACK:** NA	**WELL ENDCAP:** NA
WELL MATERIAL: NA	**DEPTH/TYPE SEAL:** NA	**WELL CAP:** NA
SCREEN SLOT SIZE: NA	**BACKFILL OVER SEAL:** NA	
SCREEN INTERVAL: NA	**SURFACE SEAL:** NA	

Notes:
Soil sample from 1-3 feet below grade retained for laboratory analysis.
Groundwater sample from 23-25 feet and 13-15 feet below grade collected and submitted for laboratory analysis.

PREFERRED ENVIRONMENTAL SERVICES 323 Merrick Avenue - North Merrick, New York 11566 Tel: (516) 626-1200 Fax: (516) 213-8256	**PROJECT:** Elks Plaza Shopping Center **LOCATION:** 157-189 West Merrick Road, Freeport, New York	**SOIL BORING/MONITORING WELL CONSTRUCTION LOG** **BORING NO.:** SB-4 **MON WELL ID:** NA
	DATE: April 17, 2009	**SHEET** 1 **OF** 1

BORING LOCATION: Interior of Laundromat - Unit 181	**LOGGED BY:** Bryan Gammons
GROUND SURFACE ELEVATION: NA	**MEASURING POINT ELEVATION:** NA
START TIME: NA **DATE:** 4-17-09	**DRILLING CO.:** Preferred Environmental Services
FINISH TIME: NA **DATE:** 4-17-09	**DRILLERS NAME:** Bryan Gammons
SAMPLING METHOD: Continuous Soil Screening	**GROUNDWATER OBSERVATIONS**
DRILLING METHOD AND RIG TYPE: Manually operated stainless steel hand auger	

DATE	TIME	DEPTH	CASING	NOTES
NA	NA	NA	NA	NA

DEPTH (FT)	SAMPLE DEPTH (FT)	SAMPLE REC. (IN.)	SAMPLE BLOWS/ 6 IN.	SAMPLE PID (PPM)	GRAPHIC LOG	MATERIAL DESCRIPTION
1 — 2	0-2	NA	NA	0.0		3" Concrete and 1" void space between concrete and soils; Light brown fine sand and gravel; No odors or staining; Dry
3 — 4	2-4	NA	NA	See Des.		2-3 ft - Light brown fine sand with fill material (Brick)- No odors or staining and Dry; 3-4 ft - Light brown fine sand and fill material (Brick) - No staining or odors and Dry - 3.1 ppm.
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

MONITORING WELL CONSTRUCTION DETAILS

DEPTH (FT): NA	**RISER INTERVAL:** NA	**MANHOLE:** NA
DIA. (IN.): NA	**DEPTH/TYPE PACK:** NA	**WELL ENDCAP:** NA
WELL MATERIAL: NA	**DEPTH/TYPE SEAL:** NA	**WELL CAP:** NA
SCREEN SLOT SIZE: NA	**BACKFILL OVER SEAL:** NA	
SCREEN INTERVAL: NA	**SURFACE SEAL:** NA	

Notes:
Soil sample from 3-4 feet below grade retained for laboratory analysis.

APPENDIX C

NYSDOH *Indoor air Quality Questionnaire and Building Inventory*

PREFERRED ENVIRONMENTAL SERVICES

323 Merrick Avenue - North Merrick, New York 11566

Tel: (516) 546-1100 Fax : (516) 213-8156

ELKS PLAZA
157-189 West Merrick Road, Freeport, New York

Indoor Air Sample Log Sheet

SAMPLE IDENTIFICATION	ELKS -IA-1
DATE AND TIME OF SAMPLE COLLECTION	4-10-09 /
SAMPLING HEIGHT	Four feet above grade
IDENTITY OF SAMPLERS	William Schlageter
SAMPLING METHODS AND DEVICES	Summa Canister with Regulator set for 8 hours
DEPENDING UPON THE METHOD, VOLUME OF AIR SAMPLED	2.7 Liter Summa
IF CANISTERS ARE USED, VACUUM OF CANISTERS BEFORE AND AFTER SAMPLES COLLECTED	-30 lb Start lb Finish Canister- 454 Regulator- 0017

Subslab Sample Log Sheet

SAMPLE IDENTIFICATION	ELKS -SS-1
DATE AND TIME OF SAMPLE COLLECTION	4-17-09 / 17:18
SAMPLING HEIGHT	4" Below Grade
IDENTITY OF SAMPLERS	David Kahn, Bryan Gammons
SAMPLING METHODS AND DEVICES	Summa Canister with Regulator set for 8 hours
DEPENDING UPON THE METHOD, VOLUME OF AIR SAMPLED	2.7 Liter Summa
IF CANISTERS ARE USED, VACUUM OF CANISTERS BEFORE AND AFTER SAMPLES COLLECTED	-30 lb Start -8 lb Finish Canister- 395 Regulator - 0154

OutdoorAir Sample Log Sheet

SAMPLE IDENTIFICATION	ELKS - OA-1
DATE AND TIME OF SAMPLE COLLECTION	4-17-09 / 16:40
SAMPLING HEIGHT	3.5 feet above grade
IDENTITY OF SAMPLERS	David Kahn, Bryan Gammons
SAMPLING METHODS AND DEVICES	Summa Canister with Regulator set for 8 hours
DEPENDING UPON THE METHOD, VOLUME OF AIR SAMPLED	2.7 Liter Summa
IF CANISTERS ARE USED, VACUUM OF CANISTERS BEFORE AND AFTER SAMPLES COLLECTED	-30 lb Start -5.5 lb Finish Canister- 371 Regulator- 0237

Soil Vapor Sample Log Sheet

SAMPLE IDENTIFICATION	ELKS - SV-1
DATE AND TIME OF SAMPLE COLLECTION	4-17-09 / 16:58
SAMPLING HEIGHT	Six Feet Below Grade
IDENTITY OF SAMPLERS	David Kahn, Bryan Gammons, Butch Meyers
SAMPLING METHODS AND DEVICES	Summa Canister with Regulator set for 8 hours
DEPENDING UPON THE METHOD, VOLUME OF AIR SAMPLED	2.7 Liter Summa
IF CANISTERS ARE USED, VACUUM OF CANISTERS BEFORE AND AFTER SAMPLES COLLECTED	-30 lb Start -11 lb Finish Canister- 136 Regulator- 0078

Soil Vapor Sample Log Sheet

SAMPLE IDENTIFICATION	ELKS - SV-2
DATE AND TIME OF SAMPLE COLLECTION	4-17-09 / 16:45
SAMPLING HEIGHT	Six Feet BelowGrade
IDENTITY OF SAMPLERS	David Kahn, Bryan Gammons, Butch Meyers
SAMPLING METHODS AND DEVICES	Summa Canister with Regulator set for 8 hours
DEPENDING UPON THE METHOD, VOLUME OF AIR SAMPLED	2.7 Liter Summa
IF CANISTERS ARE USED, VACUUM OF CANISTERS BEFORE AND AFTER SAMPLES COLLECTED	-29 lb Start -5.5 lb Finish Canister- 112 Regulator- 0064

Soil Vapor Sample Log Sheet

SAMPLE IDENTIFICATION	ELKS - SV-3
DATE AND TIME OF SAMPLE COLLECTION	4-17-09 / 16:59
SAMPLING HEIGHT	Six Feet Below Grade
IDENTITY OF SAMPLERS	David Kahn, Bryan Gammons, Butch Meyers
SAMPLING METHODS AND DEVICES	Summa Canister with Regulator set for 8 hours
DEPENDING UPON THE METHOD, VOLUME OF AIR SAMPLED	2.7 Liter Summa
IF CANISTERS ARE USED, VACUUM OF CANISTERS BEFORE AND AFTER SAMPLES COLLECTED	-26 lb Start -7 lb Finish Canister- 545 Regulator- 0079

Soil Vapor Sample Log Sheet

SAMPLE IDENTIFICATION	ELKS - SV-4
DATE AND TIME OF SAMPLE COLLECTION	4-17-09 / 17:29
SAMPLING HEIGHT	Six Feet Below Grade
IDENTITY OF SAMPLERS	David Kahn, Bryan Gammons, Butch Meyers
SAMPLING METHODS AND DEVICES	Summa Canister with Regulator set for 8 hours
DEPENDING UPON THE METHOD, VOLUME OF AIR SAMPLED	2.7 Liter Summa
IF CANISTERS ARE USED, VACUUM OF CANISTERS BEFORE AND AFTER SAMPLES COLLECTED	-30 lb Start -11 lb Finish Canister- 467 Regulator- 0294

OSR – 3

NEW YORK STATE DEPARTMENT OF HEALTH
INDOOR AIR QUALITY QUESTIONNAIRE AND BUILDING INVENTORY
CENTER FOR ENVIRONMENTAL HEALTH

This form must be completed for each residence involved in indoor air testing.

Preparer's Name _____ Date Time Prepared _____

Preparer's Affiliation _____ Phone No. _____

Purpose of Investigation _____

1. OCCUPANT:

Interviewed: Y /(N)

Last Name: First Name: _____

Address: _____

County:

Home Phone: Office Phone:

Number of Occupants persons at this location Age of Occupants _____

2. OWNER OR LANDLORD: (Check if same as occupant ___)

Interviewed: Y /(N)

Last Name: _____ First Name: _____

Address:

County: _____

Home Phone: _____ Office Phone: _____

3. BUILDING CHARACTERISTICS

Type of Building: (Circle appropriate response)

Residential School (Commercial Multi-use) -> Shopping center
Industrial Church Other:

If the property is residential, type? (Circle appropriate response) N/A

Ranch	2-Family	3-Family
Raised Ranch	Split Level	Colonial
Cape Cod	Contemporary	Mobile Home
Duplex	Apartment House	Townhouses Condos
Modular	Log Home	Other: ___

If multiple units, how many?

If the property is commercial, type?

Business Type(s) Shopping center -> Specific unit is laundromat currently

Does it include residences (i.e., multi-use)? Y (N) If yes, how many?

Other characteristics:

Number of floors 1 Building age

Is the building insulated? Y / N How air tight? Tight / (Average) / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns and qualitatively describe:

Airflow between floors

N/A

Airflow near source

N/A

Outdoor air infiltration

[illegible]

Infiltration into air ducts

N/A

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (Circle all that apply)

a. Above grade construction:	wood frame	(concrete)	stone	brick
b. Basement type:	(full)	crawlspace	slab	other [illegible]
c. Basement floor:	(concrete)	dirt	stone	other
d. Basement floor:	uncovered	(covered)	covered with [illegible]	
e. Concrete floor:	(unsealed)	sealed	sealed with _____	
f. Foundation walls:	poured	(block)	stone	other
g. Foundation walls:	(unsealed)	sealed	sealed with _____	
h. The basement is:	wet	damp	(dry)	moldy
i. The basement is:	finished	(unfinished)	partially finished	
j. Sump present?	(Y) N			
k. Water in sump?	(Y) N / not applicable			

Basement/Lowest level depth below grade: 2 x (feet)

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

_____ _____ _____

_____ _____ _____ _____ _____

6. HEATING, VENTING and AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

(Hot air circulation)	Heat pump	Hot water baseboard	
Space Heaters	Stream radiation	Radiant floor	
Electric baseboard	Wood stove	Outdoor wood boiler	Other _____

The primary type of fuel used is:

(Natural Gas)	Fuel Oil	Kerosene
Electric	Propane	Solar
Wood	Coal	

Domestic hot water tank fueled by: [illegible]

Boiler/furnace located in: Basement Outdoors (Main Floor) Other _____

Air conditioning: (Central Air) Window units Open Windows None

Are there air distribution ducts present? Y N

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

7. OCCUPANCY

Is basement/lowest level occupied? Full-time Occasionally Seldom Almost Never

Level	General Use of Each Floor (e.g., familyroom, bedroom, laundry, workshop, storage)
Basement	
1st Floor	
2nd Floor	
3rd Floor	
4th Floor	

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? Y (N)

b. Does the garage have a separate heating unit? Y (N) NA

c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, atv, car) Y (N) NA
Please specify _____

d. Has the building ever had a fire? Y (N) When? _____

e. Is a kerosene or unvented gas space heater present? Y (N) Where? _____

f. Is there a workshop or hobby/craft area? Y (N) Where & Type? _____

g. Is there smoking in the building? Y (N) How frequently? _____

h. Have cleaning products been used recently? (Y) N When & Type? _____

i. Have cosmetic products been used recently? Y (N) When & Type? _____

j. Has painting/staining been done in the last 6 months? Y (N) Where & When? ____

k. Is there new carpet, drapes or other textiles? Y (N) Where & When? ____

l. Have air fresheners been used recently? Y (N) When & Type? ____

m. Is there a kitchen exhaust fan? Y (N) If yes, where vented?

n. Is there a bathroom exhaust fan? Y (N) If yes, where vented?

o. Is there a clothes dryer? (Y) N If yes, is it vented outside? (Y) N

p. Has there been a pesticide application? Y (N) When & Type? ____

Are there odors in the building? (Y) N
If yes, please describe: [illegible]

Do any of the building occupants use solvents at work? Y (N)
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist

If yes, what types of solvents are used? ____

If yes, are their clothes washed at work? Y N

Do any of the building occupants regularly use or work at a dry-cleaning service? (Circle appropriate response)

Yes, use dry-cleaning regularly (weekly) No
Yes, use dry-cleaning infrequently (monthly or less) (Unknown)
Yes, work at a dry-cleaning service

Is there a radon mitigation system for the building/structure? Y (N) Date of Installation: ____
Is the system active or passive? Active Passive

9. WATER AND SEWAGE

Water Supply: Public Water (Drilled Well) Driven Well Dug Well Other: ____

Sewage Disposal: (Public Sewer) Septic Tank Leach Field Dry Well Other:

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended: n/a

b. Residents choose to: remain in home relocate to friends/family relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? Y N

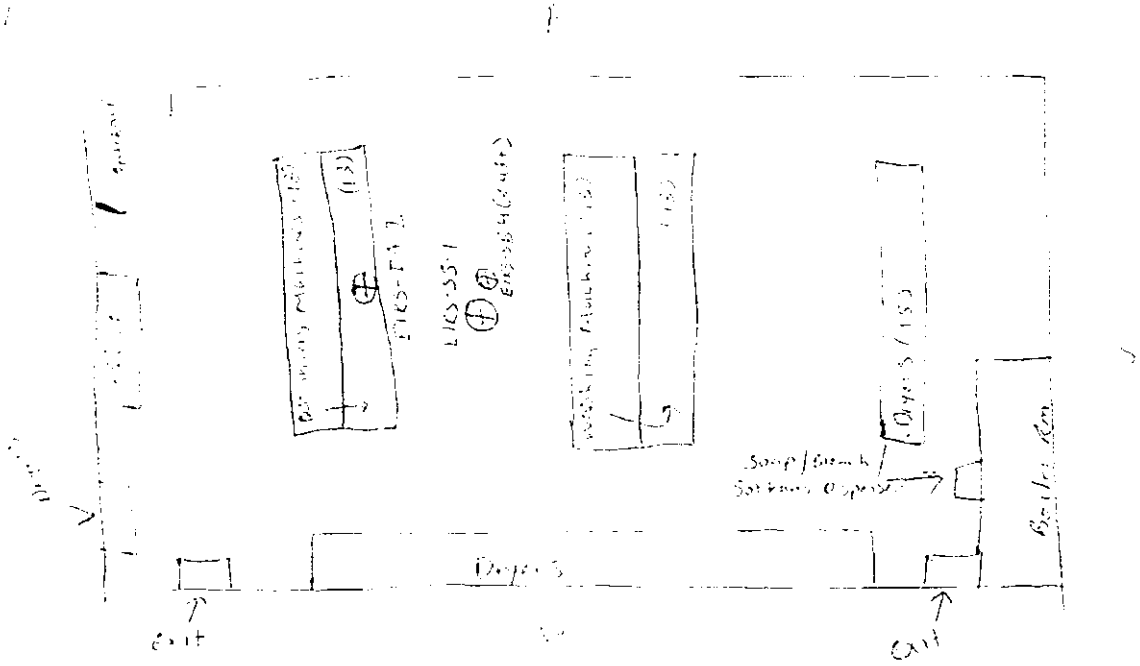
d. Relocation package provided and explained to residents? Y / N

11. FLOOR PLANS

Draw a plan view sketch of the basement and first floor of the building. Indicate air sampling locations, possible indoor air pollution sources and PID meter readings. If the building does not have a basement, please note.

Basement:

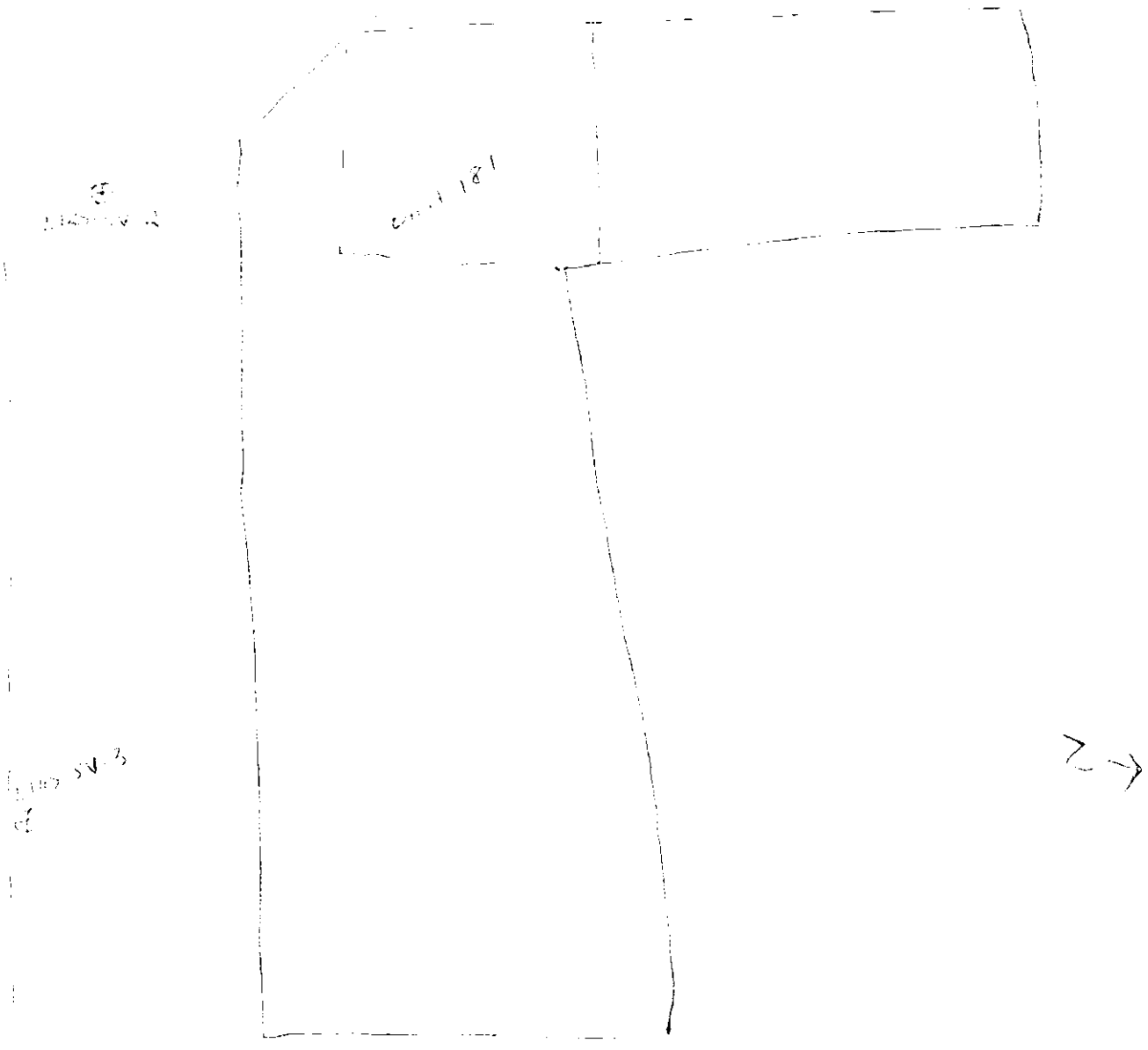
First Floor:



12. OUTDOOR PLOT

Draw a sketch of the area surrounding the building being sampled. If applicable, provide information on spill locations, potential air contamination sources (industries, gas stations, repair shops, landfills, etc.), outdoor air sampling location(s) and PID meter readings.

Also indicate compass direction, wind direction and speed during sampling, the locations of the well and septic system, if applicable, and a qualifying statement to help locate the site on a topographic map.



13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: Mini Rae Photo Ionization Detector 2000

List specific products found in the residence that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition*	Chemical Ingredients	Field Instrument Reading (units)	Photo** Y/N
Laundry	Fabuloso	1 L	U	Isopropanol	0.0	Y
↓	Clorox Bleach	240 Fl oz.	UO	Triethanolamine, Hydrogen Peroxide Benzenesulfonic Acid	0.0	Y
↓	Downy Detergent	300 Fl oz	UO	ethanol (SD alcohol 40, MEA, Borax, Sodium Hydroxide	0.0	Y
↓	TIDE Detergent	125 Fl oz	UO	Ethanol (SD Alcohol 40, MEA, borax, Sodium Hydroxide	0.0	Y
↓	Shout Stain Remover	440 Fl. oz	UO	water, Acrylic polymers, C12-15 Pareth-11	0.0	Y
↓	Downy Fabric Softener	20 boxes of sheets	UO	Biodegradable Fabric Softening agents	0.0	Y
↓	Gain Fabric Softener	20 boxes of sheets	UO	↓	0.0	Y

* Describe the condition of the product containers as **Unopened (UO)**, **Used (U)**, or **Deteriorated (D)**

** Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

APPENDIX D

Data Usability Summary Report

PREFERRED ENVIRONMENTAL SERVICES

323 Merrick Avenue - North Merrick, New York 11566

Tel: (516) 546-1100 Fax : (516) 213-8156

Premier Environmental Services

DATA USABILTY SUMMARY REPORT (DUSR)
OF THE
ELKS PLAZA-FREEPORT SITE
FREEPORT, NEW YORK

ORGANIC ANALYSES IN
AQUEOUS SAMPLES

H2M LABORATORIES, INC.
MELVILLE, NEW YORK

SDG NUMBER:
PES004

June, 2009

Prepared for
Preferred Environmental Services
Merrick, New York

Prepared by
Premier Environmental Services
2815 Covered Bridge Road
Merrick, New York 11566
(516)223-9761

NYS DEC Data Usability Summary Report

DATA VALIDATION FOR:	**Volatile Organic Analyses – EPA Method 8260B**
SITE:	**Elks Plaza Site Freeport, New York**
CONTRACT LAB:	**H2M Laboratories, Inc. Melville, New York**
REVIEWER:	**Renee Cohen**
DATE REVIEW COMPLETED:	**June, 2009**
MATRIX:	**Aqueous**

The data validation was performed according to the guidelines in the described in the New York State Department of Environmental Conservation, Division of Environmental Remediation, Guidance for the Development of Data Usability Summary Reports (DUSR). In addition the data was been reviewed using the protocol specified in the NYS Analytical Services Protocol ('95).

All data are considered valid and acceptable except those analytes which have been rejected "R" (unreliable/unusable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material, "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All actions are detailed on the attached sheets.

Several factors should be noted for all persons using this data. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results presented meet the specific site/project criteria for data quality and data use.

This data set includes the review of twenty-two (22) aqueous samples, one (1) Field Blank sample and three (3) Trip Blank samples. The samples in this data set were collected April 9, 2009, April 10, 2009 and April 17, 2009. The samples were delivered to H2M Labs, Inc. located in Melville, New York. The samples were received at the laboratory on April 9, 2009, April 10, 2009 and April 17, 2009. All samples were received in good condition. The samples were analyzed for Volatile Organic Analytes (EPA Method 8260B) as specified on the Chain of Custody (COC) documentation that accompanied the samples to the laboratory.

Appendix A of this report includes a list of qualifiers and definitions that may be used in this report. Appendix B of the report includes the qualified data result tables. A copy of the COC documents associated with this data set is located in Appendix C of this report. Appendix D of this report is a copy of the TIC result pages associated with each sample in this data set.

DATA USABILITY SUMMARY REPORT (DUSR)
ELKS PLAZA SITE

1. OVERVIEW:

The aqueous samples associated with this data set were submitted to the laboratory for the analyses requested on the Chain of Custody (COC) documentation. The samples were analyzed for the organic analytes using EPA Test Methods for the Evaluation of Solid Waste (SW 846), Method 8260B. The laboratory provided a deliverables package in accordance with the guidelines in the NYSDEC ASP, Rev '95, Category B.

The samples in this data set are designated as SDG PES004.

2. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Preserved volatile organic analyses are required to be analyzed within 10 days of validated time of sample receipt (VTSR) in accordance with the NYSDEC ASP, Rev '95.

All samples in this data set were analyzed for Volatile Organic Analytes by EPA Method 8260B. All of the samples and associated QC samples were analyzed in two analytical sequences. All sample analyses associated with this data set were completed by April 24, 2009. All of the samples in this data set were analyzed within ten (10) days of VTSR. All holding times were met in each of these sample analyses.

3. SURROGATES:

All samples are spiked with surrogate compounds prior to sample preparation to evaluate the overall laboratory performance and the efficiency of the analytical technique. If the measured surrogate concentrations are outside the QC limits, qualifiers were applied to the effected samples.

Each sample was spiked/fortified with the surrogate compounds 1,2-Dichloroethane-d4, Toluene-d8 and 4-Bromofluorobenzene. In-house surrogate recovery limits were reported by the laboratory. The percent recovery of each surrogate met QC criteria in each of the field samples and QC samples associated with this data set.

4. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data. The laboratory used the in-house generated recovery criteria and RPD (precision) data for reporting purposes.

Sample GW-1 (22-24) was utilized as the site-specific Matrix Spike/Matrix Spike Duplicate sample. The sample was spiked with the CLP subset of target analytes. In-house recovery and RPD limits were applied for review. The recovery of all spiked compounds met QC criteria in both the matrix spike and matrix spike duplicate sample. The Relative Percent Differences (RPD) of all spiked analytes met QC criteria in this site specific MS/MSD set

5. BLANK SPIKE ANALYSIS:

The NY ASP protocol requires that a blank spike analysis be performed with each sample batch. The blank spike analysis is used to insure that the analytical system is in control. The laboratory applied in-house recovery limits for each analyte.

The laboratory reported two (2) blank spike samples with this data set. The blank spike sample was fortified with all reported analytes. The spike recovery of each target analyte in each of the aqueous blank spike samples met QC criteria.

6. BLANK CONTAMINATION:

Quality assurance (QA) blanks, such as the method, trip, field, or rinse blanks are prepared to identify any contamination that may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations. Samples are then qualified based on blank contamination when detected.

A) Method Blank contamination

Three (3) method blank samples are associated with this data set. Each was free from contamination of all target and non-target analytes with the exception of Acetone. Acetone was detected in each of the method blank samples at a concentration of 2 J ug/l. When detected at a concentration that can be attributed to method blank contamination Acetone has been negated and qualified "U".

Qualified data result pages are located in Appendix B of this report.

B) Field Blank contamination

The Field Blank sample (FB #2) was free from contamination of all target and non-target analytes with the exception of Acetone (3 J B ug/l).

The SB040909 was free from contamination of all target analytes with the exception of Acetone (2 B J ug/l) and Methylene Chloride (4 J ug/l). In addition a number of tentatively identified alkane compounds were detected in this sample. When detected in associated samples, these were negated and qualified "U".

C) Trip Blank contamination

One (1) Trip Blank sample was associated with each day of sample collection. Sample TB #1 (4/9/09) was free from contamination of all target and non-target analytes. Sample TB #2 (4/10/09) was free from contamination of all target analytes with the exception of Acetone. Acetone was detected at a concentration of 2 B J ug/l. In addition a number of tentatively identified alkane compounds were detected in this Trip Blank sample. When detected in associated samples, these were negated and qualified "U". Sample Trip Blank (4/17/09) was free from contamination of all target and non-target analytes.

Qualified data result pages are located in Appendix B of this report.

DATA USABILITY SUMMARY REPORT (DUSR)
ELKS PLAZA SITE

7. GC/MS CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument is giving satisfactory daily performance. USEPA data validation criteria is the same for all analytes in both GC/MS Volatile and GC/MS Semivolatile Organic analyses, therefore, all text discussion is for VOA and SVOA samples analyses.

A) RESPONSE FACTOR

The response factor measures the instrument's response to specific chemical compounds. USEPA data review requires that the response factor of all analytes be greater than or equal to 0.05 in both initial and continuing calibration analyses. A value less than 0.05 indicates a serious detection and quantitation problem (poor sensitivity). USEPA data validation criteria states that if the minimum RRF criteria are not met in an initial calibration the positive results are qualified "J". Non-detect results in the initial calibration with a RRF <0.05 are qualified "R", unusable. If RRF criteria is not met in the continuing calibration curve analysis, affected positive analytes will be qualified "J" estimated. Those analytes not detected are not qualified. The SW-846 Methods cite specific analytes known as System Performance Check Compounds (SPCC). Minimum response criteria are set for these analytes. If the minimum criteria are not met, analyses must stop and the source of problems must be found and corrected. Data associated with this set has been reviewed for the criteria in the cited in the EPA Method and the USEPA criteria.

One (1) initial calibration curve analysis is associated with this data set. The laboratory performed an aqueous initial multi-level calibration on March 2, 2009. The RRF for all target compounds met QC criteria in this initial calibration curve.

Three (3) continuing calibration standards are associated with this data set. All response factor criteria of the target analytes met QC criteria each of these continuing calibration standard analyses.

DATA USABILITY SUMMARY REPORT (DUSR)
ELKS PLAZA SITE

B) PERCENT RELATIVE STANDARD DEVIATION (RSD) AND PERCENT DIFFERENCE (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the compounds in the continuing calibration standard to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Region II data validation criteria states that the percent RSD of the initial calibration curve must be less than or equal to 30%. The %D must be <25% in the continuing calibration standard. This criteria has been applied to all target analytes. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects may be flagged "UJ", based on professional judgment. If %RSD and %D grossly exceed QC criteria (>90%), non-detects data may be qualified "R", unusable. Data associated with this set has been reviewed for the criteria in the cited in the USEPA Data Validation Guidelines.

One (1) initial calibration curve analysis is associated with this data set. The laboratory performed one (1) initial multi level aqueous calibration on March 2, 2009. The %RSD for all target compounds met QC criteria in this initial calibration curve.

Three (3) continuing calibration standards are associated with this data set. All %Difference criteria met all QC criteria for the target analytes with the exception of the following:

Date of Analysis	File ID	Analyte	%Difference
4/15/09	A\A64356	Acetone	30.3
		Carbon Disulfide	28.1
		2-Butanone	29.1
		4-Methyl-2-Pentanone	41.2
		2-Hexanone	41.5
		1,1,2,2-Tetrachloroethane	28.5
4/16/09	A\A64382	Chloromethane	34.9
		Acetone	29.3
		Carbon Disulfide	28.4
		2-Butanone	28.5
		4-Methyl-2-Pentanone	38.9
		2-Hexanone	37.7
		1,1,2,2-Tetrachloroethane	26.3

These target analytes have been qualified "UJ/J" estimated in each of the samples associated with these continuing calibration standard analyses.

Qualified data result pages are located in Appendix B of this report.

DATA USABILITY SUMMARY REPORT (DUSR)
ELKS PLAZA SITE

8. GC/MS MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is Bromofluorobenzene (BFB). If the mass calibration is in error, or missing, all associated data will be classified as unusable, "R".

All BFB Instrument Tuning criteria were met for these sample analyses.

9. GC/MS INTERNAL STANDARDS PERFORMANCE:

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every run. The method recommends that the internal standard area count must not vary by more than a factor of 2 (-50%to +100%) from the associated continuing calibration standard. The method recommends that the retention time of the internal standard must not vary more than ±30 seconds from the associated continuing calibration standard. The EPA CLP validation guidelines state that if the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified estimated, "J", and all non-detects below 50% are qualified "UJ", non detects above 100% should not be qualified or "R" if there is a severe loss of sensitivity. The internal standard evaluation criteria are applied to all field and QC samples.

All samples were fortified with the internal standards Bromochloromethane, 1,4-Difluorobenzene and Chorobenzene-d5. All internal standard area criteria were met for the samples in this data set.

10. COMPOUND IDENTIFICATION:

Target compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound, and have an ion spectra which has a ratio of the primary and secondary ion intensities with 20% of that in the standard compound.

The samples in this data set were analyzed via EPA Method 8260B. The laboratory reported all target analytes to the laboratory reporting limit (RL). Results between the MDL and RL were qualified "J" by the laboratory on the result page. All samples in this data set were analyzed and reported without dilution. Tentatively Identified Compounds (TIC's) were analyzed for and reported with each sample in this data set.

DATA USABILITY SUMMARY REPORT (DUSR)
ELKS PLAZA SITE

11. FIELD DUPLICATE SAMPLE ANALYSES:

Field duplicate samples are collected and analyzed as an indication of overall field precision. These results are expected to have more variability than laboratory duplicate samples. Field duplicate samples are not associated wit this data set.

12. OVERALL ASSESSMENT:

Analytical QC criteria were met for these analyses. The laboratory provided a complete data package and reported all data using acceptable protocols and laboratory qualifiers as defined in the report package.

The sample data results reported are acceptable for use with the noted data qualifiers. Data qualifiers are detailed in the above report.

Qualified data result pages are located in Appendix B of this report.

TABLE 1

CLIENT SAMPLE ID	LABORATORY SAMPLE ID
GW-1 (12-14)	0904471-001
GW-1 (22-24)	0904471-002
GW-2 (16-18)	0904471-003
GW-2 (26-28)	0904471-004
GW-3 (14-16)	0904471-005
GW-3 (24-26)	0904471-006
GW-4 (14-16)	0904471-007
GW-4 (24-26)	0904471-008
GW-5 (14-16)	0904471-009
GW-5 (24-26)	0904471-010
FB # 2	0904471-011
TB # 1	0904471-012
SB 040909	0904471-013
GW-6 (14-16)	0904503-001
GW-6 (24-26)	0904503-002
GW-7 (13-15)	0904503-003
GW-7 (23-25)	0904503-004
GW-8 (14-16)	0904503-005
GW-8 (24-26)	0904503-006
GW-9 (14-16)	0904503-007
GW-9 (24-26)	0904503-008
ST-1	0904503-009
WELL #1	0904503-010
TB # 2	0904503-011
WELL #2	0904738-001
TRIP BLANK	0904738-002

APPENDIX A

DATA QUALIFIER DEFINITIONS

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

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

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

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

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

R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.

K – The analyte is present. The reported value may be biased high. The actual value is expected to be lower than reported.

L - The analyte is present. The reported value may be biased low. The actual value is expected to be higher than reported.

UL – The analyte was not detected, and the reported quantitation limit is probably higher than reported.

APPENDIX B

TABLE 2 - SUMMARY OF VOLATILE ORGANIC COMPOUNDS DETECTED AND/OR ELEVATED ABOVE NYSDEC CLASS GA AMBIENT WATER QUALITY STANDARDS IN GROUNDWATER SAMPLES GW-1 THROUGH GW-5

Elks Plaza,
Freeport, New York
Soil Samples- April 2009

			GW-1				GW-2				GW-3				GW-4				GW-5				
	Sampling Date		4/8/2009		4/8/2009		4/8/2009		4/8/2009		4/8/2009		4/8/2009		4/8/2009		4/8/2009		4/8/2009		4/8/2009		NYSDEC Class GA Ambient Water Quality Standards and Guidance Values (ug/L)
	Project Location		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		
	Sample ID		GW-1 (12-14)		GW-1 (22-24)		GW-2 (16-18)		GW-2 (26-28)		GW-3 (14-16)		GW-3 (24-26)		GW-4 (14-16)		GW-4 (24-26)		GW-5 (14-16)		GW-5 (24-26)		
	Laboratory ID		0804471-001A		0804471-002A		0804471-003A		0804471-004A		0804471-005A		0804471-006A		0804471-007A		0804471-008A		0804471-009A		0804471-010A		
Cas #	Analyte	Units:		Qualifier		Qualifier		Qualifier		Qualifier		Qualifier		Qualifier		Qualifier		Qualifier		Qualifier		Qualifier	
74-87-3	Chloromethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		NA
75-01-4	Vinyl Chloride	ug/L	ND		ND		ND		ND		ND		4	J	ND		ND		ND		ND		2
74-83-9	Bromomethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		NA
75-00-3	Chloroethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		50
75-35-4	1,1-Dichloroethene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
540-59-0	1,2-Dichloroethene (total)	ug/L	ND		ND		ND		ND		31		45		1	J	ND		8	J	2	J	5
67-64-1	Acetone	ug/L	7	UJ	3	UJ	6	UJ	8	UJ	3	UJ	5	UJ	3	UJ	4	UJ	ND	UJ	3	UJ	50
75-15-0	Carbon Disulfide	ug/L	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	50
75-09-2	Methylene Chloride	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
1634-04-4	Methyl tert-butyl ether	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		10
75-34-3	1,1-Dichloroethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
78-93-3	2-Butanone	ug/L	2	J	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	50
67-66-3	Chloroform	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		7
71-55-6	1,1,1-Trichloroethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
56-23-5	Carbon Tetrachloride	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
71-43-2	Benzene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		0.7
107-06-2	1,2-Dichloroethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
79-01-6	Trichloroethene	ug/L	ND		ND		ND		ND		39		25		3	J	ND		11		3	J	5
78-87-5	1,2-Dichloropropane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		NO		1
75-27-4	Bromodichloromethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		50
10061-01-5	cis-1,3-Dichloropropene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
108-10-1	4-Methyl-2-pentanone	ug/L	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	50
108-88-3	Toluene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
10061-02-6	trans-1,3-Dichloropropene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		NA
79-00-5	1,1,2-Trichloroethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
127-18-4	Tetrachloroethene	ug/L	4	J	ND		ND		ND		180		25		50		1	J	88		9	J	5
591-78-6	2-Hexanone	ug/L	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	50
124-48-1	Dibromochloromethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
108-90-7	Chlorobenzene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		NA
100-41-4	Ethylbenzene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
1330-20-7	Xylene (total)	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
100-42-5	Styrene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
75-25-2	Bromoform	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		5
79-34-5	1,1,2,2-Tetrachloroethane	ug/L	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	5

Notes:

J - Indicates an estimated value

B - Indicates that the analyte is found in the associated blank as well as the sample

NYSDEC Class GA Ambient Water Quality Standards and Guidance Values,
Revised June 1998

NA - Not Available

Bolded values indicate detected above NYSDEC Class GA Ambient Water Quality Standards

B - Analyte detected in associated blank as well as the sample

Elks Plaza,
Freeport New York
Soil Samples- April 2009

TABLE 3 - SUMMARY OF VOLATILE ORGANIC COMPOUNDS DETECTED AND/OR ELEVATED ABOVE NYSDEC CLASS GA AMBIENT WATER QUALITY STANDARDS IN GROUNDWATER SAMPLES GW-6 THROUGH GW-9 AND ST-1, WELL #1 AND WELL #2

	Sampling Date / Project Location / Sample ID / Laboratory ID		GW-6				GW-7				GW-8				GW-9				Septic Tank		Supply Wells			
			4/10/2009 Elks Plaza GW-6 (14-16) 0904603-001A	Qualifier	4/10/2009 Elks Plaza GW-6 (24-26) 0904603-002A	Qualifier	4/10/2009 Elks Plaza GW-7 (13-16) 0904603-003A	Qualifier	4/10/2009 Elks Plaza GW-7 (23-26) 0904603-004A	Qualifier	4/10/2009 Elks Plaza GW-8 (14-16) 0904603-005A	Qualifier	4/10/2009 Elks Plaza GW-8 (24-26) 0904603-006A	Qualifier	4/10/2009 Elks Plaza GW-9 (14-16) 0904603-007A	Qualifier	4/10/2009 Elks Plaza GW-9 (24-26) 0904603-008A	Qualifier	4/10/2009 Elks Plaza ST-1 0904603-009A	Qualifier	4/10/2009 Elks Plaza WELL #1 0904603-010A	Qualifier	4/17/2009 Elks Plaza Well #2 0904736-001A ACTIVE WELL	Qualifier
Cas #	Analyte	Units:																						
74-87-3	Chloromethane	ug/L	ND		ND		ND		ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	
75-01-4	Vinyl Chloride	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
74-83-9	Bromomethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
75-00-3	Chloroethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
75-35-4	1,1-Dichloroethene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
540-59-0	1,2-Dichloroethene (total)	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
67-64-1	Acetone	ug/L	5	UJ	3	UJ	2	UJ	2	UJ	10	UJ	4	UJ	3	UJ	3	UJ	110	BJ	4	UJ	ND	
75-15-0	Carbon Disulfide	ug/L	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	
75-09-2	Methylene Chloride	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1634-04-4	Methyl tert-butyl ether	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
75-34-3	1,1-Dichloroethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
78-93-3	2-Butanone	ug/L	ND	UJ	ND	UJ	ND	UJ	ND	UJ	2	J	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	
67-66-3	Chloroform	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		3	J	ND		ND	
71-55-6	1,1,1-Trichloroethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
56-23-5	Carbon Tetrachloride	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
71-43-2	Benzene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
107-06-2	1,2-Dichloroethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
79-01-6	Trichloroethene	ug/L	2	J	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
78-87-5	1,2-Dichloropropane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
75-27-4	Bromodichloromethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
10061-01-5	cis-1,3-Dichloropropene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
108-10-1	4-Methyl-2-pentanone	ug/L	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	
108-88-3	Toluene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
10061-02-6	trans-1,3-Dichloropropene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
79-00-5	1,1,2-Trichloroethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
127-18-4	Tetrachloroethene	ug/L	53		2	J	ND		1	J	3	J	1	J	7	J	1	J	ND		12		ND	
591-78-6	2-Hexanone	ug/L	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	
124-48-1	Dibromochloromethane	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
108-90-7	Chlorobenzene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
100-41-4	Ethylbenzene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
1330-20-7	Xylene (total)	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
100-42-5	Styrene	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
75-25-2	Bromoform	ug/L	ND		ND		ND		ND		ND		ND		ND		ND		ND		ND		ND	
79-34-5	1,1,2,2-Tetrachloroethane	ug/L	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	UJ	ND	

NYSDEC Class GA Ambient Water Quality Standards and Guidance Values (ug/L)
NA
2
NA
50
5
5
5
50
50
5
10
5
50
7
5
5
0.7
5
5
1
50
5
50
5
NA
5
5
50
NA
5
5
5
5
50
5

Notes:
J - [illegible]
B - Indicates that the analyte is found in the associated blank as well as the sample
NYSDEC Class GA Ambient Water Quality Standards and Guidance Values
[illegible]
NA - [illegible]
[illegible] NYSDEC Class GA Ambient Water Quality Standards
B - Analyte detected in associated blank as well as the sample

Elka Plaza,
Freeport New York
Samples Collected- April 2009

TABLE 5- QA/QC SAMPLES SUMMARY

	Sampling Date:		4/17/2009		4/9/2009		4/10/2009		4/9/2009		4/9/2009		4/9/2009	
	Project Location:		Elka Plaza		Elka Plaza		Elka Plaza		Elka Plaza		Elka Plaza		Elka Plaza	
	Sample ID:		Trip Blank	Qualifier	TB #1	Qualifier	TB #2	Qualifier	FB#1 Soil	Qualifier	FB #2	Qualifier	SB 040909	Qualifier
	Laboratory ID:		0904738-002A		0904471-012A		0904503-011A		0904473-003A		0904471-011A		0904471-013A	
Cas #	Analyte	Units:												
74-87-3	Chloromethane	ug/L	ND		ND		**ND**	**UJ**	ND		ND		**ND**	**U**
75-01-4	Vinyl Chloride	ug/L	ND		ND		ND		ND		ND		ND	
74-83-9	Bromomethane	ug/L	ND		ND		ND		ND		ND		ND	
75-00-3	Chloroethane	ug/L	ND		ND		ND		ND		ND		ND	
75-35-4	1,1-Dichloroethene	ug/L	ND		ND		ND		ND		ND		ND	
540-59-0	1,2-Dichloroethene (total)	ug/L	ND		ND		ND		ND		ND		ND	
67-64-1	Acetone	ug/L	ND		**ND**	**UJ**	**2**	**BJ**	**3**	**UJ**	**3**	**UJ**	**2**	**UJ**
75-15-0	Carbon Disulfide	ug/L	ND		**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**
75-09-2	Methylene Chloride	ug/L	ND		ND		ND		ND		ND		4	J
1634-04-4	Methyl tert-butyl ether	ug/L	ND		ND		ND		ND		ND		ND	
75-34-3	1,1-Dichloroethane	ug/L	ND		ND		ND		ND		ND		ND	
78-93-3	2-Butanone	ug/L	ND		**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**
67-66-3	Chloroform	ug/L	ND		ND		ND		ND		ND		ND	
71-55-6	1,1,1-Trichloroethane	ug/L	ND		ND		ND		ND		ND		ND	
56-23-5	Carbon Tetrachloride	ug/L	ND		ND		ND		ND		ND		ND	
71-43-2	Benzene	ug/L	ND		ND		ND		ND		ND		ND	
107-06-2	1,2-Dichloroethane	ug/L	ND		ND		ND		ND		ND		ND	
79-01-6	Trichloroethene	ug/L	ND		ND		ND		ND		ND		ND	
78-87-5	1,2-Dichloropropane	ug/L	ND		ND		ND		ND		ND		ND	
75-27-4	Bromodichloromethane	ug/L	ND		ND		ND		ND		ND		ND	
10061-01-5	cis-1,3-Dichloropropene	ug/L	ND		ND		ND		ND		ND		ND	
108-10-1	4-Methyl-2-pentanone	ug/L	ND		**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**
108-88-3	Toluene	ug/L	ND		ND		ND		ND		ND		ND	
10061-02-6	trans-1,3-Dichloropropene	ug/L	ND		ND		ND		ND		ND		ND	
79-00-5	1,1,2-Trichloroethane	ug/L	ND		ND		ND		ND		ND		ND	
127-18-4	Tetrachloroethene	ug/L	ND		ND		ND		ND		ND		ND	
591-78-6	2-Hexanone	ug/L	ND		**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**
124-48-1	Dibromochloromethane	ug/L	ND		ND		ND		ND		ND		ND	
108-90-7	Chlorobenzene	ug/L	ND		ND		ND		ND		ND		ND	
100-41-4	Ethylbenzene	ug/L	ND		ND		ND		ND		ND		ND	
1330-20-7	Xylene (total)	ug/L	ND		ND		ND		ND		ND		ND	
100-42-5	Styrene	ug/L	ND		ND		ND		ND		ND		ND	
75-25-2	Bromoform	ug/L	ND		ND		ND		ND		ND		ND	
79-34-5	1,1,2,2-Tetrachloroethane	ug/L	ND		**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**

Notes

1F

EPA SAMPLE NO.

ST-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract:

Lab Code: 10478 Case No.: PRS SAS No.: SDG No.: PRS001

Matrix: (soil/water) WATER Lab Sample ID: 0904503-009A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64390.D

Level: (low/med) LOW Date Received: 04/10/09

% Moisture: not dec. Date Analyzed: 04/16/09

GC Column: DB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

Number TICs found: 8 CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	000064-17-5	Ethanol-	5.03	45	JN
2.	001066-40-6	Silanol, trimethyl-	7.42	9.5	JN
3.	000066-25-1	Hexanal	11.95	6.9	JN
4.	000124-13-0	Octanal	15.71	6.6	JN
5.	000138-86-3	Limonene	15.85	22	JN
6.		unknown alcohol (16.8)	16.80	11	J
7.	000124-19-6	Nonanal	17.36	9.6	JN
8.		straight-chain alkane (17.99)	17.99	9.6	J
9.		straight-chain alkane (19.62)	19.62	8.9	J
10.		unknown alcohol (21)	21.00	18	J

PRS001 S09

1F

EPA SAMPLE NO.

WELL #1

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904503-010A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64391.D

Level: (low/med) LOW Date Received: 04/10/09

% Moisture: not dec. Date Analyzed: 04/16/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

Number TICs found: 0 CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1		straight-chain alkane (16.43)	16.43	6.8	J
2		straight-chain alkane (17.99)	17.99	15	J
3		branched alkane (18.22)	18.22	5.3	J
4		branched alkane (19.17)	19.17	7.8	J
5		straight-chain alkane (19.63)	19.63	17	J
6		straight-chain alkane (21.47)	21.47	8.4	J

APPENDIX C

H2M LABS, INC.

2931

EXTERNAL CHAIN OF CUSTODY

575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (631) 694-3040 Fax: (631) 420-8436

CLIENT: PES | **H2M SDG NO:** PES004/005

PROJECT NAME/NUMBER
Elks Plaza
157-189 W. Merrick Road
Freeport

SAMPLERS: (signature)/Client
William Schlageter Preferred Env.
David Kahn Preferred Env.

DELIVERABLES: NYSDEC ASP-B

TURNAROUND TIME: 15 days

NOTES:
MS/MSD GW
Elks SB-1 (1-3ft)
Elks GW-1 22-24ft

Project Contact: Bill Schlageter
Phone Number: 516 546-1100
PIS/Quote #

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	Sample Container Description: Full List (TCL) VOCs 8260 plus TICs	ANALYSIS REQUESTED: ORGANIC VOA	ORGANIC BNA	ORGANIC Pest/PCB	INORG. Metal	INORG. CN	LAB I.D. NO.	REMARKS:
4/9/09	8:40	L	Elks TB #1	2	X						0904471-012A	
4/9/09	9:27	S	Elks SB-1 (1-3ft) MS/MSD	3	X						0904473-002A	PES 005
[illegible]					X							
4/9/09	9:58	L	Elks GW-1 (22-24ft) MS/MSD	6	X						0904471-002A	
4/9/09	10:12	L	Elks GW-1 (12-14ft)	2	X						-001	
4/9/09	10:31	KS	Elks FB#1 Soil	2	X						0904473-003A	PES 005
4/9/09	10:32	L	Elks FB#2 GW	2	X						0904471-011A	
4/9/09	11:03	L	Elks GW-2 (26-28ft)	2	X						-004	
4/9/09	11:14	L	Elks GW-2 (16-18ft)	2	X						-003	
4/9/09	12:23	L	Elks GW-3 (24-26ft)	2	X						-006	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	4/9/09	12:15		4-9-09	12:15
	4-9-09	3:53		4/9/09	15:53
	4/9/09	1553		4/9/09	1553
	Date	Time		Date	Time

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N
Explain:

Samples were:
1. Shipped ___ or Hand Delivered ___ Airbill# _____
2. Ambient or chilled Temp. ___
3. Received in good condition: Y or N
4. Properly preserved Y or N

COC Tape was:
1. Present on outer package: Y or N
2. Unbroken on outer package: Y or N
3. COC record present & complete upon sample receipt: Y or N

PES004-A8

WHITE COPY - ORIGINAL | YELLOW COPY - CLIENT | PINK COPY - LABORATORY

H2M LABS, INC.

2931

EXTERNAL CHAIN OF CUSTODY

575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (631) 694-3040 Fax: (631) 420-8436

CLIENT: PES

H2M SDG NO: PES004 / 005

PROJECT NAME/NUMBER: Elks Plaza, 157-189 W. Merrick Rd, Freeport, NY

SAMPLERS: (signature)/Client: David Kahn [signature] Preferred Env.

DELIVERABLES: NYSDEC ASP-B

TURNAROUND TIME: 15 days

NOTES:

Project Contact: Bill Schlageter

Phone Number: 516-546-1100

PIS/Quote #

Sample Container Description → Full list (TCL) VOC's 8260 PLUS TICS

ANALYSIS REQUESTED

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	VOA	BNA	Pest/PCB				Metal	CN	LAB I.D. NO.	REMARKS:
4-9-09	12:37	L	EIKS-GW-3 (14-16 Ft)	2	X								0904471-005 A	
4-9-09	13:00	L	EIKS-GW-4 (24-26 Ft)	2	X								-008	
4-9-09	13:15	L	EIKS-GW-4 (14-16 Ft)	2	X								-007	
4-9-09	13:28	SL	EIKS-D-1 (12-14 Ft)	2	X								0904473-001 A	PES 005
4-9-09	13:34	L	EIKS-GW-5 (24-26 Ft)	2	X								0904471-010 A	
4-9-09	13:44	L	EIKS-GW-5 (14-16 Ft)	2	X								-009	
~~4-9-09~~	~~14:00~~	~~L~~	~~EIKS-SEP-1~~	~~2~~	~~X~~									

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	4-9-09	3:53	[signature]	4/9/09	15:53
[signature]	4/9/09	1553	[signature]	4/9/09	1553

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N
Explain:

Samples were:
1. Shipped ___ or Hand Delivered ✓ Airbill# ______
2. Ambient or chilled, Temp______
3. Received in good condition: (Y) or N
4. Properly preserved: (Y) or N

COC Tape was:
1. Present on outer package: Y or N
2. Unbroken on outer package: Y or N
3. COC record present & complete upon sample receipt: Y or N

 WHITE COPY - ORIGINAL   YELLOW COPY - CLIENT   PINK COPY - LABORATORY

H2M LABS, INC.

293C

EXTERNAL CHAIN OF CUSTODY

575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (631) 694-3040 Fax: (631) 420-8436

CLIENT: Preferred Environmental Services | **H2M SDG NO:** PES004 | 005

PROJECT NAME/NUMBER: Elks Plaza

SAMPLERS: (signature)/Client: Preferred Environmental Services

DELIVERABLES: NYSDEC ASP-B

TURNAROUND TIME: 15 days

NOTES:

Project Contact: B. Yl Schlageter

Phone Number: 516 546 -V00

PIS/Quote #

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	Sample Container Description: Full list VOCs (TCL) 8260 plus TICs	ANALYSIS REQUESTED: ORGANIC VOA	ORGANIC BNA	ORGANIC Pest/PCB	INORG. Metal	INORG. CN	LAB I.D. NO.	REMARKS:
4/10/09	8:37	L	Elks TB # 2 (QC)	2	X						0904503-011 A	
~~4/10/09~~	~~8:40~~	~~S~~	~~Elks SB-2 (12-14')~~ EM 4/10/09	~~1~~								
4/10/09	9:03	L	Elks GW-6 (24-26')	2	X						0904503-002 A	
4/10/09	9:30	L	Elks GW-6 (14-16')	2	X						↓ -001 ↓	
4/10/09	10:43	S	Elks SB-3 (1-3ft)	1	X						0904503-001A	PES 005
4/10/09	11:04	L	Elks GW-7 (23-25')	2	X						0904503-004 A	
4/10/09	11:17	L	Elks GW-7 (13-15')	2	X						- 003	
4/10/09	12:20	L	Elks GW-8 (24-26')	2	X						- 006	
4/10/09	12:43	L	Elks GW-8 (14-16')	2	X						- 005	
4/10/09	1:10	L	Elks GW-9 (24-26')	2	X						↓ - 008 ↓	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	4/10/09	15:45		4-10-09	15:45
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	4-10-09	16:20		4/10/09	1620
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N
Explain:

Samples were:
1. Shipped ___ or Hand Delivered ✓ Airbill# ___
2. Ambient or chilled, Temp ___
3. Received in good condition: Y or N
4. Properly preserved: Y or N

COC Tape was:
1. Present on outer package: Y or N
2. Unbroken on outer package: Y or N
3. COC record present & complete upon sample receipt: Y or N

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PES004 of 13

H2M LABS, INC.

575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (631) 694-3040 Fax: (631) 420-8436

2931

EXTERNAL CHAIN OF CUSTODY

CLIENT: PES | **H2M SDG NO:** PES004

PROJECT NAME/NUMBER: Elks Plaza

SAMPLERS: (signature)/Client: Preferred Environmental Services

DELIVERABLES: NYSDEC ASP-B

TURNAROUND TIME: 15 days

NOTES:

Project Contact: Bill Schlageter

Phone Number: (516) 546-1100

PIS/Quote #

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	Sample Container Description: Full List (TCL) VOCs 8260 plus TICs	ANALYSIS REQUESTED: ORGANIC VOA	ORGANIC BNA	ORGANIC Pest/PCB	INORG. Metal	INORG. CN	LAB I.D. NO.	REMARKS:
4/10/09	13:19	L	ELKS GW-9 (14-16ft)	2	X						0904503-007A	
4/10/09	13:40	L	ELKS ST-1	2	X						-009	
4/10/09	13:46	L	Elks Well #1	2	X						-010	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	4/10/09	15:45		4-10-09	15:45
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	4-10-09	16:20		4/10/09	1620
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N

Explain:

Samples were:
1. Shipped___ or Hand Delivered ✓ Airbill# _____
2. Ambient or chilled, Temp_____
3. Received in good condition Y or N
4. Properly preserved Y or N

COC Tape was:
1. Present on outer package: Y or N
2. Unbroken on outer package: Y or N
3. COC record present & complete upon sample receipt: Y or N

WHITE COPY - ORIGINAL | YELLOW COPY - CLIENT | PINK COPY - LABORATORY

PES004.014

H2M LABS, INC.

2940

EXTERNAL CHAIN OF CUSTODY 4/17/ (F) MJM

575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (631) 694-3040 Fax: (631) 420-8436

CLIENT: | **H2M SDG NO:** PES 007 004/005

PROJECT NAME/NUMBER
EIKS PLAZA
157-189 W. Merrick Rd
Freeport, NY

SAMPLERS: (signature)/Client
DKK / Preferred Env.

DELIVERABLES:
NYSDEC ASP-B

TURNAROUND TIME: 15 Days

NOTES:

Project Contact: Bill Schlageter
Phone Number: 516-546-1100
PIS/Quote #

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	Sample Container Description: Full List (TCL) VOCs 8260 Plus TICs	ANALYSIS REQUESTED: ORGANIC VOA	ORGANIC BNA	ORGANIC Pest/PCB	INORG. Metal	INORG. CN	LAB I.D. NO.	REMARKS:
4-17-09	7:30	L	EIKS-Trip Blank		X						0904738-002A	PES 004
4-17-09	11:49	L	EIKS-Well #2		X						↓ 001A	↓ ↓
4-17-09	12:02	S	EIKS-SB-4 (3-4 Ft bg)		X						0904747-001A	PES 005

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
DKK	4/17/09	13:51	Matt M	4/17/09	13:51

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N
Explain:

Samples were:
1. Shipped___ or Hand Delivered___ Airbill# _____
2. Ambient or chilled, Temp_____
3. Received in good condition: Y or N
4. Properly preserved: Y or N

COC Tape was:
1. Present on outer package: Y or N
2. Unbroken on outer package: Y or N
3. COC record present & complete upon sample receipt: Y or N

WHITE COPY - ORIGINAL | YELLOW COPY - CLIENT | PINK COPY - LABORATORY

APPENDIX D

1F

EPA SAMPLE NO.

GW-1 (12-14)

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904471-001A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64360.D

Level: (low/med) LOW Date Received: 04/09/09

% Moisture: not dec. Date Analyzed: 04/15/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

1F

EPA SAMPLE NO.

GW-1 (22-24)

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904471-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64361.D

Level: (low/med) LOW Date Received: 04/09/09

% Moisture: not dec. Date Analyzed: 04/15/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-2 (16-18)

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904471-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64365.D

Level: (low/med) LOW Date Received: 04/09/09

% Moisture: not dec. Date Analyzed: 04/15/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

PES004 S31

1F

EPA SAMPLE NO.

GW-2 (26-28)

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904471-004A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64366.D

Level: (low/med) LOW Date Received: 04/09/09

% Moisture: not dec. Date Analyzed: 04/15/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

1F

EPA SAMPLE NO.

GW-3 (14-16)

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904471-005A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64367.D

Level: (low/med) LOW Date Received: 04/09/09

% Moisture: not dec. Date Analyzed: 04/15/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

1F

EPA SAMPLE NO.

GW-3 (24-26)

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904471-006A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64368.D

Level: (low/med) LOW Date Received: 04/09/09

% Moisture: not dec. Date Analyzed: 04/15/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

Number TICs found: 1 CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1		unknown hydrocarbon	3.08	15	J

1F

EPA SAMPLE NO.

GW-4 (14-16)

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904471-007A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64369.D

Level: (low/med) LOW Date Received: 04/09/09

% Moisture: not dec. Date Analyzed: 04/15/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

1F

EPA SAMPLE NO.

GW-4 (24-26)

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904471-008A

Sample wt/vol: 5 (g/mL) ML. Lab File ID: A\A64370.D

Level: (low/med) LOW Date Received: 04/09/09

% Moisture: not dec. Date Analyzed: 04/15/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 1 (µg/L or µg/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.		unknown hydrocarbon	3.08	8.3	J
2.		straight-chain alkane	3.66	5.0	J

PES004 S41

1F

EPA SAMPLE NO.

GW-5 (14-16)

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904471-009A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64371.D

Level: (low/med) LOW Date Received: 04/09/09

% Moisture: not dec. Date Analyzed: 04/15/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

Number TICs found: 0 CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

PES004 S43

1F

EPA SAMPLE NO.

GW-5 (24-26)

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904471-010A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64372.D

Level: (low/med) LOW Date Received: 04/09/09

% Moisture: not dec. Date Analyzed: 04/15/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

Number TICs found: 1 CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.		unknown hydrocarbon	3.08	6.4	J

1F

EPA SAMPLE NO.

FB #2

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904471-011A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64373.D

Level: (low/med) LOW Date Received: 04/09/09

% Moisture: not dec. Date Analyzed: 04/15/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

1F

EPA SAMPLE NO.

TB #1

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904471-012A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64374.D

Level: (low/med) LOW Date Received: 04/09/09

% Moisture: not dec. Date Analyzed: 04/15/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

1F

EPA SAMPLE NO.

SB 040909

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904471-013A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64393.D

Level: (low/med) LOW Date Received: 04/09/09

% Moisture: not dec. Date Analyzed: 04/16/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.		straight-chain alkane (17.99)	17.99	8.2	J
2.		branched alkane	19.18	5.0	J
3.		straight-chain alkane (19.62)	19.62	11	J
4.		straight-chain alkane (21.48)	21.48	7.4	J

1F

EPA SAMPLE NO.

GW-6 (14-16)

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904503-001A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64377.D

Level: (low/med) LOW Date Received: 04/10/09

% Moisture: not dec. Date Analyzed: 04/15/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

PES004 S53

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

GW-6 (24-26)

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904503-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64378.D

Level: (low/med) LOW Date Received: 04/10/09

% Moisture: not dec. Date Analyzed: 04/15/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 1 (µg/L or µg/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.		unknown hydrocarbon	3.09	11	J
2.		straight-chain alkane	3.66	6.2	J

PES004 S55

1F

EPA SAMPLE NO.

GW-7 (13-15)

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904503-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64379.D

Level: (low/med) LOW Date Received: 04/10/09

% Moisture: not dec. Date Analyzed: 04/15/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

1F

EPA SAMPLE NO.

GW-7 (23-25)

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904503-004A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64385.D

Level: (low/med) LOW Date Received: 04/10/09

% Moisture: not dec. Date Analyzed: 04/16/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

1F

EPA SAMPLE NO.

GW-8 (14-16)

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904503-005A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64386.D

Level: (low/med) LOW Date Received: 04/10/09

% Moisture: not dec. Date Analyzed: 04/16/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

Number TICs found: 0 CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1		cyclic alkane	3.62	15	J

1F

EPA SAMPLE NO.

GW-8 (24-26)

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904503-006A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64387.D

Level: (low/med) LOW Date Received: 04/10/09

% Moisture: not dec. Date Analyzed: 04/16/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

Number TICs found: 0 CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.		straight-chain alkane	3.65	13	J

PES004 S63

1F

EPA SAMPLE NO.

GW-9 (14-16)

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904503-007A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64388.D

Level: (low/med) LOW Date Received: 04/10/09

% Moisture: not dec. Date Analyzed: 04/16/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

1F

EPA SAMPLE NO.

GW-9 (24-26)

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904503-008A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64389.D

Level: (low/med) LOW Date Received: 04/10/09

% Moisture: not dec. Date Analyzed: 04/16/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

Number TICs found: 1 CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.		unknown hydrocarbon	3.07	7.9	J
2.		straight-chain alkane	3.65	6.2	J

1F

EPA SAMPLE NO.

ST-1

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904503-009A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64390.D

Level: (low/med) LOW Date Received: 04/10/09

% Moisture: not dec. Date Analyzed: 04/16/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

Number TICs found: 8 CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.	000064-17-5	Ethanol-	5.03	45	JN
2.	001066-40-6	Silanol, trimethyl-	7.42	9.5	JN
3.	000066-25-1	Hexanal	11.95	6.9	JN
4.	000124-13-0	Octanal	15.71	6.6	JN
5.	000138-86-3	Limonene	15.85	22	JN
6.		unknown alcohol (16.8)	16.80	11	J
7.	000124-19-6	Nonanal	17.36	9.6	JN
8.		straight-chain alkane (17.99)	17.99	9.6	J
9.		straight-chain alkane (19.62)	19.62	8.9	J
10.		unknown alcohol (21)	21.00	18	J

1F

EPA SAMPLE NO.

WELL #1

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904503-010A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64391.D

Level: (low/med) LOW Date Received: 04/10/09

% Moisture: not dec. Date Analyzed: 04/16/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.		straight-chain alkane (16.43)	16.43	6.8	J
2.		straight-chain alkane (17.99)	17.99	15	J
3.		branched alkane (18.22)	18.22	5.3	J
4.		branched alkane (19.17)	19.17	7.8	J
5.		straight-chain alkane (19.63)	19.63	17	J
6.		straight-chain alkane (21.47)	21.47	8.4	J

1F

EPA SAMPLE NO.

TB#2

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904503-011A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64392.D

Level: (low/med) LOW Date Received: 04/10/09

% Moisture: not dec. Date Analyzed: 04/16/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

Number TICs found: 0 CONCENTRATION UNITS: (µg/L or µg/Kg) UG/L

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.		straight-chain alkane (16.43)	16.43	11	J
2.		straight-chain alkane (17.99)	17.99	21	J
3.		branched alkane (18.22)	18.22	9.2	J
4.		branched alkane (19.17)	19.17	12	J
5.		straight-chain alkane (19.63)	19.63	22	J
6.		straight-chain alkane (21.48)	21.48	7.7	J

1F

EPA SAMPLE NO.

WELL #2

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904738-001A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64526.D

Level: (low/med) LOW Date Received: 04/17/09

% Moisture: not dec. Date Analyzed: 04/24/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

1F

EPA SAMPLE NO.

TRIP BLANK

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES004

Matrix: (soil/water) WATER Lab Sample ID: 0904738-002A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64525.D

Level: (low/med) LOW Date Received: 04/17/09

% Moisture: not dec. Date Analyzed: 04/24/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

PES004 S77

Premier Environmental Services

DATA USABILTY SUMMARY REPORT (DUSR)
OF THE
ELKS PLAZA-FREEPORT SITE
FREEPORT, NEW YORK

ORGANIC ANALYSES IN AQUEOUS
AND NON-AQUEOUS SAMPLES

H2M LABORATORIES, INC.
MELVILLE, NEW YORK

SDG NUMBER:
PES005

June, 2009

Prepared for
Preferred Environmental Services
Merrick, New York

Prepared by
Premier Environmental Services
2815 Covered Bridge Road
Merrick, New York 11566
(516)223-9761

NYS DEC Data Usability Summary Report

DATA VALIDATION FOR:	**Volatile Organic Analyses – EPA Method 8260B**
SITE:	**Elks Plaza Site** **Freeport, New York**
CONTRACT LAB:	**H2M Laboratories, Inc.** **Melville, New York**
REVIEWER:	**Renee Cohen**
DATE REVIEW COMPLETED:	**June, 2009**
MATRIX:	**Aqueous, Non-Aqueous**

The data validation was performed according to the guidelines in the described in the New York State Department of Environmental Conservation, Division of Environmental Remediation, Guidance for the Development of Data Usability Summary Reports (DUSR). In addition the data was been reviewed using the protocol specified in the NYS Analytical Services Protocol ('95).

All data are considered valid and acceptable except those analytes which have been rejected "R" (unreliable/unusable). Due to various QC problems some analytes may have been qualified with a "J" (estimated), "N" (presumptive evidence for the presence of the material, "U" (non-detect), or "JN" (presumptive evidence for the presence of the material at an estimated value) flag. All actions are detailed on the attached sheets.

Several factors should be noted for all persons using this data. Persons using this data should be aware that no result is guaranteed to be accurate even if it has passed all QC tests. The main purpose of this review is to appropriately qualify outliers and to determine whether the results presented meet the specific site/project criteria for data quality and data use.

This data set includes the review of four (4) non-aqueous samples and one (1) Field Blank sample. The samples in this data set were collected April 9, 2009, April 10, 2009 and April 17, 2009. The samples were delivered to H2M Labs, Inc. located in Melville, New York. The samples were received at the laboratory on April 9, 2009, April 10, 2009 and April 17, 2009. All samples were received in good condition. The samples were analyzed for Volatile Organic Analytes (EPA Method 8260B) as specified on the Chain of Custody (COC) documentation that accompanied the samples to the laboratory.

Appendix A of this report includes a list of qualifiers and definitions that may be used in this report. Appendix B of the report includes the qualified data result tables. A copy of the COC documents associated with this data set is located in Appendix C of this report. Appendix D of this report is a copy of the TIC result pages associated with each sample in this data set.

DATA USABILITY SUMMARY REPORT (DUSR)
ELKS PLAZA SITE

1. OVERVIEW:

The non-aqueous samples associated with this data set were submitted to the laboratory for the analyses requested on the Chain of Custody (COC) documentation. The samples were analyzed for the organic analytes using EPA Test Methods for the Evaluation of Solid Waste (SW 846), Method 8260B. The laboratory provided a deliverables package in accordance with the guidelines in the NYSDEC ASP, Rev '95, Category B.

The samples in this data set were designated SDG: PES005.

2. HOLDING TIME:

The amount of an analyte in a sample can change with time due to chemical instability, degradation, volatilization, etc. If the specified holding time is exceeded, the data may not be valid. Preserved volatile organic analyses are required to be analyzed within 10 days of validated time of sample receipt (VTSR) in accordance with the NYSDEC ASP, Rev '95.

All samples in this data set were analyzed for Volatile Organic Analytes by EPA Method 8260B. All of the samples and associated QC samples associated with this data set were analyzed within ten (10) days of VTSR. All holding times were met for the samples in this data set.

3. SURROGATES:

All samples are spiked with surrogate compounds prior to sample preparation to evaluate the overall laboratory performance and the efficiency of the analytical technique. If the measured surrogate concentrations are outside the QC limits, qualifiers were applied to the effected samples.

Each sample was spiked/fortified with the surrogate compounds 1,2-Dichloroethane-d4, Toluene-d8 and 4-Bromofluorobenzene. In-house surrogate recovery limits were reported by the laboratory. The percent recovery of each surrogate met QC criteria in each of the field samples and QC samples associated with this data set.

4. MATRIX SPIKE/SPIKE DUPLICATE, MS/MSD:

The MS/MSD data are generated to determine the long term precision and accuracy of the analytical method in various matrices. The MS/MSD may be used in conjunction with other QC criteria for additional qualification of data. The laboratory used the in-house generated recovery criteria and RPD (precision) data for reporting purposes.

Sample ELKS-SB-1 (1-3) was utilized as the site-specific Matrix Spike/Matrix Spike Duplicate sample. The sample was spiked with the CLP subset of target analytes. In-house recovery and RPD limits were applied for review. The recovery of all spiked compounds met QC criteria in both the matrix spike and matrix spike duplicate sample. The Relative Percent Differences (RPD) of all spiked analytes met QC criteria in this site specific MS/MSD set

In addition a full component LCS was prepared and analyzed with this data set. The recovery of all target analytes met in-house QC criteria.

5. BLANK SPIKE ANALYSIS:

The NY ASP protocol requires that a blank spike analysis be performed with each sample batch. The blank spike analysis is used to insure that the analytical system is in control. The laboratory applied in-house recovery limits for each analyte.

The laboratory reported one (1) blank spike sample with this data set. The blank spike sample was fortified with the CLP spike analytes. The spike recovery of each target analyte in the non-aqueous blank spike sample met QC criteria.

6. BLANK CONTAMINATION:

Quality assurance (QA) blanks, such as the method, trip, field, or rinse blanks are prepared to identify any contamination that may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Trip blanks measure cross-contamination of samples during shipment. Field blanks measure cross-contamination of samples during field operations. Samples are then qualified based on blank contamination when detected.

A) Method Blank contamination

Three (3) method blank samples are associated with this data set. One (1) aqueous method blank sample was free from contamination of all target and non-target analytes with the exception of Acetone. Acetone was detected at a concentration of 2 J ug/l. Acetone was detected in the associated Field Blank sample. The result has been negated and qualified "U".

Two (2) non-aqueous method blank samples are associated with this data set. Each was free from contamination of all target analytes with the exception of Methylene Chloride. Methylene Chloride was detected in each of the soil samples in this data set. Methylene Chloride has been negated and qualified "U" in each of the soil samples.

Qualified data result pages are located in Appendix B of this report.

B) Field Blank contamination

The Field Blank sample (FB #1-Soil) was free from contamination of all target and non-target analytes with the exception of Acetone (3 J B ug/l).

C) Trip Blank contamination

A Trip Blank sample is not associated with this data set.

DATA USABILITY SUMMARY REPORT (DUSR)
ELKS PLAZA SITE

7. GC/MS CALIBRATION:

Satisfactory instrument calibration is established to ensure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of giving acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument is giving satisfactory daily performance. USEPA data validation criteria is the same for all analytes in both GC/MS Volatile and GC/MS Semivolatile Organic analyses, therefore, all text discussion is for VOA and SVOA samples analyses.

A) RESPONSE FACTOR

The response factor measures the instrument's response to specific chemical compounds. USEPA data review requires that the response factor of all analytes be greater than or equal to 0.05 in both initial and continuing calibration analyses. A value less than 0.05 indicates a serious detection and quantitation problem (poor sensitivity). USEPA data validation criteria states that if the minimum RRF criteria are not met in an initial calibration the positive results are qualified "J". Non-detect results in the initial calibration with a RRF <0.05 are qualified "R", unusable. If RRF criteria is not met in the continuing calibration curve analysis, affected positive analytes will be qualified "J" estimated. Those analytes not detected are not qualified. The SW-846 Methods cite specific analytes known as System Performance Check Compounds (SPCC). Minimum response criteria are set for these analytes. If the minimum criteria are not met, analyses must stop and the source of problems must be found and corrected. Data associated with this set has been reviewed for the criteria in the cited in the EPA Method and the USEPA criteria.

One (1) initial calibration curve analysis is associated with this data set. The laboratory performed an aqueous initial multi-level calibration on March 2, 2009 (HP5971). The RRF for all target compounds met QC criteria in this initial calibration curve.

One (1) continuing calibration standard is associated with this data set. All response factor criteria of the target analytes met QC criteria each of these continuing calibration standard analyses.

An additional calibration curve analysis is associated with this data set. The laboratory performed a non-aqueous initial multi-level calibration on March 26, 2009 (HP5972-2). The RRF for all target compounds met QC criteria in this initial calibration curve.

One (1) continuing calibration standard is associated with this data set. All response factor criteria of the target analytes met QC criteria each of these continuing calibration standard analyses.

DATA USABILITY SUMMARY REPORT (DUSR)
ELKS PLAZA SITE

B) PERCENT RELATIVE STANDARD DEVIATION (RSD) AND PERCENT DIFFERENCE (%D):

Percent RSD is calculated from the initial calibration and is used to indicate the stability of the specific compound response factor over increasing concentration. Percent D compares the response factor of the compounds in the continuing calibration standard to the mean response factor (RRF) from the initial calibration. Percent D is a measure of the instrument's daily performance. Region II data validation criteria states that the percent RSD of the initial calibration curve must be less than or equal to 30%. The %D must be <25% in the continuing calibration standard. This criteria has been applied to all target analytes. A value outside of these limits indicates potential detection and quantitation errors. For these reasons, all positive results are flagged as estimated, "J" and non-detects may be flagged "UJ", based on professional judgment. If %RSD and %D grossly exceed QC criteria (>90%), non-detects data may be qualified "R", unusable. Data associated with this set has been reviewed for the criteria in the cited in the USEPA Data Validation Guidelines.

One (1) initial calibration curve (HP5971) analysis is associated with this data set. The laboratory performed one (1) initial multi level aqueous calibration on March 2, 2009. The %RSD for all target compounds met QC criteria in this initial calibration curve.

One (1) continuing calibration standard is associated with this curve analysis. All %Difference criteria met all QC criteria for the target analytes with the exception of the following:

Date of Analysis	File ID	Analyte	%Difference
4/15/09	A\A64356	Acetone	30.3
		Carbon Disulfide	28.1
		2-Butanone	29.1
		4-Methyl-2-Pentanone	41.2
		2-Hexanone	41.5
		1,1,2,2-Tetrachloroethane	28.5

These target analytes have been qualified "UJ/J" estimated in each of the samples associated with these continuing calibration standard analyses.

An additional initial calibration curve analysis is associated with this data set. The laboratory performed one (1) initial multi level aqueous calibration on March 26, 2009 (HP5972-2). The %RSD for all target compounds met QC criteria in this initial calibration curve.

Two (2) continuing calibration standards are associated with this curve analysis. All %Difference criteria met all QC criteria for the target analytes with the exception of the following:

Date of Analysis	File ID	Analyte	%Difference
4/16/09	09\G1142	Bromomethane	38.2
4/23/09	09\G1189	Bromomethane	35.4

Bromomethane has been qualified "UJ" estimated in each of the soil samples associated with this data set.

Qualified data result pages are located in Appendix B of this report.

8. GC/MS MASS SPECTROMETER TUNING:

Tuning and performance criteria are established to ensure adequate mass resolution, proper identification of compounds, and to some degree, sufficient instrument sensitivity. These criteria are not sample specific. Instrument performance is determined using standard materials. Therefore, these criteria should be met in all circumstances. The tuning standard for volatile organics is Bromofluorobenzene (BFB). If the mass calibration is in error, or missing, all associated data will be classified as unusable, "R".

All BFB Instrument Tuning criteria were met for these sample analyses.

9. GC/MS INTERNAL STANDARDS PERFORMANCE:

Internal standard (IS) performance criteria ensure that the GC/MS sensitivity and response are stable during every run. The method recommends that the internal standard area count must not vary by more than a factor of 2 (-50%to +100%) from the associated continuing calibration standard. The method recommends that the retention time of the internal standard must not vary more than ±30 seconds from the associated continuing calibration standard. The EPA CLP validation guidelines state that if the area count is outside the (-50% to +100%) range of the associated standard, all of the positive results for compounds quantitated using that IS are qualified estimated, "J", and all non-detects below 50% are qualified "UJ", non detects above 100% should not be qualified or "R" if there is a severe loss of sensitivity. The internal standard evaluation criteria are applied to all field and QC samples.

All samples were fortified with the internal standards Bromochloromethane, 1,4-Difluorobenzene and Chorobenzene-d5. All internal standard area criteria were met for the samples in this data set.

10. COMPOUND IDENTIFICATION:

Target compounds are identified on the GC/MS by using the analyte's relative retention time (RRT) and by comparison to the ion spectra obtained from known standards. For the results to be a positive hit, the sample peak must be within ± 0.06 RRT units of the standard compound, and have an ion spectra which has a ratio of the primary and secondary ion intensities with 20% of that in the standard compound.

The samples in this data set were analyzed via EPA Method 8260B. The laboratory reported all target analytes to the laboratory reporting limit (RL). Results between the MDL and RL were qualified "J" by the laboratory on the result page. All samples in this data set were analyzed and reported without dilution. Tentatively Identified Compounds (TIC's) were analyzed for and reported with each sample in this data set. Appendix D of this report contains a summary of the TIC's detected at each sample point.

11. FIELD DUPLICATE SAMPLE ANALYSES:

Field duplicate samples are collected and analyzed as an indication of overall field precision. These results are expected to have more variability than laboratory duplicate samples. Field duplicate samples are not associated with this data set.

DATA USABILITY SUMMARY REPORT (DUSR)
ELKS PLAZA SITE

12. OVERALL ASSESSMENT:

Analytical QC criteria were met for these analyses. The laboratory provided a complete data package and reported all data using acceptable protocols and laboratory qualifiers as defined in the report package.

The sample data results reported are acceptable for use with the noted data qualifiers. Data qualifiers are detailed in the above report.

Qualified data result pages are located in Appendix B of this report.

TABLE 1

CLIENT SAMPLE ID	LABORATORY SAMPLE ID
ELKS-D-1 (12-14Ft)	0904473-001
ELKS-SB-1 (1-3Ft)	0904473-002
ELKS FB#1 Soil	0904473-003
ELKS SB-3 (1-3Ft)	0904509-001
ELKS-SB-4 (3-4Ft)	0904747-001

APPENDIX A

DATA QUALIFIER DEFINITIONS

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

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

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

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

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

R - The sample results are unreliable/unusable. The presence or absence of the analyte cannot be verified.

K – The analyte is present. The reported value may be biased high. The actual value is expected to be lower than reported.

L - The analyte is present. The reported value may be biased low. The actual value is expected to be higher than reported.

UL – The analyte was not detected, and the reported quantitation limit is probably higher than reported.

APPENDIX B

Elks Plaza
Freeport, New York
Soil Samples- April 2009

TABLE 1 - SUMMARY OF VOLATILE ORGANIC COMPOUNDS DETECTED AND/OR ELEVATED ABOVE NYSDEC TAGM RECOMMENDED SOIL CLEAN-UP OBJECTIVES

	Sampling Date:		4/9/2009		4/9/2009		4/10/2009		4/17/2009		NYSDEC TAGM Recommended Soil Clean-up Objectives
	Project Location:		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		
	Sample ID:		D-1 (12-14)		SB-1 (1-3)		SB-3 (1-3)		SB-4 (3-4 FT BG)		
	Laboratory ID:		0904473-001A	Qualifier	0904473-002A	Qualifier	0904508-001A	Qualifier	0904747-001A	Qualifier	
Cas #	Analyte	Units:									
74-87-3	Chloromethane	ug/kg	ND		ND		ND		ND		NA
75-01-4	Vinyl Chloride	ug/kg	ND		ND		ND		ND		200
74-83-9	Bromomethane	ug/kg	ND	UJ	ND	UJ	ND	UJ	ND	UJ	NA
75-00-3	Chloroethane	ug/kg	ND		ND		ND		ND		1,900
75-35-4	1,1-Dichloroethene	ug/kg	ND		ND		ND		ND		400
540-59-0	1,2-Dichloroethene (total)	ug/kg	ND		ND		ND		ND		250
67-64-1	Acetone	ug/kg	24		ND		ND		ND		200
75-15-0	Carbon Disulfide	ug/kg	ND		ND		ND		ND		2,700
75-09-2	Methylene Chloride	ug/kg	6	U	4	U	3	U	6	U	100
1634-04-4	Methyl tert-butyl ether	ug/kg	ND		ND		ND		ND		120
75-34-3	1,1-Dichloroethane	ug/kg	ND		ND		ND		ND		200
78-93-3	2-Butanone	ug/kg	ND		ND		ND		ND		300
67-66-3	Chloroform	ug/kg	ND		ND		ND		ND		300
71-55-6	1,1,1-Trichloroethane	ug/kg	ND		ND		ND		ND		800
56-23-5	Carbon Tetrachloride	ug/kg	ND		ND		ND		ND		600
71-43-2	Benzene	ug/kg	ND		ND		ND		ND		60
107-06-2	1,2-Dichloroethane	ug/kg	ND		ND		ND		ND		100
79-01-6	Trichloroethene	ug/kg	ND		ND		ND		ND		700
78-87-5	1,2-Dichloropropane	ug/kg	ND		ND		ND		ND		NA
75-27-4	Bromodichloromethane	ug/kg	ND		ND		ND		ND		NA
10061-01-5	cis-1,3-Dichloropropene	ug/kg	ND		ND		ND		ND		NA
108-10-1	4-Methyl-2-pentanone	ug/kg	ND		ND		ND		ND		1,000
108-88-3	Toluene	ug/kg	5	J	ND		ND		ND		1,500
10061-02-6	trans-1,3-Dichloropropene	ug/kg	ND		ND		ND		ND		NA
79-00-5	1,1,2-Trichloroethane	ug/kg	ND		ND		ND		ND		NA
127-18-4	Tetrachloroethene	ug/kg	ND		ND		ND		26		1,400
591-78-6	2-Hexanone	ug/kg	ND		ND		ND		ND		NA
124-48-1	Dibromochloromethane	ug/kg	ND		ND		ND		ND		300
108-90-7	Chlorobenzene	ug/kg	ND		ND		ND		ND		1,700
100-41-4	Ethylbenzene	ug/kg	ND		ND		ND		ND		5,500
1330-20-7	Xylene (total)	ug/kg	4	J	ND		ND		ND		NA
100-42-5	Styrene	ug/kg	ND		ND		ND		ND		1,200
75-25-2	Bromoform	ug/kg	ND		ND		ND		ND		NA
79-34-5	1,1,2,2-Tetrachloroethane	ug/kg	ND		ND		ND		ND		600

Notes:
NYSDEC TAGM - Recommended Soil Cleanup Objectives,
HWR-94-4046, Revised 4/93 and 2001 update.
RSCO - Recommended Soil Cleanup Objective.
ND - Analyte was not detected above method detection limit.
NA - Not Analyzed / Not Available.
Bolded values indicates detected concentration exceeded NYSDEC RSCO.
EUS BC - Eastern United States Background Concentration
MDL - Method Detection Limit
J - Indicates that the contaminant was detected at a concentration below its applicable MDL
B - Analyte detected in associated blank as well as the sample

Elks Plaza,
Freeport New York
Samples Collected- April 2009

TABLE 5- QA/QC SAMPLES SUMMARY

	Sampling Date:		4/17/2009		4/9/2009		4/10/2009		4/9/2009		4/9/2009		4/9/2009	
	Project Location:		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza		Elks Plaza	
	Sample ID:		Trip Blank		TB #1		TB #2		FB#1 Soil		FB #2		SB 040909	
	Laboratory ID:		0904738-002A	Qualifier	0904471-012A	Qualifier	0904503-011A	Qualifier	0904473-003A	Qualifier	0904471-011A	Qualifier	0904471-013A	Qualifier
Cas #	Analyte	Units:												
74-87-3	Chloromethane	ug/L	ND		ND		**ND**	**UJ**	ND		ND		**ND**	**U**
75-01-4	Vinyl Chloride	ug/L	ND		ND		ND		ND		ND		ND	
74-83-9	Bromomethane	ug/L	ND		ND		ND		ND		ND		ND	
75-00-3	Chloroethane	ug/L	ND		ND		ND		ND		ND		ND	
75-35-4	1,1-Dichloroethene	ug/L	ND		ND		ND		ND		ND		ND	
540-59-0	1,2-Dichloroethene (total)	ug/L	ND		ND		ND		ND		ND		ND	
67-64-1	Acetone	ug/L	ND		**ND**	**UJ**	**2**	**BJ**	**3**	**UJ**	**3**	**UJ**	**2**	**UJ**
75-15-0	Carbon Disulfide	ug/L	ND		**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**
75-09-2	Methylene Chloride	ug/L	ND		ND		ND		ND		ND		4	J
1634-04-4	Methyl tert-butyl ether	ug/L	ND		ND		ND		ND		ND		ND	
75-34-3	1,1-Dichloroethane	ug/L	ND		ND		ND		ND		ND		ND	
78-93-3	2-Butanone	ug/L	ND		**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**
67-66-3	Chloroform	ug/L	ND		ND		ND		ND		ND		ND	
71-55-6	1,1,1-Trichloroethane	ug/L	ND		ND		ND		ND		ND		ND	
56-23-5	Carbon Tetrachloride	ug/L	ND		ND		ND		ND		ND		ND	
71-43-2	Benzene	ug/L	ND		ND		ND		ND		ND		ND	
107-06-2	1,2-Dichloroethane	ug/L	ND		ND		ND		ND		ND		ND	
79-01-6	Trichloroethene	ug/L	ND		ND		ND		ND		ND		ND	
78-87-5	1,2-Dichloropropane	ug/L	ND		ND		ND		ND		ND		ND	
75-27-4	Bromodichloromethane	ug/L	ND		ND		ND		ND		ND		ND	
10061-01-5	cis-1,3-Dichloropropene	ug/L	ND		ND		ND		ND		ND		ND	
108-10-1	4-Methyl-2-pentanone	ug/L	ND		**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**
108-88-3	Toluene	ug/L	ND		ND		ND		ND		ND		ND	
10061-02-6	trans-1,3-Dichloropropene	ug/L	ND		ND		ND		ND		ND		ND	
79-00-5	1,1,2-Trichloroethane	ug/L	ND		ND		ND		ND		ND		ND	
127-18-4	Tetrachloroethene	ug/L	ND		ND		ND		ND		ND		ND	
591-78-6	2-Hexanone	ug/L	ND		**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**
124-48-1	Dibromochloromethane	ug/L	ND		ND		ND		ND		ND		ND	
108-90-7	Chlorobenzene	ug/L	ND		ND		ND		ND		ND		ND	
100-41-4	Ethylbenzene	ug/L	ND		ND		ND		ND		ND		ND	
1330-20-7	Xylene (total)	ug/L	ND		ND		ND		ND		ND		ND	
100-42-5	Styrene	ug/L	ND		ND		ND		ND		ND		ND	
75-25-2	Bromoform	ug/L	ND		ND		ND		ND		ND		ND	
79-34-5	1,1,2,2-Tetrachloroethane	ug/L	ND		**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**	**ND**	**UJ**

Notes:

APPENDIX C

H2M LABS, INC.

575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (631) 694-3040 Fax: (631) 420-8436

2931

EXTERNAL CHAIN OF CUSTODY

CLIENT: PES | **H2M SDG NO:** PES004/005

PROJECT NAME/NUMBER
Elks Plaza
157-159 W Merrick Road
Freeport

SAMPLERS: (signature)/Client
William Schlageter — Preferred Fax.
David Kahn — Preferred EM.

DELIVERABLES: NYSDEC ASP-B

TURNAROUND TIME: 15 days

NOTES:
MS/MSD on
Elks SB-1 (1-3ft)
Elks GW-1 22-24ft

Project Contact: Bill Schlageter
Phone Number: 516 546-1100
PIS/Quote #

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	Sample Container Description: Full List (TCL) VOCs plus TICs	ANALYSIS REQUESTED: ORGANIC VOA	ORGANIC BNA	ORGANIC Pest/PCB	INORG. Metal	INORG. CN	LAB I.D. NO.	REMARKS:
4/9/09	8:40	L	Elks TB #1	2	X						0904471-012A	
4/9/09	9:27	S	Elks SB-1 (1-3ft) MS/MSD	3	X						0904473-002A	PES 005
[illegible]												
4/9/09	9:58	L	Elks GW-1 (22-24ft) MS/MSD	6	X						0904471-002A	
4/9/09	10:12	L	Elks GW-1 (12-14ft)	2	X						↓ -001 ↓	
4/9/09	10:31	L	Elks FB#1 Soil	2	X						0904473-003A	PES 005
4/9/09	10:32	L	Elks FB#2 GW	2	X						0904471-011A	
4/9/09	11:03	L	Elks GW-2 (26-28ft)	2	X						-004	
4/9/09	11:14	L	Elks GW-2 (16-18ft)	2	X						-003	
4/9/09	12:23	L	Elks GW-3 (24-26ft)	2	X						↓ -006 ↓	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	4/9/09	12:15		4-9-09	12:15
	4-9-09	3:53		4/9/09	15:53
	4/9/09	1553		4/9/09	1553

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N
Explain:

Samples were:
1. Shipped ___ or Hand Delivered ✓ Airbill# ___
2. Ambient or chilled, Temp ___
3. Received in good condition: Y or N
4. Properly preserved: Y or N

COC Tape was:
1. Present on outer package: Y or N
2. Unbroken on outer package: Y or N
3. COC record present & complete upon sample receipt: Y or N

PES005 S6

WHITE COPY - ORIGINAL | YELLOW COPY - CLIENT | PINK COPY - LABORATORY

293

H2M LABS, INC.

575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (631) 694-3040 Fax: (631) 420-8436

EXTERNAL CHAIN OF CUSTODY

CLIENT: PES

H2M SDG NO: PES004 / 005

PROJECT NAME/NUMBER
Eiks Plaza
157-187 W. Merrick Rd
Freeport, NY

SAMPLERS: (signature)/Client
David Kahn [signature] Preferred Env.

DELIVERABLES: NYSDEC ASP-B

TURNAROUND TIME: 15 days

Sample Container Description → Full list (TCL) VOC's 8260 PLUS TICs

NOTES:

Project Contact: Bill Schlageter

Phone Number: 516-546-1100

PIS/Quote #

ANALYSIS REQUESTED

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	ORGANIC: VOA	BNA	Pest/PCB				INORG.: Metal	CN	LAB I.D. NO.	REMARKS:
4-9-09	12:37	L	EIKS-GW-3 (14-16 Ft)	2	X								0904471-005 A	
4-9-09	13:00	L	EIKS-GW-4 (24-26 Ft)	2	X								-008	
4-9-09	13:15	L	EIKS-GW-4 (14-16 Ft)	2	X								-007	
4-9-09	13:28	SL	EIKS-D-1 (12-14 Ft)	2	X								0904473-001A	PES 005
4-9-09	13:34	L	EIKS-GW-5 (24-26 Ft)	2	X								0904471-010 A	
4-9-09	13:44	L	EIKS-GW-5 (14-16 Ft)	2	X								-009	
~~4-9-09~~	~~14:00~~	~~L~~	~~EIKS-SEP-1~~	~~2~~	~~X~~									

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
[signature]	4-9-09	3:53	[signature]	4/9/09	15:53
[signature]	4/9/09	1553	[signature]	4/9/09	1553

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N
Explain:

Samples were:
1. Shipped ___ or Hand Delivered ✓ Airbill# ______
2. Ambient or chilled, Temp ______
3. Received in good condition: (Y) or N
4. Properly preserved: (Y) or N

COC Tape was:
1. Present on outer package: Y or N
2. Unbroken on outer package: Y or N
3. COC record present & complete upon sample receipt: Y or N

PES005-S7

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H2M LABS, INC.

575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (631) 694-3040 Fax: (631) 420-8436

2930

EXTERNAL CHAIN OF CUSTODY

CLIENT: Preferred Environmental Services | **H2M SDG NO:** PES004 | 005

PROJECT NAME/NUMBER: Elks Place

SAMPLERS: (signature)/Client: Preferred Environmental Services

DELIVERABLES: NYSDEC ASP-B

TURNAROUND TIME: 15 days

NOTES:

Project Contact: B. M Schlageter

Phone Number: 516 546-V00

PIS/Quote #

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	Sample Container Description: Full list VOCs (TCL) 8260 plus TICs	ORGANIC: VOA	ORGANIC: BNA	ORGANIC: Pest/PCB	INORG.: Metal	INORG.: CN	LAB I.D. NO.	REMARKS:
4/10/09	8:37	L	Elks TB # 2 (EB)	2	X						0904503-011 A	
~~4/10/09~~	~~8:40~~	~~S~~	~~Elks SB-2 (12-14') EB 4/10/09~~	~~1~~								
4/10/09	9:03	L	Elks GW-6 (24-26')	2	X						0904503-002 A	
4/10/09	9:30	L	Elks GW-6 (14-16')	2	X						↓ -001 ↓	
4/10/09	10:43	S	Elks SB-3 (1-3 ft)	1	X						0904509-001 A	PES 005
4/10/09	11:04	L	Elks GW-7 (23-25')	2	X						0904503-004 A	
4/10/09	11:17	L	Elks GW-7 (13-15')	2	X						- 003	
4/10/09	12:20	L	Elks GW-8 (24-26')	2	X						- 006	
4/10/09	12:43	L	Elks GW-8 (14-16')	2	X						- 005	
4/10/09	1:10	L	Elks GW-9 (24-26')	2	X						↓ - 008 ↓	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	4/10/09	15:45		4-10-09	15:45
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
	4-10-09	16:20		4/10/09	1620
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N
Explain:

Samples were:
1. Shipped___ or Hand Delivered ✓ Airbill# _____
2. Ambient or chilled, Temp 0
3. Received in good condition: Y or N
4. Properly preserved: Y or N

COC Tape was:
1. Present on outer package: Y or N
2. Unbroken on outer package: Y or N
3. COC record present & complete upon sample receipt: Y or N

PES005 SJJ

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H2M LABS, INC.

575 Broad Hollow Rd, Melville, NY 11747-5076
Tel: (631) 694-3040 Fax: (631) 420-8436

2940

EXTERNAL CHAIN OF CUSTODY

4/17/09 MJM

CLIENT:

H2M SDG NO: PES 004/005

PROJECT NAME/NUMBER
EIKS PLAZA
157-189 W Merrick Rd
Freeport, NY

SAMPLERS: (signature)/Client
D. Kahl / Preferred Env.

DELIVERABLES:
NYSDEC ASP B

TURNAROUND TIME: 15 Days

NOTES:

Project Contact: Bill Schlageter

Phone Number: 516-546-1100

PIS/Quote #

DATE	TIME	MATRIX	FIELD I.D.	Total No. of Containers	Sample Container Description: Full TCL VOCs 8260 Plus TICs	ANALYSIS REQUESTED: ORGANIC VOA	ORGANIC BNA	ORGANIC Pest/PCB	INORG. Metal	INORG. CN	LAB I.D. NO.	REMARKS:
4-17-09	7:30	L	EIKS-Trip Blank		X						0904738-002A	PES 004
4-17-09	11:49	L	EIKS-Well #2		X						↓ 001A	↓ ↓
4-17-09	12:02	S	EIKS-SB-4 (3-4 Ft bg)		X						0904747-001A	PES 005

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time
D. Kahl	4/17/09	13:51	Matt Mc	4/17/09	13:51

LABORATORY USE ONLY

Discrepancies Between Sample Labels and COC Record? Y or N
Explain:

Samples were:
1. Shipped___ or Hand Delivered___ Airbill# _____
2. Ambient or chilled, Temp_____
3. Received in good condition: Y or N
4. Properly preserved: Y or N

COC Tape was:
1. Present on outer package: Y or N
2. Unbroken on outer package: Y or N
3. COC record present & complete upon sample receipt: Y or N

PES005 S15

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APPENDIX D

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

D-1 (12-14)

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES005

Matrix: (soil/water) SOIL Lab Sample ID: 0904473-001A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\G1147.D

Level: (low/med) LOW Date Received: 04/09/09

% Moisture: not dec. 42.8 Date Analyzed: 04/16/09

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 1 (µg/L or µg/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q
1.		(DEL) Alkane: Branched (6.4)	6.40	72	J
2.		(DEL) Alkane: Branched (8.83)	8.83	35	J
3.		(DEL) Alkane: Cyclic (14.29)	14.29	38	J
4.		unknown hydrocarbon	14.73	110	J
5.		(DEL) Alkane: Branched (14.84)	14.84	62	J
6.		(DEL) Alkane: Cyclic (15.06)	15.06	63	J
7.		(DEL) Alkane: Cyclic (15.11)	15.11	54	J
8.		(DEL) Alkane: Cyclic (15.26)	15.26	290	J
9.		(DEL) Alkane: Branched (15.62)	15.62	71	J
10.		(DEL) Alkane: Straight-Chain	16.65	54	J

PES005 S26

1F

EPA SAMPLE NO.

SB-1 (1-3)

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES005

Matrix: (soil/water) SOIL Lab Sample ID: 0904473-002A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\G1148.D

Level: (low/med) LOW Date Received: 04/09/09

% Moisture: not dec. 9.8 Date Analyzed: 04/16/09

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-3 (1-3)

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES005

Matrix: (soil/water) SOIL Lab Sample ID: 0904506-001A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\G1151.D

Level: (low/med) LOW Date Received: 04/10/09

% Moisture: not dec. 7 Date Analyzed: 04/16/09

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

PES005 S30

1F

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SB-4 (3-4 FT BG)

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES005

Matrix: (soil/water) SOIL Lab Sample ID: 0904747-001A

Sample wt/vol: 5 (g/mL) G Lab File ID: 09\G1192.D

Level: (low/med) LOW Date Received: 04/17/09

% Moisture: not dec. 5.3 Date Analyzed: 04/23/09

GC Column: Rtx-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

PES005 S32

1F

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

FB#1 SOIL

Lab Name: H2M LABS, INC. Contract: _____

Lab Code: 10478 Case No.: PES SAS No.: _____ SDG No.: PES005

Matrix: (soil/water) WATER Lab Sample ID: 0904473-003A

Sample wt/vol: 5 (g/mL) ML Lab File ID: A\A64376.D

Level: (low/med) LOW Date Received: 04/09/09

% Moisture: not dec. Date Analyzed: 04/15/09

GC Column: ZB-624 ID: .18 (mm) Dilution Factor: 1.00

Soil Extract Volume: (µl) Soil Aliquot Volume: 0 (µL)

CONCENTRATION UNITS:

Number TICs found: 0 (µg/L or µg/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST.CONC.	Q

PES005 S34

APPENDIX E

LABORATORY DATA