

**DRAFT**  
**SITE CHARACTERIZATION REPORT**  
**SOIL VAPOR INTRUSION EVALUATION**  
**NEW CASSEL INDUSTRIAL AREA**  
**(Site No.:1-30-043 A, B, C, F, K, N and V)**  
**North Hempstead, Nassau County, New York**



Prepared for

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# Acronyms

AS/SVE	air sparging/soil vapor extraction
ASP	Analytical Services Protocol
bgs	below ground surface
CDM	Camp Dresser & McKee
Co	Company
DCA	Dichloroethane
DCE	Dichloroethene
DER	Division of Environmental Remediation
DUSR	Data Usability Survey Report
ELAP	Environmental Laboratory Approval Program
EPA	United States Environmental Protection Agency
FB	Field Blank
ft	feet
ft/day	feet per day
HASP	Health and Safety Plan
Hg	mercury
ID	identification
IMC	IMC Magnetics Inc.
Inc.	Incorporated
IRM	Interim Remedial Measure
ml	milliliters
msl	mean sea level
MTBE	Methyl-tert-Butyl Ether
NCDOH	Nassau County Department of Health
NTU	nephelometric turbidity unit
NY	New York
NYPIRG	New York Public Interest Research Group
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
OU	Operable Unit
PCE	Tetrachloroethene
PID	photoionization detector
PSA	proliminary site assesment
QA	quality assurance
QAPP	quality assurance project plan
QC	quality control
RI	Remedial Investigation
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
SVE	soil vapor extraction system
TB	Trip Blank
TCA	trichloroethane
TCE	trichloroethene
Tischcon	Tischcon Corporation

µg/L	micrograms per Liter
µg/m <sup>3</sup>	micrograms per meters cubed
UGA	Upper Glacial aquifer
USGS	United States Geological Survey
VOC	volatile organic compound
WA	work assignment

# Section 1

## Introduction

This Site Characterization Report for the Soil Vapor Intrusion Evaluation at the New Cassel Industrial Area Sites 1-30-043 A, B, C, F, K, N, and V was prepared by Camp Dresser and McKee (CDM) for the New York State Department of Environmental Conservation (NYSDEC) under the Engineering Services for Investigation and Design, Standby Contract No. D004437, Work Assignment No. D004437-8. This report details the results of the soil vapor field investigation conducted in accordance with the Final Work Plan dated June 2007. The Final Work Plan was developed in accordance with the "Standby Contract Work Assignment No. D004437-8, Soil Vapor Intrusion Investigation at the New Cassel Industrial Area Sites (Site No.:1-30-043A, B, C, F, K, N and V)", work assignment (WA) issuance letter dated October 4, 2006. The scope of work included developing project plans for the samples selected by NYSDEC, executing these plans, and preparing a Site Characterization Report for the Soil Vapor Intrusion Investigation at the New Cassel Site Industrial Area Site. The Work Plan and this Site Characterization Report are consistent with the "Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006" and the "Draft Division of Environmental Remediation (DER)-10 Technical Guidance for Site Investigation and Remediation, dated December 2002".

The focus of this Soil Vapor Intrusion Evaluation is to determine if volatile organic compounds (VOCs) are present in the soil vapor adjacent to structures/buildings located on the following sites:

<u>Site Address</u>	<u>Site Identification (ID)</u>
■ Site A - 570 Main Street	Site ID: 130043A
■ Site B - 567 Main Street	Site ID: 130043B
■ Site C - 125 State Street	Site ID: 130043C
■ Site F - 68 Kinkel Street	Site ID: 130043F
■ Site K - 62 Kinkel Street	Site ID: 130043K
■ Site N - 750 Summa Avenue	Site ID: 130043N
■ Site V - 29 New York Avenue	Site ID: 130043V

Historical documents describing existing conditions, history of the site and past land use practices were provided to CDM by NYSDEC. In addition, these reference materials were used in the development of proposed sample locations.

NYSDEC provided the following background documents that were utilized in the development of this Soil Vapor Intrusion Evaluation:

- Record of Decision, 2003. New Cassel Industrial Area Site, Town of North Hempstead, Nassau County, New York, Offsite Groundwater South of the New Cassel Industrial Area Operable Unit No. 3.

- Remedial Investigation/Feasibility Study Report, Volume 1, 2000. New Cassel Industrial Area Offsite Groundwater, Town of North Hempstead, Nassau County.
- Multisite preliminary site assessment (PSA) Report , 1996. New Cassel Industrial Area Site, North Hempstead, Nassau County.
- Summary Report on New Cassel Industrial Area, Site ID#130043, 1995.
- Work Plan, 2006. New Cassel Operable Unit 4, Site No.1-30-043A-V, Vapor Intrusion Investigation, Work Assignment #D00490-40
- Environmental Investigation, 1996. 750 Summa Avenue Westbury, New York.
- Record of Decision, 1998. Tishcon Corporation Site at 125 State Street Westbury (V), North Hempstead (T) New Cassel Industrial Area Nassau County, New York Site Number 1-30-043C.
- Record of Decision, 2000. IMC Magnetics Site, Town of North Hempstead, Nassau County, Site Number 1-30-043A Operable Unit-02 On-Site Groundwater.
- Record of Decision, 2000. Atlas Graphics Site, Town of North Hempstead, Nassau County, Site Number 1-30-043B Operable Unit-01 On-Site Soil and Groundwater.
- Record of Decision, 1997. Former Tishcon Site, Westbury, North Hempstead, New Cassel Industrial Area, Nassau County, New York, Site Number 1-30-043F.
- Record of Decision, 2002. Tishcon at 29 New York Avenue Site, Town of North Hempstead, Nassau County, New York, Site Number 1-30-043V.

This report is comprised of the following sections:

■ **Section 1 - Introduction**

This section presents the site background and history; location, operational and remedial history; and 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 level and flow direction

■ **Section 3 - Site Investigation**

This section provides the investigation procedures and any variations which may have influenced sampling procedures or analytical results

■ **Section 4 - Analytical Results**

This section presents and evaluates the analytical results of the vapor and groundwater samples collected at the site in comparison to acceptable New York State standards

■ **Section 5 -Conclusions and Recommendations**

This section presents the conclusions and recommendation based upon the analytical results of the site investigation.

## **1.1 Site Background and History**

The following subsections describe the New Cassel site, and provide a brief overview of operational and remedial activities conducted.

### **1.1.1 Location**

The New Cassel Industrial Area Site (herein identified as the "Site") is located in the town of North Hempstead, Nassau County, New York (NY). The Site is heavily developed and covers approximately 170 acres which are bounded by the Long Island Railroad to the north, Frost Street to the east, Old Country Road to the south, and Grand Boulevard to the southwest (Figure 1-1). The site and surrounding areas, in general, are comprised of several light industrial and commercial properties intermixed with private residences located to the north and south. Hempstead Bay is located approximately six miles southwest of the site and the nearest water supply well is approximately 1,800 feet (ft) southeast of the site.

### **1.1.2 Operational and Remedial History**

The New Cassel Industrial Area was first developed during the early 1950s and is home to approximately 200 industrial and commercial businesses. Business practices associated with past light industrial activities within the area have resulted in extensive VOC contamination of groundwater in the vicinity of the site. Previous investigations conducted within the area indicated that multiple parties were responsible for the contamination resulting in individual "sites". To address this, NYSDEC classified the entire industrial area as a hazardous waste site in 1998 and it is collectively referred to as the New Cassel Industrial Area (LM&S 1996; NYSDEC 2003). This Report and subsequent field investigation address several of these sites. A brief description of operational and remedial activities conducted at each site is presented below.

#### **1.1.2.1 Site A - 570 Main Street**

Site A is located at 570 Main Street and is more than two acres in size. From the early 1950s until 1992, the site was occupied by IMC Magnetics Inc (IMC), a manufacturer of induction motors, fans, blowers, stepper motors and other rotating machinery. In 1995 the site was given a Class 2 Registry status by NYSDEC due to the presence of onsite contaminated soils and groundwater. Primary contaminants consisted of chlorinated hydrocarbons, petroleum hydrocarbons and metals; however, further investigation revealed the presence of chlorinated VOCs. Subsequently, to remediate site soil contamination identified during a 1996 Remedial Investigation (RI), IMC

installed and operated a soil vapor extraction (SVE) system. In addition, a Remedial Investigation/Feasibility Study (RI/FS) conducted at the site confirmed the presence of a chlorinated VOC groundwater plume. To address the groundwater contamination, in-situ oxidation using hydrogen peroxide injection was selected as the remedy. Treatment began in December 2001 and was still ongoing upon completion of the October 2003, Record of Decision (ROD) for Operable Unit (OU) 3 (NYSDEC 2003).

#### **1.1.2.2 Site B - 567 Main Street**

Site B is located at 567 Main Street and is approximately one acre in size. In 1950 a warehouse was constructed onsite for use as a construction vehicle storage facility. Warehouse operations ceased in 1977, and the property was sold to Atlas Graphics Inc., a photo engraving manufacturing operation. The operation used a reported 312 gallons per year of tetrachloroethene (TCE). At the time of purchase, the building was connected to a cesspool for its sanitary waste disposal. In 1977, a discharge of approximately 50 gallons of TCE to the cesspool was documented. Investigations conducted on-site uncovered elevated levels of TCE in both soil and groundwater, and in 1995 the site was assigned a Class 2 status by NYSDEC. In February 2000, a ROD was issued for the site, selecting air sparging/soil vapor extraction (AS/SVE) as the remedy to address the contaminated soils and groundwater. The system was constructed in October 2000 followed by initial treatment activities in November 2000 (NYSDEC 2003).

#### **1.1.2.3 Site C - 125 State Street**

Site C is located at 125 State Street and is approximately one acre in size. From 1984 to 1996 the site was occupied by the Tishcon Corporation (Tishcon). Manufacturing operations at Tishcon consisted primarily of the production of dietary supplements and vitamin products via a dry blending process. From 1985 to 1993, methylene chloride, 1,1,1-trichloroethane (1,1,1-TCA) and methanol were used in tablet coating processes conducted at the facility. As part of operating procedures, equipment was rinsed in a driveway fitted with several storm drains. An investigation conducted by the Nassau County Department of Health (NCDOH) indicated the presence of chlorinated VOCs and metals in four storm drains at the site, and requested that contaminated material be removed from storm drains and a distribution box on the property in August 1993. The site was placed on the Registry in 1995 and issued a Class 2 status. The excavation and restoration of contaminated areas was completed as part of an Interim Remedial Measure (IRM) in October 1997. A ROD for the site was issued in January 1998, and required the excavation and restoration of remaining contaminated source areas. Excavation and disposal of the material was conducted in early 1999, and the site was reclassified by NYSDEC to a Class 4 ranking in March of 2000 (NYSDEC 2003).

#### **1.1.2.4 Site F - 68 Kinkel Street**

Site F is located at 68 Kinkel Street and is approximately one-quarter of an acre in size. From 1982 to 1983, Tishcon conducted operations at the site which involved the encapsulation of materials. It was reported that 1,650 gallons of TCE as well as 8,000

gallons of methylene chloride and 3,000 gallons of shellac were used during these processes. The site was added to the NYSDEC Registry under Class 2 status in 1995. A State Superfund investigation was completed in July 1996, and in January 1997, a ROD requiring no action was issued. The site was delisted from the Registry in December of 1997 (NYSDEC2003).

#### **1.1.2.5 Site K - 62 Kinkel Street**

Site K is located at 62 Kinkel Street, west of the intersection of Old Country Road and the Wantagh State Parkway. The LAKA Tool and Stamping Company (Co), Incorporated (Inc.), occupied and conducted metals stamping at the site from 1971 to 1978. LAKA Industries, Inc., the parent company, operated the site from 1979 to 1984 as a machine shop specializing in tools, dies and precision stamping; both companies used TCE and lubricating oils as part of their operating procedures. In 1996, the site was issued a Class 2 status. Subsequently, an RI/FS was conducted to define the nature and extent of contamination at the site. Results of the RI/FS confirmed the presence of soil contamination in the vicinity of an onsite cesspool and an area located in a catch basin found downgradient of the site. To address the soil contamination, NYSDEC issued a ROD in February 2000, followed by the excavation of contaminated soils in May 2001; however, remedial activities did not address groundwater contamination (NYSDEC2003).

#### **1.1.2.6 Site N - 750 Summa Avenue**

Site N is located at 750 Summa Avenue and is currently occupied by EZ-EM, a company that specializes in imaging and diagnostics for treating gastrointestinal diseases. EZ-EM along with other parties owned the property since 1982. Prior to ownership by EZ-EM, Micro Industries, a machine shop, occupied the site from 1971 to 1982. From 1968 to 1971 Advance Food Service Equipment Manufacturing occupied the site as a stainless steel kitchen equipment supplier. Advance Food Service stored and used 1,1,1-TCA and other solvents during their occupancy. In 1978, the NCDOH required a floor drain near a vat used for degreasing operations be sealed as sludges sampled from a dry-well contained levels 1,1,1-TCA. In 1985, the vat was removed from the site. Degreaser sludges containing a mixture of 1,1,1-TCA and waste oil were stored in drums in the rear of the facility according to records from 1978. The site was classified on the Registry as a Class 4 ranking (LM&S 1996; NYPIRG website).

#### **1.1.2.7 Site V - 29 New York Avenue**

Site V is located at 29 New York Avenue and is approximately one acre in size. The site was developed in 1952, and was used to manufacture electronic equipment until the late 1970s. From 1979 to 1991 Tishcon occupied the site until it was sold to Equity 1 Associates in 1991. In 1995 the site was issued a Class 2 status on the Registry as part of the Tishcon Brooklyn Ave site. A 1996 study investigating soils/sediments collected from onsite catch basins showed levels of 1,1,1-TCA-related compounds above cleanup criteria. Based on these results, NYSDEC listed the Tishcon 29 New York Ave site as a separate Class 2 site on the Registry in March 1998. In December 1999, a RI was completed and results were presented to NYSDEC followed by the removal of contaminated materials from an onsite cesspool in August 2000. Based on

the results of that investigation a no further action ROD was signed in March 2002, and the site was delisted from the Registry later that year (NYSDEC2003).

## 1.2 Project Objectives

The objective of this soil vapor intrusion evaluation is to determine if VOCs are present in site soil vapors and groundwater. If vapor contamination exists, the potential threat to human health and the environment will be examined. In order to achieve this objective, the following activities were conducted:

- Task 1 - Work Plan Development  
The development of a site specific work plan for soil vapor investigation and soil vapor intrusion investigation, where each included a site specific Quality Assurance Project Plan (QAPP) and Health and Safety Plan (HASP)
- Task 2 - Soil Vapor Intrusion Investigation  
The investigation included:
  - Collection of soil vapor samples at each of the seven sites (Site A, B, C, F, K, N, & V) containing five direct push locations from three depth intervals, 8, 25, and 45 feet below ground surface (bgs).
  - Collection of groundwater samples at each of the seven sites (Site A, B, C, F, K, N, & V) containing five direct push locations at the water table interface, approximately 48 feet bgs.
  - Proper handling of the investigative derived waste according to standard procedures.
  - Performing the decontamination procedures according to standard procedures.
  - Collection of ambient air and standard Quality Assurance/Quality Control (QA/QC) samples
  - Identification of direct push sample locations utilizing dead-reckoning
- Task 3 - Field Documentation and Reporting  
The field documentation and reporting of the soil vapor intrusion investigation



## Section 2

# Physical Setting

The following subsections describe the environmental conditions of the New Cassel Industrial Area site.

### 2.1 Regional Geology

A history of coastal submergence and emergence spanning the Cretaceous Period, significant differential erosion during the Cenozoic, and glaciation during the Quaternary is reflected in the present day geology of Long Island. The geology of Long Island is characterized by a southeastward-thickening wedge of unconsolidated sediments unconformably overlying a gently-dipping basement bedrock surface. The wedge ranges in thickness from zero feet where it outcrops along the north shore in Queens, up to about 2,000 feet along the south shore barrier islands. A generalized cross section through Nassau County is shown in Figures 2-1 and 2-2.

#### 2.1.1 Basement

Basement is composed of Precambrian to Early Paleozoic igneous or metamorphic consolidated bedrock. Unconformably overlying the basement is a thick succession of Late Cretaceous deposits: the Raritan and overlying Magothy Formations, both of fluvio-deltaic depositional origin. The Upper Cretaceous deposits are unconformably overlain by a veneer of Pliocene and Pleistocene deposits, chiefly of glacial origin.

#### 2.1.2 Cretaceous

**Raritan Formation:** The Raritan Formation is divided into the basal Lloyd Sand Member and the overlying Raritan Clay Member. The Lloyd Sand rests unconformably on bedrock and is about 150 feet thick in the vicinity of the Site. The top of the Lloyd Sand is found at approximately 200-250 feet below mean sea level (msl). It is composed of white and grey fine to coarse sand and gravel, commonly with a clayey matrix. The contact with the overlying clay member is gradational.

The Raritan Clay Member is composed chiefly of bedded variegated clay and silt, locally containing interbedded sands. Lignite fragments and iron and pyrite nodules are common. The clay member is approximately 100 feet thick in the vicinity of the Site (Smolensky, et al. 1989). The Raritan Clay is the most widespread hydrologic confining layer on Long Island. The Raritan's updip erosional pinchout generally is located subparallel to the northern coast of Nassau County. The clay unit dips gently to the south-southeast.

**Matawan Group-Magothy Formation (Magothy):** The Magothy unconformably overlies the Raritan; the contact is commonly marked by a change from the solid clays of the Raritan Clay Member to coarse sands and gravels of the basal unit of the Magothy. The dominant Magothy lithology generally is fine to medium quartz sand, interbedded clayey sand with silt, clay, and gravel interbeds or lenses. Interbedded clay is more common towards the top of the formation. The thickness of the Magothy

varies between 100 feet in the vicinity of the Site to over 800 feet beneath the barrier islands.

### 2.1.3 Cenozoic-Quaternary

After the Cretaceous, deep erosion of the land surface took place as a response to fluctuations in sea level. Sedimentological evidence indicates that sea level falls exposed the entire Atlantic continental margin during the Miocene epoch, which would have promoted rejuvenation and deep incision of rivers and streams across the Coastal Plain. Later deposition of abundant fluvial and glacial clastic deposits during the Pliocene and Quaternary filled these incised buried valleys. The top of the Cretaceous sequence is marked by a highly irregular erosion surface upon which rests deposits of Pleistocene and, in some places, Pliocene age.

Deposits of Pleistocene age mantle the Cretaceous formations. Within the study area, the Pleistocene deposits include three depositional sequences: the fluvial Jameco Gravel and marine Gardiners Clay; and the much more widespread Late Pleistocene glacial deposits of the Wisconsin glacial stage. Undifferentiated gravels and clays described in buried valleys within southern Long Island have been attributed to the Jameco Gravel and Gardiners Clay units. The Jameco Gravel and Gardiners Clay formations are well-defined, mapable stratigraphic units beneath the southern margin of Long Island where they are of hydrogeological significance. These stratigraphic units are not recognized in the vicinity of the Site. The remainder of the Pleistocene succession belongs to the Wisconsin glacial stage Upper Glacial Deposits.

The thickness of the Pleistocene Upper Glacial Deposits in the study area varies but averages 100 feet. The thickness and distribution of the Pleistocene Upper Glacial Deposits were controlled by the older, now buried paleotopography discussed above. The pattern of stream and river valleys that dissected the surface of Long Island during the Cenozoic likely was later modified by Pleistocene overriding ice sheets and meltwater erosion and deposition.

## 2.2 Regional Hydrogeology

The hydrogeology of Long Island has been well documented over the years by the United States Geological Survey (USGS) and others. Three major aquifers are present on Long Island: the Upper Glacial aquifer (UGA), the Magothy aquifer and the Lloyd aquifer. A generalized cross section through Nassau County is shown in Figures 2-1 and 2-2. Based on the cross section, the Magothy Aquifer is not present in the Site area. Groundwater contours prepared for Nassau County's Groundwater Monitoring Program based on water levels collected in public wells in 2001, 2002, and 2003 indicates that the groundwater in the UGA (water table) in the Site area generally flows to the southwest, but that there may be a northwest component to the groundwater flow. The mapping shows groundwater in the Lloyd aquifer flows more westerly in this area. Mapping conducted by Kilburn and Krulik suggests that there is a groundwater high in the Site area which may result in radial flow from the Site.

### **2.2.1 Bedrock**

The bedrock in the area has been mapped as the Hartland Formation of Middle Ordovician to Lower Cambrian Age. The bedrock surface generally slopes southeastward from about 350 to 800 feet below sea level except in the northernmost parts of the Oyster Bay area where glacial scouring has created north-northwestward dipping valleys. The formation consists of highly weathered biotite-garnet-schist with low hydraulic conductivity. A thick saprolitic zone 50 to 100 feet thick, consisting of white, yellow, and gray clay, underlies most of the peninsula except in the northernmost part.

### **2.2.2 Lloyd Aquifer**

The Lloyd Sand Member of the Raritan Formation of the Late Cretaceous Age overlies the saprolitic bedrock surface and is Long Island's deepest aquifer. The Lloyd sand was deposited as a series of braided streams and deltaic deposits consisting of white and pale yellow sand with interbedded lenses of gravel and white clay. The aquifer does not outcrop on Long Island and is believed to extend to the north beneath Long Island Sound in eastern Nassau County and in Suffolk County, and offshore to the south, beyond the barrier beaches. The Lloyd aquifer is confined in most places, except where the overlying Raritan clay has been eroded away. The thickness of the Lloyd aquifer varies from zero feet where it is not present along the north shore of Nassau County, to more than 500 feet in the southeastern areas of Nassau County. The average horizontal hydraulic conductivity is reported to be approximately 40 feet per day (ft/day) with a 10:1 vertical anisotropy.

### **2.2.3 Raritan Clay**

Overlying the Lloyd aquifer is the Cretaceous Age clay member of the Raritan Formation, referred to as the Raritan clay. The Raritan clay is the major confining unit on Long Island, ranging between 150 and 250 feet in thickness. Like the Lloyd aquifer, the Raritan clay is absent from areas of northern Queens and northern Nassau County where it had been eroded. The Raritan clay outcrops in parts of Queens, and is believed to be present north of the island beneath Long Island Sound, and south of the island, beneath the barrier islands. This confining unit consists of solid, multicolored, compact clay (gray, white, red, or tan) with interbedded lenses of sand. The average vertical hydraulic conductivity is reported to be approximately 0.001 ft/day.

### **2.2.4 North Shore Aquifer**

The North Shore aquifer consists of a sequence of Pleistocene-age sediments found only in the northwestern, central, and northeastern parts of the study area. The aquifer consists of moderately sorted stratified drift and outwash deposits that infilled the low-lying areas after the partial removal of the Cretaceous deposits and parts of the bedrock (saprolitic zone) by glacial erosion. The deposits consist of poor to moderately sorted brown and olive gray sand, silt, and gravel. It contains subangular to subrounded quartz grains, rock fragments, unstable opaque minerals, and a large percentage of biotite and muscovite. The North Shore aquifer deposits are referred to locally as the Jameco Gravel.

### **2.2.5 North Shore Confining Unit**

The North Shore confining unit is a sequence of Pleistocene-aged clay and silt deposits that are locally present along the northern shore of Nassau County. The unit consists of marine and postglacial lake deposits including olive brown and olive gray clay and silt deposits with minor lenses containing shells. The unit contains a minor sand unit that is moderately permeable. The presence of the North Shore confining unit in the Site area is questionable.

### **2.2.6 Upper Glacial Aquifer (UGA)**

The UGA is the surficial unit on Long Island and is therefore entirely unconfined. Along the Harbor Hill and Ronkonkoma terminal moraines and parts of the north shore, the unit is composed of till consisting of poorly sorted clay, sand, gravel, and boulders. The till is generally poorly permeable and may contain perched water. The outwash deposits that are found are mainly between, and south of, the moraines. The outwash deposits are moderately to highly permeable, consisting of gray, brown, and yellow fine to very coarse sand and gravel. The UGA ranges up to 600 feet thick, however the saturated thickness is often much lower. The estimated average horizontal hydraulic conductivity generally exceeds 225 ft/day.

## **2.3 Site-Specific Geology and Hydrogeology**

The site is located above the UGA which consists of Upper Pleistocene deposits of poorly sorted sand and gravel to approximately 80 feet bgs. Beneath the UGA lies the Magothy aquifer which is comprised of finer sands, silt and small amounts of clay. Previous investigations have indicated that the Magothy formation may sometimes be found at considerable shallower depths (60-80 ft bgs) within the area when compared to other portions of Long Island. Within the New Cassel Industrial Area, the UGA and Magothy formations are in direct hydraulic connection as no other hydrogeologic units are found between them; however, clay lenses are often found within the upper portions of the Magothy. The soil vapor intrusion investigation conducted onsite indicated that the water table is at 48 feet bgs and that groundwater flow is in a southwesterly direction.

# Section 3

## Site Investigation

### 3.1 Soil Vapor Intrusion Investigation

The following subsections describe the scope of work conducted for the soil vapor intrusion investigation that was conducted from March 3 through 31, 2008. The soil vapor intrusion investigation was conducted in accordance with the Final Work Plan dated June 2007. This task included soil vapor and groundwater sampling at each of the seven sites (Sites A, B, C, F, K, N, and V) containing five direct push locations, presented in Figures 3-1 - 3-7.

The investigation included:

- Determining depth to groundwater table.
- Collecting a total of 105 soil vapor samples from five direct push locations at each of the seven sites (Sites A, B, C, F, K, N, and V) from three depth intervals-8, 25, and 45 feet bgs-for VOC analysis.
- Collecting a total of 35 groundwater samples that are co-located adjacent to the soil vapor sample locations at the surface of the groundwater table from five direct push locations at each of the seven sites (Sites A, B, C, F, K, N, and V) for VOC analysis.

These samples were collected in accordance with the *“Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York, dated October 2006”* and the *“Draft Division of Environmental Remediation (DER)-10 Technical Guidance for Site Investigation and Remediation, dated December 2002”*.

#### 3.1.1 Water Level Determination

Prior to soil vapor and groundwater sample collection, the water table level was determined in order to establish an appropriate location to install the soil vapor sampling ports. A monitoring well located near the 62 Kinkle Street property was opened to measure the depth to water using a water level meter. The depth to water was determined to be 48 feet bgs.

#### 3.1.2 Soil Vapor Sample Collection

A total of 105 soil vapor samples were collected from five direct push locations at each of the seven sites (Sites A, B, C, F, K, N, and V) from three depth intervals (Figure 3-1). Direct push temporary soil vapor implants were advanced to 8, 25, and 3 feet above the water table (approximately 45 feet bgs) at each direct push location. Soil vapor boreholes were drilled using direct-push technology to drive steel rods equipped with a detachable steel drive point to the desired depth. The deep borehole was drilled first followed by the intermediate then shallow soil vapor implant. The three soil vapor ports were sampled simultaneously. The soil vapor sampling procedure is provided in the Generic QAPP and has been previously reviewed and approved by NYSDEC.

The tubing was connected to a vacuum/volume system which is a combined diaphragm pump and calibrated gauge system specifically designed for soil gas sampling. The tubing was fitted with a needle valve regulator which can easily be throttled to a flow rate of less than 100 milliliters (ml) per minute. Approximately three probe volumes (i.e. volume of sample probe and tubing) were purged at a flow rate less than 100 ml per minute. Purging for the 45-foot vapor locations yields a purging volume of 1,306.8 ml over a 13.06 minute time frame. Purging the 25-foot vapor locations yields a purging volume of 726 ml per minute over a 7.26 minute time frame. Purging the 8-foot vapor locations yields a purging volume of 232.32 ml over a 2.32 minute time frame. After purging the tubing, the soil gas was screened using the photoionization detector (PID) meter and recorded in the field log book. The vacuum/volume system was then disconnected and the end of the tubing was connected directly to the summa canister intake valve.

Samples were collected using laboratory-certified clean summa canisters with flow regulators set for 2-hour sample collection and a vacuum of approximately 28 inches mercury (Hg)  $\pm$  2 inches. A vacuum of approximately 5 inches Hg  $\pm$  1 inch was targeted to be present when sample collection was terminated. If the final vacuum pressure of 5 inches of Hg was reached prior to the set 2-hour sample collection period the sample's collection was considered complete per the lab's request. The initial and final pressures as well as the sample collection times were recorded on the chains of custody. Soil vapor sample parameters are presented in Table 3-1.

A tracer gas test was performed at one deep soil vapor port (45 feet bgs), one intermediate soil vapor port (25 feet bgs), and 40% of the shallow soil vapor ports (8 feet bgs) during the soil vapor investigation in accordance with the New York State Department of Health (NYSDOH) guidance for evaluating soil vapor intrusion. Tracer gas test procedures are outlined in Section 4.5.2 of the Generic QAPP. The flow rate during sampling did not exceed 100 ml per minute to minimize outdoor air infiltration during sampling. Outdoor ambient air samples were collected for each day of soil vapor sampling. The soil vapor samples were sent to an off-site laboratory for VOC analysis via United States Environmental Protection Agency (EPA) Method TO-15. All samples were analyzed by an Environmental Laboratory Approval Program (ELAP) certified laboratory (Chemtech). The analysis for air samples achieves detection limits of 1 microgram per meter cubed ( $\mu\text{g}/\text{m}^3$ ) in most samples except where dilution was necessary.

Upon completion of the sampling, sample tubing was cut to site grade and decommissioned with bentonite. Soil vapor points performed in paved or concrete areas were restored to original condition with concrete or cold patch, as appropriate.

Several issues arose during soil vapor sampling due to inappropriate vacuum pressurization and/or flow meter malfunction. At borehole 130043A-DP05-SD45, the duplicate canister's pressure decreased from -28.5 to -17.5 inches of Hg over a 45 minute period. Since the original sample's pressure decreased from -26.4 to -4 inches of Hg over the equivalent sampling period, both the original and duplicate canisters sample collection was completed. At borehole 130043C-DP01-SV08, the canister's

pressure decreased from >-30 to -7 inches of Hg over a 2 hour period. The set 2-hours sample collection time was reached, therefore the canister's collected period was completed. At borehole 130043F-DP04-SV08, the canister's pressure decreased from -28 to 0 over a 30 minute period, therefore the soil vapor port was re-sampled. At borehole 130043N-DP02-SV25, the canister's pressure decreased from >-30 to -6.5 over a 2 hour period. The set 2-hours sample collection time was reached, therefore the canister's collection period was completed. At borehole 130043V-DP02-SD45, the duplicate canister's pressure decreased from -29 to -11.5 over a 45 minute period. Since the original sample's pressure decreased from -28 to -3.5 inches of Hg over the equivalent sampling period, both the original and duplicate canister's sample collection was completed.

Based on the similar analytical results of the original and the duplicate soil vapor samples collected at different ending pressures confirms that the issues summarized above did not have an impact on the results.

### **3.1.3 Groundwater Sample Collection**

A total of 35 groundwater samples were collected at the water table interface from a four foot interval (51 to 55 feet bgs) from five direct push locations at each of the seven sites (Sites A, B, C, F, K, N, and V), locations shown on Figure 3-1 - 3-7. The boreholes were drilled using direct-push technology to drive steel rods equipped with a detachable steel drive point to the desired depth. The detailed groundwater sampling procedure is provided in the Generic QAPP. Groundwater sample parameters are provided in Table 3-2.

The groundwater samples were sent to an off-site laboratory for VOC analysis via EPA Method OLC03.2. All samples were analyzed by an ELAP certified laboratory (Chemtech). Prior to groundwater sample collection, water quality parameters were observed using a Horiba U-22 water quality meter and recorded into the field log book. The water quality parameters are presented on Table 3-3. The turbidity for all samples exceed 10 nephelometric turbidity unit (NTUs) (>500 - 1,000 NTUs). The increased turbidity of the groundwater samples would tend to increase contaminant levels of constituents that readily adsorb to suspended particulates (e.g. inorganics). However, since only VOCs were analyzed, the excess turbidity would not impact sample quality.

Upon completion of sampling, the boreholes were backfilled with indigenous soil and/or clean sand and marked with a stake/spray paint which has been labeled with the proper sample identification and are illustrated on the site map. Borings performed in paved or concrete areas were backfilled and refinished at the ground surface with concrete or cold patch.

### **3.1.4 Outdoor (Ambient) Air Sample Collection**

Ambient air samples were collected each day of soil vapor sampling to represent the outdoor air quality surrounding each structure. The ambient air samples were collected using laboratory-certified clean summa canisters with flow regulators set for 2-hour sample collection and a vacuum of approximately 28 inches Hg  $\pm$  2 inches. A

vacuum of approximately 5 inches Hg  $\pm$  1 inch was targeted to be present when sample collection was terminated. If the final vacuum pressure of 5 inches of Hg was reached prior to the set 2-hour sample collection period the sample's collection was considered complete per the lab's request. The initial and final pressures as well as the sample collection times were recorded on the chains of custody. The outdoor ambient air parameters are presented in Table 3-1.

The ambient air samples were sent to an off-site laboratory for VOC analysis via EPA Method TO-15. All samples were analyzed by an ELAP certified laboratory (Chemtech). The analysis for air samples achieved detection limits of 1  $\mu\text{g}/\text{m}^3$  in most samples except where dilution was necessary.

One issue arose during the outdoor ambient air sampling due to inappropriate vacuum pressurization and/or flow meter malfunction. At ambient air 130043F-AA collected on March 7, 2008, the canister's pressure decreased from -29.5 to -24 inches of Hg over a 2 hour period. Since the set 2-hour sample collection time was reached, the canister's collection period was considered complete.

### **3.1.5 Investigative Derived Waste**

Soil cuttings and purge water were dispersed onto the ground near/into the designated deep borehole. No contamination or elevated PID readings were observed. PPE, consisting of nitrile gloves, was disposed of in a dumpster.

### **3.1.6 Decontamination**

All non-dedicated equipment and tools used to collect samples for chemical analysis were decontaminated prior to and between each sample interval using an Alconox rinse. The spent decon fluids were dispersed onto the ground near/into the designated deep borehole.

### **3.1.7 Sample Location**

Field measurements were collected from fixed locations (e.g. corner of the building, fence, etc.) via dead-reckoning. The approximate sample locations of sub-slab and indoor air are provided in Figures 3-1 - 3-7.

## **3.2 Sample Identification, Laboratory Analysis and Validation**

Each sample collected was designated by an alphanumeric code that identified the type of sampling location, matrix sampled, and the specific sample designation (identifier). Site specific procedures are described in the QAPP.

All samples were analyzed by a NYSDOH approved ELAP certified laboratory (Chemtech). Air samples were analyzed for VOCs using EPA Method TO-15. The analysis for vapor samples achieved detection limits of 1  $\mu\text{g}/\text{m}^3$  for each compound unless dilution was necessary. Groundwater samples were analyzed for VOCs by EPA Method OLC03.2. A NYSDEC Analytical Services Protocol (ASP) Category B data deliverable is provided for these analyses.



All samples collected were validated in accordance with NYSDEC Data Usability Summary Report (DUSR) guidance by a party that is independent of the laboratory which performed the analyses and CDM. A usability analysis was conducted by a qualified data validator (Data Validation Services). Tables presenting the analytical results from the soil vapor intrusion investigation are provided in Appendix A.

All analytical data received from the laboratory were validated in accordance with DUSR requirements and no analytical data were rejected. As typical in vapor analysis, many samples required dilution increasing the overall detection limits. In summary, analyte detected values or reporting limits for non-detected compounds are either usable as reported or usable with minor qualification as estimated. Thus, project data quality objectives have been achieved.

### **3.3 Field Documentation and Reporting**

Field notebooks were used during all on-site work. A dedicated field notebook was maintained by the field manager overseeing activities at the site. A copy of the field notebook for this investigation is provided in Appendix B. In addition to the notebook, field and sampling procedures, including installation of the sample boreholes, collection of soil vapor, sub-slab, indoor air, and outdoor air samples, etc., were photo-documented and included in Appendix C.

## Section 4

# Analytical Results

This section presents the analytical results for the soil vapor intrusion investigation conducted in March 2008. The soil vapor intrusion investigation indicated that several sources of chlorinated solvents exist throughout the seven sites located within the New Cassel Industrial Area.

### 4.1 Soil Vapor Results

Fifteen soil vapor samples were collected from five direct push locations at each of the seven sites to determine if VOC contamination in the subject area has resulted in the presence of soil vapor that may impact the quality of indoor air in surrounding structures. The results of the soil vapor investigation also assisted the identification of potential source areas at each site. Three vapor boreholes were co-located at each direct push location to collect three soil vapor samples, approximately 8 feet below site grade, 25 feet below site grade, and 3 feet above the water table interface, approximately 45 feet bgs.

An ambient air sample was collected each day soil vapor sampling was conducted and is labeled with an "AA" in accordance with the approved Work Plan. Ambient air and soil vapor sampling results are discussed in the sections below.

Volatile chlorinated and non-chlorinated detections of the soil vapor samples collected during the investigation are presented on Figures 4-1 through 4-7. Tables presenting the analytical results from the soil vapor intrusion investigation are provided in Appendix A. The 2006 NYSDOH Vapor Intrusion guidance indicates that the State of New York does not have any standards, criteria, or guidance values for the subsurface vapors. However, New York State air guideline values were compared to soil vapor levels to determine if exceedances exist. Table 4-1 presents the New York State guidance values. New York State guidelines for methylene chloride, Tetrachloroethene (PCE), and TCE are  $60 \mu\text{g}/\text{m}^3$ ,  $100 \mu\text{g}/\text{m}^3$  and  $5 \mu\text{g}/\text{m}^3$ , respectively.

#### 4.1.1 Site A – 570 Main Street

The soil vapor concentrations for PCE ranged from  $29.2 \mu\text{g}/\text{m}^3$  to  $224,000$  micrograms per meters cubed ( $\mu\text{g}/\text{m}^3$ ). The highest PCE concentration of  $224,000 \mu\text{g}/\text{m}^3$  was detected in the deep soil vapor sample collected from A-DP05 located in the northwest portion of Site A. The deep soil vapor sample collected from A-DP04, also located in the northwest area of the site, detected an elevated concentration of PCE at  $198,000 \mu\text{g}/\text{m}^3$ . Soil vapor samples collected from A-DP01, A-DP03A, A-DP04, and A-DP05 exceeded New York State's guidance value for PCE.

Daughter products of PCE, TCE and *cis*-1,2-Dichloroethene (DCE) were also detected at elevated concentrations from soil vapor samples collected at A-DP05 and A-DP04. However the greatest concentrations of these compounds,  $6,990 \mu\text{g}/\text{m}^3$  of TCE and  $5,550 \mu\text{g}/\text{m}^3$  of *cis*-1,2-DCE, were detected downgradient at A-DP03A. Vinyl chloride,

the tertiary daughter product of TCE, was only detected at the deep soil vapor sample of A-DP03A at a concentration of 2.56  $\mu\text{g}/\text{m}^3$ . Soil vapor samples collected from all five direct push borings exceeded New York State's guidance value for TCE.

*Trans*-1,2-DCE was detected at elevated concentrations in soil vapor samples collected from A-DP03A and A-DP05. The soil vapor concentrations of *trans*-1,2-DCE were 4.36  $\mu\text{g}/\text{m}^3$  and 43.6  $\mu\text{g}/\text{m}^3$ . The highest *trans*-1,2-DCE concentration of 43.6  $\mu\text{g}/\text{m}^3$  was detected in the deep soil vapor sample collected from A-DP03A.

The soil vapor concentrations for 1,1,1-TCA ranged from 8.73 to 589  $\mu\text{g}/\text{m}^3$ . The highest 1,1,1-TCA concentration of 589  $\mu\text{g}/\text{m}^3$  was detected in the deep soil vapor sample collected from A-DP04. The deep soil vapor sample collected from A-DP05 detected an elevated concentration of 1,1,1-TCA at 385  $\mu\text{g}/\text{m}^3$ . 1,1-Dichloroethane (DCA), a daughter product of 1,1,1-TCA, was detected at elevated concentrations in soil vapor samples collected from A-DP03A, A-DP04, and A-DP05. The deep soil vapor sample collected at A-DP03A detected the highest concentration of 1,1-DCA at 26.3  $\mu\text{g}/\text{m}^3$ .

Other compounds which were detected are chloroform and methylene chloride ranging from non-detect to 63.5  $\mu\text{g}/\text{m}^3$  and non-detect to 4.86  $\mu\text{g}/\text{m}^3$ , respectively. The elevated chloroform concentration of 63.5  $\mu\text{g}/\text{m}^3$  was detected at the deep soil vapor sample collected from A-DP03A.

A total of two ambient air samples were collected during soil vapor sampling at Site A. The ambient air samples were located direct push locations A-DP01 and A-DP04. Three compounds were detected in the ambient air samples collected. Carbon tetrachloride was detected in both A-DP01 and A-DP04 ambient air samples at concentrations of 0.44 and 0.5  $\mu\text{g}/\text{m}^3$ , respectively. PCE was detected at a concentration of 2.17  $\mu\text{g}/\text{m}^3$  from the ambient air sample collected near A-DP04. Methylene chloride was detected at a concentration of 1.39  $\mu\text{g}/\text{m}^3$  from the ambient air sample collected near A-DP01.

#### 4.1.2 Site B – 567 Main Street

The soil vapor concentrations of PCE ranged from 11.5  $\mu\text{g}/\text{m}^3$  to 12,200  $\mu\text{g}/\text{m}^3$ . The highest PCE concentration of 12,200  $\mu\text{g}/\text{m}^3$  was detected in the deep soil vapor sample collected from B-DP05 located downgradient in the southern area of the site. Elevated concentrations of PCE were also detected in the shallow soil vapor sample collected from B-DP04 and the intermediate soil vapor sample collected from B-DP01. The direct push borehole B-DP04 is located in the northeast corner of the site and detected PCE at 1,560  $\mu\text{g}/\text{m}^3$ . Downgradient from B-DP04, direct push boring B-DP01 detected PCE at 2,710  $\mu\text{g}/\text{m}^3$ . Soil vapor samples collected from all five direct push borings exceeded New York State's guidance value for PCE.

Daughter products of PCE, TCE and *cis*-1,2-DCE, were also detected at elevated concentrations from soil vapor samples collected from B-DP01, B-DP04, and B-DP05. The highest TCE concentration of 21,000  $\mu\text{g}/\text{m}^3$  was detected in the intermediate soil vapor sample collected from B-DP01. Soil vapor samples collected from B-DP04 and

B-DP05 also detected significant elevated concentrations of TCE. The shallow soil vapor sample collected at B-DP04 and deep soil vapor sample collected from B-DP05 detected TCE concentrations of 5,370  $\mu\text{g}/\text{m}^3$  and 3,760  $\mu\text{g}/\text{m}^3$ , respectively. The highest concentration of *cis*-1,2-DCE of 396  $\mu\text{g}/\text{m}^3$  was detected in the shallow soil vapor sample collected from B-DP04. The *cis*-1,2-DCE concentrations detected at B-DP01 and B-DP05 ranged from non-detect to 32.9  $\mu\text{g}/\text{m}^3$  and non-detect to 15.9  $\mu\text{g}/\text{m}^3$ , respectively. *Trans*-1,2-DCE was also detected at the shallow soil vapor sample collected from B-DP04 at a concentration of 16.3  $\mu\text{g}/\text{m}^3$ . Soil vapor samples collected from all five direct push borings exceeded New York State's guidance value for TCE.

The soil vapor concentrations of 1,1,1-TCA ranged from non-detect to 600  $\mu\text{g}/\text{m}^3$ . The highest 1,1,1-TCA concentration of 600  $\mu\text{g}/\text{m}^3$  was detected in the deep soil vapor sample collected from B-DP04. Elevated concentrations of 1,1,1-TCA were also detected in the deep soil vapor samples of B-DP02 and B-DP05. The direct push borehole DP02 is located in the northwest corner of the site and detected 1,1,1-TCA at 311  $\mu\text{g}/\text{m}^3$ . Downgradient of B-DP04, direct push boring B-DP05 detected 1,1,1-TCA at 344  $\mu\text{g}/\text{m}^3$ .

The biotic daughter product of 1,1,1-TCA, 1,1-DCA, was also detected at elevated concentrations at soil vapor samples collected from B-DP01, B-DP02, B-DP04, and B-DP05. The highest 1,1-DCA concentration of 68.8  $\mu\text{g}/\text{m}^3$  was detected in the intermediate soil vapor sample of B-DP01. An abiotic daughter product of 1,1,1-TCA, 1,1-DCE, was detected in soil vapor samples collected from B-DP04 and B-DP02. The highest 1,1-DCE concentration of 6.74  $\mu\text{g}/\text{m}^3$  was detected in the shallow soil vapor sample of B-DP04.

Other compounds which were detected are chloroform, carbon tetrachloride, and methylene chloride. The highest chloroform and carbon tetrachloride concentrations were detected in the intermediate soil vapor sample from B-DP02 at concentrations of 8.79  $\mu\text{g}/\text{m}^3$  and 4.4  $\mu\text{g}/\text{m}^3$ , respectively. The highest concentration of methylene chloride of 26.1  $\mu\text{g}/\text{m}^3$  was detected in the shallow soil vapor sample collected from B-DP03.

A total of two ambient air samples were collected during soil vapor sampling at Site B. Methylene chloride was the only compound detected from the ambient air collected near the B-DP02 location at a concentration of 3.13  $\mu\text{g}/\text{m}^3$ . Several compounds were detected in the ambient air sample collected near the B-DP04 location. The detections which exceeded 1  $\mu\text{g}/\text{m}^3$  were 1,1,1-TCA at 1.09  $\mu\text{g}/\text{m}^3$ , carbon tetrachloride at 1.32  $\mu\text{g}/\text{m}^3$ , methylene chloride at 1.74  $\mu\text{g}/\text{m}^3$ , and PCE at a concentration of 1.36  $\mu\text{g}/\text{m}^3$ .

#### 4.1.3 Site C - 125 State Street

The soil vapor concentrations of PCE ranged from non-detect to 13,600  $\mu\text{g}/\text{m}^3$ . The highest PCE concentration of 13,600  $\mu\text{g}/\text{m}^3$  was detected in the shallow soil vapor sample collected from C-DP04, located in the southwestern area of Site C. Adjacent

borehole C-DP05 detected significant concentrations of PCE as well. The intermediate soil vapor sample collected from C-DP05 detected a PCE concentration of 3,930  $\mu\text{g}/\text{m}^3$ . Soil vapor samples collected from all five direct push borings exceeded New York State's guidance value for PCE.

Daughter products of PCE, TCE and *cis*-1,2-DCE, were also detected at elevated concentrations from soil vapor samples collected from C-DP04 and C-DP05. The highest TCE concentration of 64.5  $\mu\text{g}/\text{m}^3$  was detected in the shallow soil vapor sampled from C-DP04. The highest *cis*-1,2-DCE concentration of 5.95  $\mu\text{g}/\text{m}^3$  was also detected in the shallow soil vapor sample of C-DP04. Soil vapor samples collected from C-DP04 and C-DP05 exceeded New York State's guidance value for TCE.

The soil vapor concentrations of 1,1,1-TCA ranged from non-detect to 2,780  $\mu\text{g}/\text{m}^3$ . The highest 1,1,1-TCA concentration of 2,780  $\mu\text{g}/\text{m}^3$  was detected in the shallow soil vapor sample of C-DP04. Adjacent borehole C-DP05 detected significant concentrations of 1,1,1-TCA as well. The intermediate soil vapor sample of C-DP05 detected a concentration of 1,1,1-TCA at 2,730  $\mu\text{g}/\text{m}^3$ .

Daughter products of 1,1,1-TCA were also detected at significant elevated concentrations from C-DP04 and C-DP05. The shallow soil vapor sample from C-DP04 detected 1,1-DCA and 1,1-DCE at a concentrations of 105  $\mu\text{g}/\text{m}^3$  and 5.15  $\mu\text{g}/\text{m}^3$ , respectively. The intermediate soil vapor sample from C-DP05 detected concentrations of 1,1-DCA and 1,1-DCE at 328  $\mu\text{g}/\text{m}^3$  and 6.74  $\mu\text{g}/\text{m}^3$ , respectively.

Other compounds which were detected are chloroform and methylene chloride. Chloroform was detected at C-DP04 and C-DP05 in concentrations ranging from non-detect to 7.33  $\mu\text{g}/\text{m}^3$ . Methylene chloride was detected at all five direct push soil vapor sampling locations in concentrations ranging from non-detect to 695  $\mu\text{g}/\text{m}^3$ . The significantly higher methylene chloride detections were present in the shallow and intermediate soil vapor samples collected from C-DP02, located in the southeastern area of Site C. The soil vapor samples collected from C-DP02 exceeded New York State's guidance value for methylene chloride.

A total of two ambient air samples were collected during soil vapor sampling at Site C. The ambient air samples were collected near direct push borings C-DP03 and C-DP05. Three compounds were detected from the ambient air samples collected. Methylene chloride was detected at both ambient air samples of concentrations ranging from 2.08 to 3.13  $\mu\text{g}/\text{m}^3$ . PCE was detected at a concentration of 0.68  $\mu\text{g}/\text{m}^3$  in the ambient air sample collected at C-DP03. 1,2-DCE was detected at a concentration of 2.43  $\mu\text{g}/\text{m}^3$  in the ambient air sample collected from C-DP05.

#### 4.1.4 Site F - 68 Kinkel Street

The soil vapor concentration of PCE ranged from 2.03 to 1,080  $\mu\text{g}/\text{m}^3$ . The highest PCE concentration of 1,080  $\mu\text{g}/\text{m}^3$  was detected in the deep soil vapor sample collected from F-DP04, located in the northeast corner of Site F. Soil vapor samples collected from all five direct push borings exceeded New York State's guidance value for PCE.

Soil vapor samples collected from F-DP04 detected the highest concentration of the three daughter products of PCE. The primary daughter product, TCE, was detected at a concentration of 145  $\mu\text{g}/\text{m}^3$  from the deep soil vapor sample. The secondary daughter product, *cis*-1,2-DCE, was detected at a concentration of 6.74 from the intermediate soil vapor sample. The tertiary daughter product, vinyl chloride, was detected at a concentration of 13.3  $\mu\text{g}/\text{m}^3$  from the intermediation soil vapor sample of F-DP04 as well. TCE was the only breakdown product of PCE detected from the soil vapor samples collected from the remaining four borings. Soil vapor samples collected from all five direct push borings exceeded New York State's guidance value for TCE.

The soil vapor concentration of 1,1,1-TCA ranged from non-detect to 28.4  $\mu\text{g}/\text{m}^3$ . The highest 1,1,1-TCA concentration of 28.4  $\mu\text{g}/\text{m}^3$  was detected in the deep soil vapor samples of F-DP02 and F-DP05, as well as the intermediate soil vapor sample of F-DP01. A daughter product of 1,1,1-TCA, 1,1-DCA, was detected in soil vapor samples collected from F-DP04 and F-DP05. The highest 1,1-DCA concentration of 23.5  $\mu\text{g}/\text{m}^3$  was detected in the intermediate soil vapor sample collected from F-DP04.

Other compounds which were detected were carbon tetrachloride, chloroform, and methylene chloride. Carbon tetrachloride was detected in one soil vapor sample collected from the shallow soil vapor port of F-DP01 at a concentration of 0.5  $\mu\text{g}/\text{m}^3$ . Chloroform was detected in one soil vapor sample collected from the intermediate soil vapor port of F-DP03 at a concentration of 0.98  $\mu\text{g}/\text{m}^3$ . Methylene chloride was detected in soil vapor samples collected from all five boreholes in concentrations ranging from non-detect to 19.8  $\mu\text{g}/\text{m}^3$ . The highest methylene chloride concentration of 19.8  $\mu\text{g}/\text{m}^3$  was detected in the deep soil vapor sample collected from F-DP01.

A total of two ambient air samples were collected during soil vapor sampling at Site F. Both ambient air samples detected several chlorinated volatile compounds. The ambient air samples were located near direct push locations F-DP02 and F-DP04. PCE was detected in both the ambient air samples at concentrations ranging from 1.36 to 3.39  $\mu\text{g}/\text{m}^3$ . The daughter products of PCE were only detected in the ambient air sample collected near the F-DP04 location. TCE was detected at 0.86  $\mu\text{g}/\text{m}^3$ , *cis*-1,2-DCE was detected at 0.79  $\mu\text{g}/\text{m}^3$ , and vinyl chloride was detected at a concentration of 1.79  $\mu\text{g}/\text{m}^3$ . 1,1,1-TCA and 1,1-DCA were detected in the ambient air sample collected near the F-DP04 location at the concentrations of 5.46  $\mu\text{g}/\text{m}^3$  and 2.83  $\mu\text{g}/\text{m}^3$ , respectively. Methylene chloride was detected in both ambient air samples at concentrations of 2.78 and 6.95  $\mu\text{g}/\text{m}^3$ . Carbon tetrachloride was only detected in the ambient air sample collected near F-DP02 at a concentration of 0.44  $\mu\text{g}/\text{m}^3$ .

#### 4.1.5 Site K - 62 Kinkel Street

The soil vapor concentration of PCE ranged from 21 to 746  $\mu\text{g}/\text{m}^3$ . The highest PCE concentration of 746  $\mu\text{g}/\text{m}^3$  was detected in the deep soil vapor sample collected from K-DP05, located in the southeast corner of Site K. PCE along with its daughter products TCE and *cis*-1,2-DCE were detected in soil vapor samples collected from all five direct push borings. The soil vapor concentration of TCE ranged from 5.91 to 537

$\mu\text{g}/\text{m}^3$ . The highest TCE concentration of  $537 \mu\text{g}/\text{m}^3$  was detected in the intermediate soil vapor sample of K-DP03, located downgradient of K-DP05 in the southwest corner of Site K. The soil vapor concentration of *cis*-1,2-DCE ranged from non-detect to  $39.3 \mu\text{g}/\text{m}^3$ . The highest *cis*-1,2-DCE concentration of  $39.3 \mu\text{g}/\text{m}^3$  was detected in the deep soil vapor sample of K-DP04, located downgradient of K-DP05 in the southern area of Site K. Soil vapor samples collected from all five direct push borings exceeded New York State's guidance values for PCE and TCE.

The soil vapor concentration of 1,1,1-TCA ranged from non-detect to  $147 \mu\text{g}/\text{m}^3$ . The highest 1,1,1-TCA concentration was detected in the deep soil vapor sample collected from K-DP05. The deep soil vapor sample collected from K-DP04, downgradient of K-DP05, detected 1,1,1-TCA at a concentration of  $104 \mu\text{g}/\text{m}^3$ . The soil vapor concentration of 1,1-DCA, a daughter product of 1,1,1-TCA, ranged from non-detect to  $312 \mu\text{g}/\text{m}^3$ . The highest 1,1,-DCA concentration of  $312 \mu\text{g}/\text{m}^3$  was detected in the deep soil vapor of K-DP05.

Other compounds that were detected are chloroform and methylene chloride. Chloroform was detected in the deep soil vapor samples collected from K-DP03 and K-DP04 at concentrations of  $6.35 \mu\text{g}/\text{m}^3$  and  $12.2 \mu\text{g}/\text{m}^3$ , respectively. The soil vapor concentration of methylene chloride ranged from non-detect to  $18.1 \mu\text{g}/\text{m}^3$ , with the highest concentration detected in the shallow soil vapor sample collected from K-DP05.

A total of two ambient air samples were collected during soil vapor sampling at Site K. Both ambient air samples detected several chlorinated volatile compounds. The ambient air samples were located near direct push locations K-DP03 and K-DP05. PCE, at a concentration of  $0.68 \mu\text{g}/\text{m}^3$ , was detected in the ambient air sample collected near K-DP03. 1,1-DCA and vinyl chloride were detected in the ambient air sample collected near K-DP05 at concentrations of  $0.4$  and  $0.77 \mu\text{g}/\text{m}^3$ , respectively. Carbon tetrachloride and methylene chloride were detected in both K-DP03 and K-DP05 ambient air samples at concentrations of  $0.5 \mu\text{g}/\text{m}^3$  and  $1.04$ , and  $0.57 \mu\text{g}/\text{m}^3$  and  $1.39$ , respectively.

#### 4.1.6 Site N - 750 Summa Avenue

The soil vapor concentration of PCE ranged from non-detect to  $5,500 \mu\text{g}/\text{m}^3$ . The highest PCE concentration of  $5,500 \mu\text{g}/\text{m}^3$  was detected in the deep soil vapor sample collected from N-DP05, located in the southeast portion of Site N. PCE and its daughter product TCE were detected in soil vapor samples collected from N-DP02, N-DP03, N-DP04, and N-DP05. The soil vapor concentration of TCE ranged from non-detect to  $127 \mu\text{g}/\text{m}^3$ . The highest TCE concentration of  $127 \mu\text{g}/\text{m}^3$  was detected in both the shallow and intermediate soil vapor samples collected from N-DP05. Soil vapor samples collected from all five direct push borings exceeded New York State's guidance values for PCE and TCE.

The soil vapor concentration of 1,1,1-TCA ranged from non-detect to  $3,820 \mu\text{g}/\text{m}^3$ . The highest 1,1,1-TCA concentration of  $3,820 \mu\text{g}/\text{m}^3$  was detected in the deep soil

vapor sample collected from N-DP02, located in the southwestern portion of Site N. The 1,1-DCE, an abiotic daughter product of 1,1,1-TCA, soil vapor concentrations ranged from non-detect to 25.4  $\mu\text{g}/\text{m}^3$ . The highest 1,1-DCE concentration of 25.4  $\mu\text{g}/\text{m}^3$  was detected in the deep soil vapor sample of N-DP02. The 1,1-DCA, a biotic daughter product of 1,1,-TCA, soil vapor concentrations ranged from non-detect to 34.8  $\mu\text{g}/\text{m}^3$ . The highest 1,1-DCA concentration of 34.8  $\mu\text{g}/\text{m}^3$  was detected in the intermediate soil sample collected from N-DP03, also located in southwestern portion of Site N.

Other compounds detected are carbon tetrachloride and methylene chloride. Carbon tetrachloride was detected in the shallow soil vapor sample of N-DP02 at a concentration of 0.44  $\mu\text{g}/\text{m}^3$ . Methylene chloride was detected in soil vapor samples collected from all five direct push borings. The soil vapor concentration of methylene chloride ranged from non-detect to 24.7  $\mu\text{g}/\text{m}^3$ , with the highest concentration in the shallow soil vapor sample from N-DP04.

A total of two ambient air samples were collected during soil vapor sampling at Site N. The ambient air sample collected near the N-DP02 location did not detect any elevated concentrations of chlorinated and non-chlorinated compounds. The ambient air sample collected near N-DP05 detected carbon tetrachloride and methylene chloride at concentrations of 0.38  $\mu\text{g}/\text{m}^3$  and 16.7  $\mu\text{g}/\text{m}^3$ , respectively.

#### 4.1.7 Site V – 29 New York Avenue

The soil vapor concentration of PCE ranged from 10.8 to 5,760  $\mu\text{g}/\text{m}^3$ . The highest PCE concentration of 5,760  $\mu\text{g}/\text{m}^3$  was detected in the intermediate soil vapor sample collected from V-DP05, located in the southern portion of Site V. Both PCE and TCE, PCE's primary daughter product, were detected in soil vapor samples collected from all five direct push borings. The soil vapor concentration of TCE ranged from non-detect to 3,920, with the highest concentration also present in the intermediate soil vapor sample collected from V-DP05. Soil vapor samples collected from V-DP04 and V-DP05 exceeded New York State's guidance value for PCE. Soil vapor samples collected from all five direct push borings exceeded New York State's guidance value for TCE.

The secondary daughter product of PCE, *cis*-1,2-DCE, was detected in direct push locations V-DP03, V-DP04, and V-DP05 all located in the southern portion of Site V. The soil vapor concentration of *cis*-1,2-DCE ranged from non-detect to 1,670, the highest concentration also present in the intermediate soil vapor sample from V-DP05. *Trans*-1,2-DCE was detected in the shallow and intermediate soil vapor samples collected from V-DP04 at concentrations of 4.36  $\mu\text{g}/\text{m}^3$  and 5.55  $\mu\text{g}/\text{m}^3$ , respectively.

1,1,1-TCA and its daughter products, 1,1-DCA and 1,1-DCE, were detected at elevated concentrations in soil vapor samples collected from all five direct push borings. The soil vapor concentration of 1,1,1-TCA ranged from non-detect to 147,000  $\mu\text{g}/\text{m}^3$ . The highest 1,1,1-TCA concentration of 147,000  $\mu\text{g}/\text{m}^3$  was detected in the intermediate soil vapor sample collected from V-DP05. The intermediate soil vapor sample



collected from V-DP04, adjacent to V-DP05, detected a 1,1,1-TCA concentration of 98,200  $\mu\text{g}/\text{m}^3$ . Soil vapor concentrations of 1,1-DCA ranged from non-detect to 72,900  $\mu\text{g}/\text{m}^3$ . Soil vapor concentrations of 1,1-DCE ranged from non-detect to 1,630  $\mu\text{g}/\text{m}^3$ . The highest concentrations of 1,1-DCA and 1,1-DCE were detected in the intermediate soil vapor sample collected from V-DP05.

Other compounds detected are chloroform and methylene chloride. Chloroform was detected in all three soil vapor samples collected from V-DP05 at concentrations ranging from 6.35  $\mu\text{g}/\text{m}^3$  to 430  $\mu\text{g}/\text{m}^3$ . The highest chloroform concentration of 430  $\mu\text{g}/\text{m}^3$  was detected in the intermediate soil vapor sample from V-DP05. Methylene chloride was detected in soil vapor samples collected from all five direct push borings. The soil vapor concentration of methylene chloride ranged from non-detect to 188  $\mu\text{g}/\text{m}^3$ , with the highest concentration in the intermediate soil vapor sample from V-DP05. The soil vapor sample collected from V-DP05 exceeded New York State's guidance value for methylene chloride.

One ambient air sample was collected during soil vapor sampling at Site V. The ambient air sample was located near the V-DP05 direct push location. The ambient air sample detected three chlorinated compounds. PCE was detected at 29.8  $\mu\text{g}/\text{m}^3$ , carbon tetrachloride was detected at 0.5  $\mu\text{g}/\text{m}^3$ , and methylene chloride was detected at a concentration of 2.43  $\mu\text{g}/\text{m}^3$ .

## 4.2 Groundwater Investigation

A total of five groundwater samples were collected from five direct push locations at each of the seven sites to assist in identifying the potential source area(s). Groundwater samples were collected at co-located boreholes from a four foot interval, ranging from 51 to 55 feet bgs, located at the water table interface.

Rinsate blank and trip blank samples were collected each day direct push groundwater sampling was conducted and are labeled with an "FB" and "TB" in accordance with the approved Work Plan. The analytical results of the rinsate and trip blank samples showed no detections. Tables presenting the analytical results from the groundwater investigation are provided in Appendix A.

Volatile chlorinated and non-chlorinated detections of the groundwater samples collected during the investigation are presented on Figures 4-8 through 4-14. Site-specific groundwater criteria is based on the New York State Standards and Guidance Values for Class GA Groundwater, NYDSOH Drinking Water Quality Standards, and the National Primary Drinking Water Standards, presented in Table 4-2.

### 4.2.1 Site A - 570 Main Street

Three compounds were detected above site-specific groundwater delineation criteria from two of the five groundwater samples collected from Site A. PCE and TCE were detected at elevated concentrations from the groundwater sample collected at A-DP04, which is located in the northwest portion of the site. The concentrations of PCE and TCE were 6.9  $\mu\text{g}/\text{L}$  and 7.3  $\mu\text{g}/\text{L}$ , respectively. The third compound detected,

chloroform, was present in the downgradient groundwater sample collected from A-DP03A at a concentration of 9 µg/L.

#### **4.2.2 Site B - 567 Main Street**

Three compounds were detected above site-specific groundwater delineation criteria from three of the five groundwater samples collected from Site B. The groundwater concentrations of PCE ranged from 5.1 to 7.1 µg/L. The highest PCE concentration of 7.1 µg/L was detected in the groundwater sample collected from B-DP04, located in the northeastern corner of the site. 1,1,1-TCA was also detected at B-DP04 with a concentration of 19 µg/L. The third compound, TCE, was detected in the groundwater sample collected downgradient from B-DP05 at a concentration of 31 µg/L.

#### **4.2.3 Site C - 125 State Street**

No compounds were detected above site-specific groundwater delineation criteria from the five groundwater samples collected from Site C.

#### **4.2.4 Site F - 68 Kinkel Street**

Four compounds were detected above site-specific groundwater delineation criteria from two of the five groundwater samples collected from Site F. PCE was detected in groundwater samples collected from F-DP03 and F-DP05 at concentrations of 9.1 µg/L and 53 µg/L, respectively. The groundwater sample collected from DP05 also detected TCE at a 47 µg/L, *cis*-1,2-DCE at 32 µg/L, and Methyl-*tert*-Butyl Ether (MTBE) at a concentration of 110 µg/L. Both F-DP03 and F-DP05 are located along the northern perimeter of the site.

#### **4.2.5 Site K - 62 Kinkel Street**

No compounds were detected above site-specific groundwater delineation criteria from the five groundwater samples collected from Site K.

#### **4.2.6 Site N - 750 Summa Avenue**

Two compounds were detected above site-specific groundwater delineation criteria from two of the five groundwater samples collected from Site N. PCE was detected at a concentration of 27 µg/L in the groundwater sample collected from N-DP05, located in the southeastern portion of Site N. 1,1,1-TCA was detected at a concentration of 14 µg/L in the groundwater sample collected from N-DP03, located in the southwestern portion of Site N.

#### **4.2.7 Site V - 29 New York Avenue**

Several compounds were detected above site-specific groundwater delineation criteria from all five of the groundwater samples collected from Site V. 1,1,1-TCA and its biotic daughter product 1,1-DCA exceeded site-specific criteria in all five groundwater samples. The groundwater exceedance concentrations of 1,1,1-TCA ranged from 23 µg/L to 70 µg/L. The highest concentration of 70 µg/L was detected in the groundwater sample collected from V-DP04, located in the southern portion of Site V.

The groundwater exceedance concentrations of 1,1-DCA ranged from 25 µg/L to 45 µg/L. The highest concentration of 1,1-DCA was also detected in the groundwater sample collected from V-DP04. 1,1-DCE, an abiotic daughter product of 1,1,1-TCA, exceeded site-specific criteria in groundwater samples collected from V-DP01, V-DP02, V-DP03, and V-DP04. The groundwater exceedances of 1,1-DCE ranged from 10 µg/L to 53 µg/L. The highest 1,1-DCE concentration of 53 µg/L was detected in the groundwater sample collected from V-DP02, located upgradient in the northeast corner of the site.

PCE concentrations exceeded site-specific criteria in one groundwater sample collected from V-DP02, with a concentration of 7.3 µg/L. TCE, the primary daughter product of PCE, exceeded site-specific criteria in groundwater samples collected from V-DP01, V-DP02, and V-DP03. The groundwater exceedance concentrations ranged from 9.8 µg/L to 38 µg/L, with the highest concentration from V-DP02. *Cis*-1,2-DCE, the secondary daughter product of PCE, exceeded site-specific criteria in the groundwater sample collected downgradient from V-DP03 with a concentration of 12 µg/L.

# Section 5

## Conclusions and Recommendations

This section presents the conclusions and recommendations which are based upon the analytical results for both the soil vapor and groundwater sampling conducted as part of the soil vapor intrusion investigation.

### 5.1 Conclusions

#### 5.1.1 Site A - 570 Main Street

The soil vapor samples located in the northwest corner of Site A contained significantly higher levels of PCE and 1,1,1-TCA than soil vapor samples collected along the northeast and southern corners of the site. The downgradient location, located in the southern corner of Site A, contained significantly higher levels of PCE and 1,1,1-TCA degradation products such as TCE, *cis*-1,2-DCE, vinyl chloride, 1,1-DCA, and 1,1-DCE. The soil vapor samples collected upgradient, along the northeast corner of the site, contained significantly lower concentrations of chlorinated solvents. Since groundwater flows in a southwesterly direction it is assumed the plume is migrating similarly suggesting the source is from the northwest corner of Site A. Based on results from the soil vapor intrusion investigation at Site A, further investigation is required to minimize potential exposures associated with vapor intrusion.

The groundwater samples collected in the northwest corner of Site A detected elevated concentrations of PCE and TCE. Based on the results from the groundwater investigation at Site A, the potential source area is reconfirmed to be located in the northwest corner of the site.

#### 5.1.2 Site B - 567 Main Street

The shallow soil vapor sample collected from the northeast corner of the onsite building detected elevated concentrations of PCE, *cis*-1,2-DCE, *trans*-1,2-DCE, 1,1,1-TCA, and 1,1-DCE. The highest PCE concentration was detected from the deep soil vapor sample collected from the southern portion of Site B. The highest 1,1,1-TCA concentration was detected from the deep soil vapor sample collected from the northeast corner. Since groundwater flows in a southwesterly direction it is assumed the plume is migrating similarly suggesting the 1,1,1-TCA and PCE source is from the northeast corner of Site B. A secondary potential PCE source is concluded to be located in the southern area of the site since the deep soil vapor sample collected in this area detected the highest concentration of PCE. Based on results from the soil vapor intrusion investigation at Site B, further investigation is required to minimize potential exposures associated with vapor intrusion.

The groundwater sample collected from the northern area of Site N detected elevated concentrations of PCE and TCE. The groundwater sample collected from the southern area of the site also detected elevated levels of PCE and TCE. 1,1,1-TCA was detected at higher a concentration from the groundwater sample collected from the

northeastern area of Site N. Based on the results from the groundwater investigation at the site, the potential locations of two onsite sources have been reconfirmed.

### 5.1.3 Site C - 125 State Street

The soil vapor samples located in the southwest area of Site C contained significantly higher concentrations of PCE and 1,1,1-TCA, as well as the degradation products, than soil vapor samples collected in the northwest corner and southeast area of the site. The soil vapor sample located in the southeast portion of the site, C-DP02, contained significantly higher concentrations of methylene chloride than soil vapor samples collected from the southwest and northeast areas of the site. Since the upgradient location, near the northwest corner of the site, contained significantly lower concentrations of VOCs the potential source is suggested as being located in the southwest area of the site. Based on results from the soil vapor intrusion investigation at Site C, further investigation is required to minimize potential exposures associated with vapor intrusion.

The groundwater samples collected onsite did not detect elevated concentrations of chlorinated solvents. The absence of onsite groundwater contamination suggests the potential source being located in the vadose zone within the northwest area.

### 5.1.4 Site F - 68 Kinkel Street

The soil vapor samples in close proximity to the northeast corner of Site F contained significantly higher concentrations of PCE and 1,1,1-TCA, as well as the degradation products, than soil vapor samples collected in the north and northwest areas of the site. Since groundwater flows in a southwesterly direction it is assumed the plume is migrating similarly suggesting the source is from the northeast corner. This assumption is further confirmed by the elevated concentrations of PCE and 1,1,1-TCA in soil vapor samples collected downgradient. Based on results from the soil vapor intrusion investigation at Site F, further investigation is required to minimize potential exposures associated with vapor intrusion.

The groundwater sample collected from the northeastern area of the site detected elevated concentrations of PCE, TCE, *cis*-1,2-DCE, and MTBE. Since this groundwater sample solely detected TCE, *cis*-1,2-DCE, and MTBE at elevated concentrations, the potential source is reconfirmed as being located in the northeastern area.

### 5.1.5 Site K - 62 Kinkel Street

The soil vapor sample located in the southeast area of Site K contained significantly higher concentrations of PCE and 1,1,1-TCA than soil vapor samples collected in the northwest and southwest areas of the site. Since groundwater flows in a southwesterly direction it is assumed the plume is migrating similarly suggesting the source is from the southeast corner. This assumption is further confirmed by the elevated concentrations of PCE and 1,1,1-TCA in soil vapor samples collected downgradient, in the southwestern area of the site. Based on results from the soil

vapor intrusion investigation at Site K, further investigation is required to minimize potential exposures associated with vapor intrusion.

The groundwater samples collected onsite did not detect elevated concentrations of chlorinated solvents. The absence of onsite groundwater contamination suggests the potential source being located in the vadose zone within the southeast area.

#### **5.1.6 Site N – 750 Summa Avenue**

The soil vapor samples collected from the southeastern area of Site N contained significantly higher concentrations of PCE and its degradation products than soil vapor samples collected from the northwest and southwest. Soil vapor samples collected from the southwestern area of Site N contained significantly higher concentrations of 1,1,1-TCE and its degradation products than soil vapor samples collected from the northwest and southeast. The upgradient location, in the northwest area of the site, contained significantly lower levels of VOCs. Since groundwater flows in a southwesterly direction it is assumed the plume is migrating similarly suggesting the two sources are from the southern area of the site. This assumption of two sources is further confirmed by the significant location difference between the concentrated levels of PCE and 1,1,1-TCA. Based on results from the soil vapor intrusion investigation at Site N, further investigation is required to minimize potential exposures associated with vapor intrusion.

The groundwater sample collected from the southeastern area of Site N detected elevated concentrations of PCE. The groundwater sample collected from the southwestern area of the site detected elevated levels of 1,1,1-TCA. Based on the results from the groundwater investigation at the site, the potential locations of two sources have been reconfirmed.

#### **5.1.7 Site V – 29 New York Avenue**

The soil vapor samples collected from the southern area of Site V contained significantly higher concentrations of methylene chloride, PCE and 1,1,1-TCA, as well as the degradation products, than soil vapor samples collected from the northeastern area of the site. The upgradient locations, in the northeast area of the site, contained significantly lower concentrations of VOCs. Since groundwater flows in a southwesterly direction it is assumed the plume is migrating similarly suggesting the source area is from the southern area of the site. Based on results from the soil vapor intrusion investigation at Site V, further investigation is required to minimize potential exposures associated with vapor intrusion.

The groundwater samples collected from the southern area of the site contained significantly higher concentrations of 1,1,1-TCA and its degradation products. The groundwater sample collected from the northeastern area of the site detected significantly higher concentrations of PCE and its degradation products. Based on the results of the groundwater investigation on site, the PCE source is suggested to be in

the northeastern area and the 1,1,1-TCA source is suggested to be in the southern area of the site.

## **5.2 Recommendations**

### **5.2.1 Site A – 570 Main Street**

Since significant concentrations of PCE and 1,1,1-TCA are present in soil vapor and groundwater samples collected in the northwest corner of Site A, it is recommended that sub-slab and indoor air samples be collected from the onsite building to further delineate the potential exposures associated with soil vapor intrusion. Another recommendation is to mitigate the potential source area of the groundwater plume located onsite.

### **5.2.2 Site B – 567 Main Street**

The presence of concentrated levels of 1,1,1-TCA in the northwest corner and PCE in both the northwest and southern area of the site suggest two potential source areas. Since significant concentrations of PCE and 1,1,1-TCA are present in soil vapor and groundwater samples collected from these two areas of Site B, it is recommended that sub-slab and indoor air samples be collected from the onsite building to further delineate the potential exposures associated with soil vapor intrusion. It is also recommended that the potential source areas of the groundwater plume located onsite be mitigated.

### **5.2.3 Site C – 125 State Street**

Since significant concentrations of PCE and 1,1,1-TCA are present in the soil vapor collected in the southwest area of Site C, it is recommended that sub-slab and indoor air samples from the onsite building be collected to further delineate the potential exposures associated with soil vapor intrusion. It is also recommended that the potential source area of the vadose zone located onsite be mitigated.

### **5.2.4 Site F – 68 Kinkel Street**

Since significant concentrations of PCE and 1,1,1-TCA are present in the soil vapor and groundwater samples collected from the northeast area of Site F, it is recommended that sub-slab and indoor air samples from the onsite building be collected to further delineate the potential exposures associated with soil vapor intrusion. It is also recommended that the potential source area of the groundwater plume located onsite be mitigated.

### **5.2.5 Site K – 62 Kinkel Street**

Since significant concentrations of PCE and 1,1,1-TCA are present in the soil vapor collected in the southeast area of Site K, it is recommended that sub-slab and indoor air samples be collected from the onsite building to further delineate the potential exposures associated with soil vapor intrusion. Mitigation of the potential source area of the vadose zone located onsite is also recommended.

### **5.2.6 Site N - 750 Summa Avenue**

The presence of concentrated levels of 1,1,1-TCA in the southwestern area and PCE in the southeastern area of the site suggest two potential source areas. Since significant concentrations of PCE and 1,1,1-TCA are present in soil vapor and groundwater samples collected from these two areas of Site N, it is recommended that sub-slab and indoor air samples be collected from the onsite building to further delineate the potential exposures associated with soil vapor intrusion. Mitigation of the potential source areas of the groundwater plume located onsite is also recommended.

### **5.2.7 Site V - 29 New York Avenue**

The presence of concentrated levels of 1,1,1-TCA in the southern area of the site and PCE in the northeastern area of the site suggest two potential source areas. Since significant concentrations of PCE and 1,1,1-TCA are present in soil vapor and groundwater samples collected from these two areas of Site V, it is recommended that sub-slab and indoor air samples be collected from the onsite building to further delineate the potential exposures associated with soil vapor intrusion. It is also recommended that the potential source areas of the groundwater plume located onsite be mitigated.

### **5.2.8 Additional Recommendation**

CDM recommends collection of soil vapor and groundwater samples throughout the New Cassel Industrial Site after each of the seven sites have been mitigated to ensure all soil vapor and groundwater contamination sources have been identified and properly mitigated.



## Tables

**Table 3-1  
Soil Vapor Sample Parameters  
New Cassel Industrial Area  
North Hempstead, New York**

Sample I.D.	Sample Location	Depth of Sample (feet bgs)	Date	Time Started	Initial Pressure (Inches Hg)	Time Collected	Final Pressure (Inches Hg)	Purge VOC (ppm)	Notes
<b>Site A</b>									
130043A-AA	DP04	N/A	3/13/2008	805	-27.5	943	-5	N/A	Ambient Air
130043A-AA	DP01	N/A	3/14/2008	730	-29.5	905	-5	N/A	Ambient Air
130043A-DP01-SV08	DP01	8	3/14/2008	725	-29.5	900	-4.5	0.2	
130043A-DP01-SV25	DP01	25	3/14/2008	721	>-30	903	-4	0	
130043A-DP01-SV45	DP01	45	3/14/2008	728	-30	921	-4.5	1.1	
130043A-DP02-SV08	DP02	8	3/14/2008	749	-29	936	-5	0.2	
130043A-DP02-SV25	DP02	25	3/14/2008	745	-29.5	925	-4.5	0.4	
130043A-DP02-SV45	DP02	45	3/14/2008	752	-30	923	-4	1.4	
130043A-DP03A-SV08	DP03	8	3/14/2008	822	-29.5	1006	-5	1.6	
130043A-DP03A-SV25	DP03	25	3/14/2008	852	-29.5	1022	-5	2.7	
130043A-DP03A-SV45	DP03	45	3/14/2008	824	>-30	1024	-5.5	3	
130043A-DP04-SV08	DP04	8	3/13/2008	940	-26.5	1105	-4.5	1.4	
130043A-DP04-SV25	DP04	25	3/13/2008	752	>-30	958	-5.5	50.2	
130043A-DP04-SV45	DP04	45	3/13/2008	808	>-30	927	-5	56.2	
130043A-DP05-SV08	DP05	8	3/13/2008	734	>-30	934	-5	0.8	
130043A-DP05-SV25	DP05	25	3/13/2008	724	-28.5	907	-5	16.8	
130043A-DP05-SV45	DP05	45	3/13/2008	730	-26.5	811	-4	50.3	
130043A-DP05-SD45	DP05	45	3/13/2008	730	-28.5	811	-17.5	50.3	Duplicate of 130043A-DP05-SV45
<b>Site B</b>									
130043B-AA	DP02	N/A	3/11/2008	8:45	-30	1027	-4.5	N/A	Ambient Air
130043B-AA	DP04	N/A	3/12/2008	731	-27.5	855	-4.5	N/A	Ambient Air
130043B-DP01-SV08	DP01	8	3/11/2008	7:49	>-30	9:45	-4.5	1.2	
130043B-DP01-SV25	DP01	25	3/11/2008	7:38	-28.5	9:05	-4.5	9.6	
130043B-DP01-SV45	DP01	45	3/11/2008	7:45	-29.5	9:25	-5	5.8	
130043B-DP02-SV08	DP02	8	3/11/2008	8:43	-27.5	10:34	-4	0.5	
130043B-DP02-SV25	DP02	25	3/11/2008	8:33	-29.5	10:12	-5	0.8	
130043B-DP02-SD25	DP02	25	3/11/2008	8:33	-29	10:12	-5.5	0.8	Duplicate of 130043B-DP02-SV25
130043B-DP02-SV45	DP02	45	3/11/2008	8:39	-27.5	1008	-4	1.1	
130043B-DP03-SV08	DP03	8	3/11/2008	10:25	-30	12:20	-5	1.6	
130043B-DP03-SV25	DP03	25	3/11/2008	10:18	-28.5	11:38	-1.8	0.9	
130043B-DP03-SV45	DP03	45	3/11/2008	10:21	-30	12:00	-4.5	0.6	

**Table 3-1**  
**Soil Vapor Sample Parameters**  
**New Cassel Industrial Area**  
**North Hempstead, New York**

Sample I.D.	Sample Location	Depth of Sample (feet bgs)	Date	Time Started	Initial Pressure (inches Hg)	Time Collected	Final Pressure (inches Hg)	Purge VOC (ppm)	Notes
<b>Site B</b>									
130043B-DP04-SV08	DP04	8	3/12/2008	723	-30	808	-4.5	2.3	
130043B-DP04-SV25	DP04	25	3/12/2008	732	-29	900	-4.5	3.2	
130043B-DP04-SV45	DP04	45	3/12/2008	729	-29.5	913	-5	2.6	
130043B-DP05-SV08	DP05	8	3/11/2008	719	-29.5	848	-4	1.4	
130043B-DP05-SV25	DP05	25	3/11/2008	707	-28	828	-4.5	4	
130043B-DP05-SV45	DP05	45	3/11/2008	712	>-30	855	-4	7.1	
<b>Site C</b>									
130043C-AA	DP05	N/A	3/20/2008	824	-28.5	947	-5	N/A	Ambient Air
130043C-AA	DP03	N/A	3/21/2008	1055	-27.5	1140	-4	N/A	Ambient Air
130043C-DP01-SV08	DP01	8	3/21/2008	1354	>-30	1554	-7	0.6	
130043C-DP01-SV25	DP01	25	3/21/2008	1350	-30	1527	-5	0.5	
130043C-DP01-SV45	DP01	45	3/21/2008	1356	>-30	1525	-5	0.6	
130043C-DP02-SV08	DP02	8	3/21/2008	1208	>-30	1342	-5	0.6	
130043C-DP02-SV25	DP02	25	3/21/2008	1204	-30	1327	-5	0.7	
130043C-DP02-SV45	DP02	45	3/21/2008	1211	>-30	1411	-5	0.3	
130043C-DP03-SV08	DP03	8	3/21/2008	1058	-29	1241	-4.5	0.8	
130043C-DP03-SV25	DP03	25	3/21/2008	1054	-30	1254	-5.5	0.6	
130043C-DP03-SV45	DP03	45	3/21/2008	1101	>-30	1244	-4.5	1.1	
130043C-DP04-SV08	DP04	8	3/20/2008	843	>-30	1026	-4	2.9	
130043C-DP04-SV25	DP04	25	3/20/2008	845	-29.5	1025	-5	2.9	
130043C-DP04-SV45	DP04	45	3/20/2008	840	-29.5	1030	-4.5	1.9	
130043C-DP05-SV08	DP05	8	3/20/2008	849	-30	1042	-5	1.7	
130043C-DP05-SV25	DP05	25	3/20/2008	818	>-30	928	-4	3.5	
130043C-DP05-SV45	DP05	45	3/20/2008	813	-29.5	1000	-5	2.8	
130043C-DP05-SV45	DP05	45	3/20/2008	821	-27.5	945	-4	3.3	
<b>Site F</b>									
130043F-AA	DP02	N/A	3/4/2008	810	-25.5	955	-3.5	N/A	Ambient Air
130043F-AA	DP04/DP05	N/A	3/7/2008	827	-29.5	1028	-24	N/A	Ambient Air
130043F-DP01-SV08	DP01	8	3/4/2008	912	-28	1041	-2	1	
130043F-DP01-SV25	DP01	25	3/4/2008	901	-30	1035	-3.5	**	
130043F-DP01-SV45	DP01	45	3/4/2008	905	-24	1032	-4	**	

Table 3-1

Soil Vapor Sample Parameters  
 New Cassel Industrial Area  
 North Hempstead, New York

Sample I.D.	Sample Location	Depth of Sample (feet bgs)	Date	Time Started	Initial Pressure (inches Hg)	Time Collected	Final Pressure (inches Hg)	Purge VOC (ppm)	Notes
<b>Site F</b>									
130043F-DP02-SV08	DP02	8	3/4/2008	805	-29	951	-3.5	1.3	
130043F-DP02-SV25	DP02	25	3/4/2008	802	-29.5	947	-3.5	0	
130043F-DP02-SV45	DP02	45	3/4/2008	800	-27	843	-3.5	**	
130043F-DP03-SV08	DP03	8	3/7/2008	846	-26.5	938	-9.5	1.2	Duplicate of 130043F-DP03-SV08
130043F-DP03-SD08	DP03	8	3/7/2008	737	-28.5	817	-0.5	1.2	
130043F-DP03-SV25	DP03	25	3/7/2008	730	-28.5	910	-4.5	0.2	
130043F-DP03-SV45	DP03	45	3/7/2008	735	-29.5	920	-4.5	0.2	
130043F-DP04-SV08	DP04	8	3/7/2008	854	-30	1021	-4.5	0.1	^Port was resampled
130043F-DP04-SV08	DP04	8	3/7/2008	854	-30	1021	-4.5	0.1	
130043F-DP04-SV25	DP04	25	3/7/2008	752	-28.5	922	-4	0.2	
130043F-DP04-SV45	DP04	45	3/7/2008	758	-29.5	931	-4.5	0.5	
130043F-DP05-SV08	DP05	8	3/7/2008	818	>-30	1018	-5	0.1	
130043F-DP05-SV25	DP05	25	3/7/2008	812	-30	947	-5	0	
130043F-DP05-SV45	DP05	45	3/7/2008	815	-27.5	925	-4	0.2	
<b>Site K</b>									
130043K-AA	DP03	N/A	3/5/2008	1140	-29.5	1340	-5	N/A	Ambient Air
130043K-AA	DP05	N/A	3/6/2008	835	-27	937	-1.5	N/A	Ambient Air
130043K-DP01-SV08	DP01	8	3/4/2008	1030	-27.5	1200	-3	0.4	
130043K-DP01-SD08	DP01	8	3/4/2008	1030	-27.5	1202	-3.5	**	Duplicate of 130043K-DP01-SV08
130043K-DP01-SV25	DP01	25	3/4/2008	1016	-27.5	1150	-3.5	**	
130043K-DP01-SV45	DP01	45	3/4/2008	1020	-29.5	1207	-4.5	**	
130043K-DP02-SV08	DP02	8	3/5/2008	910	-29.5	1110	-4.5	0.2	
130043K-DP02-SV25	DP02	25	3/5/2008	855	>-30	1055	-5	0.2	
130043K-DP02-SV45	DP02	45	3/5/2008	902	-29	1102	-3.5	0.4	
130043K-DP03-SV08	DP03	8	3/5/2008	1135	-27.5	1335	-4	0	
130043K-DP03-SV25	DP03	25	3/5/2008	1127	-29	1327	-4	0	
130043K-DP03-SV45	DP03	45	3/5/2008	1130	-29.5	1315	-4	0	
130043K-DP04-SV08	DP04	8	3/6/2008	801	-30	931	-2.5	0.4	
130043K-DP04-SV25	DP04	25	3/6/2008	754	-26.5	933	-4	0.6	
130043K-DP04-SV45	DP04	45	3/6/2008	800	>-30	1000	-4	1	
130043K-DP05-SV08	DP05	8	3/6/2008	830	-26.5	1002	-3.5	0.7	

Table 3-1  
Soil Vapor Sample Parameters  
New Cassel Industrial Area  
North Hempstead, New York

Sample I.D.	Sample Location	Depth of Sample (feet bgs)	Date	Time Started	Initial Pressure (inches Hg)	Time Collected	Final Pressure (inches Hg)	Purge VOC (ppm)	Notes
<b>Site K</b>									
130043K-DP05-SV25	DP05	25	3/6/2008	818	>-30	1005	-3.5	1.3	
130043K-DP05-SV45	DP05	45	3/6/2008	825	>-30	1025	-4.5	0.7	
<b>Site N</b>									
130043N-AA	DP05	N/A	3/24/2008	1215	-29	1400	-5	N/A	Ambient Air
130043N-AA	DP02	N/A	3/25/2008	1114	-29.5	1302	-5	N/A	Ambient Air
130043N-DP01-SV08	DP01	8	3/25/2008	1303	>-30	1434	-5	0.4	
130043N-DP01-SV25	DP01	25	3/25/2008	1259	-30	1432	-5	0.8	
130043N-DP01-SV45	DP01	45	3/25/2008	1305	-29.5	1430	-4.5	1.8	
130043N-DP02-SV08	DP02	8	3/25/2008	1124	-30	1210	-5	0.4	
130043N-DP02-SV25	DP02	25	3/25/2008	1120	>-30	1320	-6.5	0.8	
130043N-DP02-SV45	DP02	45	3/25/2008	1126	-29.5	1310	-5	0.7	
130043N-DP03-SV08	DP03	8	3/25/2008	754	-30	928	-5	1.6	
130043N-DP03-SV25	DP03	25	3/25/2008	749	>-30	923	-5	0.4	
130043N-DP03-SV45	DP03	45	3/25/2008	756	-30	941	-5	0.6	
130043N-DP04-SV08	DP04	8	3/25/2008	731	>-30	900	-5	1.1	
130043N-DP04-SV25	DP04	25	3/25/2008	727	-30	812	-3.5	0.8	
130043N-DP04-SV45	DP04	45	3/25/2008	734	-30	916	-5	0.5	
130043N-DP04-SD45	DP04	45	3/25/2008	734	-30	916	-5	0.5	Duplicate of 130043N-DP04-SV45
130043N-DP05-SV08	DP05	8	3/24/2008	1211	-29	1354	-5	0.8	
130043N-DP05-SV25	DP05	25	3/24/2008	1207	-30	1333	-5	1.3	
130043N-DP05-SV45	DP05	45	3/24/2008	1214	-27	1330	-5	1.2	
<b>Site V</b>									
130043V-AA	DP05	N/A	3/17/2008	1224	>-30	1403	-5	N/A	Ambient Air*
130043V-DP01-SV08	DP01	8	3/18/2008	1140	-30	1240	-5	0.4	
130043V-DP01-SV25	DP01	25	3/18/2008	1135	-30	1305	-5	0.4	
130043V-DP01-SV45	DP01	45	3/18/2008	1143	-29.5	1315	-5	0.5	
130043V-DP02-SV08	DP02	8	3/18/2008	806	-27	926	-5	0.1	
130043V-DP02-SV25	DP02	25	3/18/2008	759	-29	944	-4.5	0.5	
130043V-DP02-SV45	DP02	45	3/18/2008	801	-28	846	-3.5	0.4	
130043V-DP02-SD45	DP02	45	3/18/2008	801	-29	846	-11.5	0.4	Duplicate of 130043V-DP02-SV45
130043V-DP03-SV08	DP03	8	3/18/2008	740	>-30	940	-6	0.4	

**Table 3-1**  
**Soil Vapor Sample Parameters**  
**New Cassel Industrial Area**  
**North Hempstead, New York**

Sample I.D.	Sample Location	Depth of Sample (feet bgs)	Date	Time Started	Initial Pressure (inches Hg)	Time Collected	Final Pressure (inches Hg)	Purge VOC (ppm)	Notes
<b>Site V</b>									
130043V-DP03-SV25	DP03	25	3/18/2008	738	>-30	936	-5	0.7	
130043V-DP03-SV45	DP03	45	3/18/2008	742	>-28	934	-5	0.4	
130043V-DP04-SV08	DP04	8	3/18/2008	722	-27.5	920	-5	0.8	
130043V-DP04-SV25	DP04	25	3/18/2008	718	>-30	838	-5	1.2	
130043V-DP04-SV45	DP04	45	3/18/2008	724	-5	918	-2	0.5	
130043V-DP05-SV08	DP05	8	3/17/2008	1221	-23	1341	-4.5	0.2	
130043V-DP05-SV25	DP05	25	3/17/2008	1222	-29	1347	-5	0.9	
130043V-DP05-SV45	DP05	45	3/17/2008	1215	-29.5	1400	-5	3.5	

**Notes:**

^ - The canister's pressure of the first soil vapor sampled collected at 130043F-DP04-SV08 decreased from -28 to 0 over a 30 minute period, therefore the soil vapor port was re-sampled.

\* - Not enough canisters for AA at 3/18/08 air sampling site V

\*\* - Purge VOC reading not recorded in Field Log Book or air canister's chains of custody

**Acronyms:**

bgs - below ground surface

Hg - mercury

I.D. - identification

MS/MSD - matrix spike/matrix spike duplicate

ppm - parts per million

VOC - volatile organic compound

**Table 3-2**  
**Direct Push Groundwater Sample Parameters**  
**New Cassel Industrial Area**  
**North Hempstead, New York**

Sample I.D.	Sample Location	Depth of Sample	Date	Time	Notes
<b>Site A</b>					
130043A-DP01-GW55	DP01	55 feet bgs	3/13/2008	8:30	
130043A-DP02-GW55	DP02	55 feet bgs	3/13/2008	9:50	
130043A-DP03-GW55	DP03	55 feet bgs	3/12/2008	12:20	^Borehole in wrong location.
130043A-DP03A-GW55	DP03	55 feet bgs	3/13/2008	11:25	
130043A-DP04-GW55	DP04	55 feet bgs	3/12/2008	10:00	
130043A-DP05-GW55	DP05	55 feet bgs	3/12/2008	8:15	MS/MSD
130043A-DP06-GW55	DP04	55 feet bgs	3/12/2008	10:00	Duplicate of 130043A-DP04-GW55
<b>Site B</b>					
130043B-DP01-GW55	DP01	55 feet bgs	3/10/2008	9:40	
130043B-DP02-GW55	DP02	55 feet bgs	3/10/2008	12:20	
130043B-DP03-GW55	DP03	55 feet bgs	3/10/2008	13:20	
130043B-DP04-GW55	DP04	55 feet bgs	3/11/2008	9:20	
130043B-DP05-GW55	DP05	55 feet bgs	3/10/2008	8:35	MS/MSD
130043B-DP06-GW55	DP01	55 feet bgs	3/10/2008	9:40	Duplicate of 130043B-DP01-GW55
<b>Site C</b>					
130043C-DP01-GW55	DP01	55 feet bgs	3/21/2008	11:30	
130043C-DP02-GW55	DP02	55 feet bgs	3/21/2008	9:40	
130043C-DP03-GW55	DP03	55 feet bgs	3/21/2008	8:35	
130043C-DP04-GW55	DP04	55 feet bgs	3/19/2008	12:00	
130043C-DP05-GW55	DP05	55 feet bgs	3/19/2008	11:00	MS/MSD
130043C-DP06-GW55	DP04	55 feet bgs	3/19/2008	12:00	Duplicate of 130043C-DP04-GW55
<b>Site F</b>					
130043F-DP01-GW55	DP01	55 feet bgs	3/3/2008	11:20	
130043F-DP02-GW55	DP02	55 feet bgs	3/3/2008	8:35	
130043F-DP03-GW55	DP03	55 feet bgs	3/6/2008	12:10	
130043F-DP04-GW55	DP04	55 feet bgs	3/6/2008	8:50	MS/MSD
130043F-DP05-GW55	DP05	55 feet bgs	3/6/2008	10:25	
130043F-DP06-GW55	DP01	55 feet bgs	3/3/2008	11:25	Duplicate of 130043F-DP01-GW55

**Table 3-2**  
**Direct Push Groundwater Sample Parameters**  
**New Cassel Industrial Area**  
**North Hempstead, New York**

Sample I.D.	Sample Location	Depth of Sample	Date	Time	Notes
<b>Site K</b>					
130043K-DP01-GW55	DP01	55 feet bgs	3/3/2008	13:20	
130043K-DP02-GW55	DP02	55 feet bgs	3/4/2008	9:20	MS/MSD
130043K-DP03-GW55	DP03	55 feet bgs	3/4/2008	12:20	
130043K-DP04-GW55	DP04	55 feet bgs	3/5/2008	11:50	
130043K-DP05-GW55	DP05	55 feet bgs	3/5/2008	10:30	
130043K-DP06-GW55	DP01	55 feet bgs	3/3/2008	13:25	Duplicate of 130043K-DP01-GW55
<b>Site N</b>					
130043N-DP01-GW55	DP01	55 feet bgs	3/25/2008	10:45	
130043N-DP02-GW55	DP02	55 feet bgs	3/25/2008	9:05	
130043N-DP03-GW55	DP03	55 feet bgs	3/24/2008	13:55	
130043N-DP04-GW55	DP04	55 feet bgs	3/24/2008	12:30	
130043N-DP05-GW55	DP05	55 feet bgs	3/24/2008	9:50	MS/MSD
130043N-DP06-GW55	DP04	55 feet bgs	3/24/2008	12:30	Duplicate of 130043N-DP04-GW55
<b>Site V</b>					
130043V-DP01-GW55	DP01	55 feet bgs	3/18/2008	8:55	
130043V-DP02-GW55	DP02	55 feet bgs	3/17/2008	14:30	
130043V-DP03-GW55	DP03	55 feet bgs	3/17/2008	11:50	
130043V-DP04-GW55	DP04	55 feet bgs	3/17/2008	10:35	
130043V-DP05-GW55	DP05	55 feet bgs	3/17/2008	9:10	MS/MSD
130043V-DP06-GW55	DP04	55 feet bgs	3/17/2008	10:35	Duplicate of 130043V-DP04-GW55

**Notes:**

^ - Borehole 130043A-DP03 was drilled and sampled in the wrong location, therefore an additional borehole (130043A-DP03) was drilled and sampled in the proper location.

**Acronyms:**

bgs - below ground surface

I.D. - identification

MS/MSD - matrix spike/matrix spike duplicate



**Table 3-3**  
**Direct Push Water Quality Parameters**  
**New Cassel Industrial Area**  
**North Hempstead, New York**

Boring/Well I.D.	Depth	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)	Temperature (°C)	ORP (mV)	Conductivity (mS/cm)
<b>Site A</b>							
130043A-DP01	55	5.86	2.99	>1000	12.02	69	0.513
130043A-DP02	55	5.9	4.19	>1000	11.36	68	1.15
130043A-DP03	55	6.36	1.15	>1000	14.66	-15	0.587
130043A-DP03A	55	6.4	2.61	>1000	13.65	-23	0.229
130043A-DP04	55	6.28	0.47	>1000	11.44	2	0.429
130043A-DP05	55	5.96	3.80	>1000	11.27	69	0.66
<b>Site B</b>							
130043B-DP01	55	5.92	5.01	>1000	10.25	74	0.44
130043B-DP02	55	6	4.75	>1000	12.28	83	0.397
130043B-DP03	55	6.07	5.75	>1000	11.82	71	0.382
130043B-DP04	55	5.99	4.45	>1000	9.91	108	0.6
130043B-DP05	55	5.69	7.60	>1000	10.07	152	0.619
<b>Site C</b>							
130043C-DP01	55	5.89	6.49	>1000	13.19	94	0.282
130043C-DP02	55	5.77	5.75	>1000	14.10	73	0.088
130043C-DP03	55	5.77	3.78	>1000	11.94	95	0.094
130043C-DP04	55	5.58	4.34	>1000	12.40	136	0.084
130043C-DP05	55	6.2	4.33	>1000	12.68	62	0.156
<b>Site F</b>							
130043F-DP01	55	5.61	6.53	725	12.37	88	0.339
130043F-DP02	55	5.46	6.21	625	11.00	70	0.582
130043F-DP03	55	6.34	1.16	>1000	16.46	-8	0.425
130043F-DP04	55	6.26	7.61	>1000	11.58	82	0.324
130043F-DP05	55	6.52	0.49	>1000	12.84	-3	0.291

**Table 3-3  
Direct Push Water Quality Parameters  
New Cassel Industrial Area  
North Hempstead, New York**

Boring/Well I.D.	Depth	pH	Dissolved Oxygen (mg/L)	Turbidity (ntu)	Temperature (°C)	ORP (mV)	Conductivity (mS/cm)
<b>Site K</b>							
130043K-DP01	55	5.82	7.83	6,228	12.84	83	0.304
130043K-DP02	55	6.06		>1000	14.89	31	0.302
130043K-DP03	55	5.57	9.11	>1000	15.20	157	0.299
130043K-DP04	55	6.04	7.81	>1000	13.76	105	0.212
130043K-DP05	55	5.86	8.34	>1000	14.08	114	0.125
<b>Site N</b>							
130043N-DP01	55	5.7	9.65	565	12.94	136	0.055
130043N-DP02	55	6.3	6.55	>1000	11.36	90	0.205
130043N-DP03	55	5.81	8.81	>1000	15.22	126	0.089
130043N-DP04	55	6.03	5.74	>1000	14.92	60	0.06
130043N-DP05	55	5.89	10.96	>1000	13.4	135	0.173
<b>Site V</b>							
130043V-DP01	55	5.53	5.91	>1000	12.88	127	0.89
130043V-DP02	55	5.99	7.21	>1000	15.48	94	0.993
130043V-DP03	55	6.35	7.50	>1000	15.51	63	0.841
130043V-DP04	55	5.95	7.76	>1000	16.25	91	0.176
130043V-DP05	55	5.65	8.37	>1000	14.02	128	0.125

**Notes:**

^ - Borehole 130043A-DP03 was drilled and sampled in the wrong location, therefore an additional borehole (130043A-DP03) was drilled and sampled in the

**Acronyms:**

- °C - degrees Celsius
- DP - direct push
- I.D. - identification
- mg/L - milligrams per Liter
- mS/cm - milli-Siemens per centimeter
- mV - millivolts
- ntu - nephelometric turbidity unit

**Table 4-1**  
**NYSDOH Air Guidelines**  
**New Cassel Industrial Area**  
**North Hempstead, New York**

Chemical	Air Guidance Value (µg/m <sup>3</sup> )
methylene chloride (MeCl) (also referred to as dichloromethane)	60
polychlorinated biphenyls (PCBs)	1 *
tetrachlorodibenzo-p-dioxin equivalents (TCDD)	0.00001 *
tetrachloroethene (PCE)	100
trichloroethene (TCE)	5

**Notes:**

\*The guideline is specific to indoor air

**Acronyms:**

µg/m<sup>3</sup> - micrograms per meters cubed

**Reference:**

*Final Guidance for Evaluating Soil Vapor Intrusion in the State of New York*. NYSDOH, October 2006.

**Table 4-2  
Site-Specific Groundwater Delineation Criteria  
New Cassel Industrial Area  
North Hempstead, New York**

CAS No.	Chemical Name	Unit	National Primary Drinking Water Standards (1)		New York State Standards (S) and Guidance (G) Values for Class GA Groundwater (2)			NYSDOH Drinking Water Quality Standards (3,4)			Site-Specific Groundwater Delineation Criteria (SSGWDC)
			Value	Note	Value	Note	G/S	Value	Note	G/S	Value
71-55-6	1,1,1-Trichloroethane	µg/L	200		5	PC	S	5	POC	S	5
79-34-5	1,1,2,2-Tetrachloroethane	µg/L	NL		5		S	5	POC	S	5
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	µg/L	NL		5	PC	S	50	UOC	S	5
79-00-5	1,1,2-Trichloroethane	µg/L	5		1		S	5	POC	S	1
75-34-3	1,1-Dichloroethane	µg/L	NL		5	PC	S	5	POC	S	5
75-35-4	1,1-Dichloroethane	µg/L	7		5	PC	S	5	POC	S	5
87-61-6	1,2,3-Trichlorobenzene	µg/L	NL		5	PC	S	5	POC	S	5
120-82-1	1,2,4-Trichlorobenzene	µg/L	70		5	PC	S	5	POC	S	5
96-12-8	1,2-Dibromo-3-chloropropane	µg/L	0.2		0.04		S	0.2		S	0.04
106-93-4	1,2-Dibromoethane (or ethylene dibromide)	µg/L	0.05		0.0006		S	0.05		S	0.0006
95-50-1	1,2-Dichlorobenzene	µg/L	600		3		S	5	POC	S	3
107-06-2	1,2-Dichloroethane	µg/L	5		0.6		S	5	POC	S	0.6
78-87-5	1,2-Dichloropropane	µg/L	5		1		S	5	POC	S	1
541-73-1	1,3-Dichlorobenzene	µg/L	NL		3		S	5	POC	S	3
106-46-7	1,4-Dichlorobenzene	µg/L	75		3		S	5	POC	S	3
123-91-1	1,4-Dioxane	µg/L	NL		NL			50	UOC	S	50
78-93-3	2-Butanone (Methyl Ethyl Ketone)	µg/L	NL		50		G	50	UOC	S	50
591-78-6	2-Hexanone	µg/L	NL		50		G	50	UOC	S	50
108-10-1	4-Methyl-2-pentanone	µg/L	NL		NL			50	UOC	S	50
67-64-1	Acetone	µg/L	NL		50		G	50	UOC	S	50
71-43-2	Benzene	µg/L	5		1		S	5	POC	S	1
74-97-5	Bromochloromethane	µg/L	NL		5	PC	S	5	POC	S	5
75-27-4	Bromodichloromethane (TTHMs)	µg/L	80	T	50		G	80	T	S	50
75-25-2	Bromoform (TTHMs)	µg/L	80	T	50		G	80	T	S	50
74-83-9	Bromomethane	µg/L	NL		5	PC	S	5	POC	S	5
75-15-0	Carbon Disulfide	µg/L	NL		60		G	50	UOC	S	50
56-23-5	Carbon Tetrachloride	µg/L	5		5		S	5	POC	S	5
108-90-7	Chlorobenzene	µg/L	100		5	PC	S	5	POC	S	5
75-00-3	Chloroethane	µg/L	NL		5	PC	S	5	POC	S	5
67-66-3	Chloroform (TTHMs)	µg/L	80	T	7		S	80	T	S	7
74-87-3	Chloromethane	µg/L	NL		5	PC	S	5	POC	S	5
156-59-2	cis-1,2-Dichloroethene	µg/L	70		5	PC	S	5	POC	S	5
10061-01-5	cis-1,3-Dichloropropene	µg/L	NL		0.4	J	S	5	POC	S	0.4
110-82-7	Cyclohexane	µg/L	NL		NL			50	UOC	S	50
124-48-1	Dibromochloromethane (TTHMs)	µg/L	80	T	50		G	80	T	S	50
75-71-8	Dichlorodifluoromethane	µg/L	NL		5	PC	S	5	POC	S	5
100-41-4	Ethylbenzene	µg/L	700		5	PC	S	5	POC	S	5
98-82-8	Isopropylbenzene	µg/L	NL		5	PC	S	5	POC	S	5
126777-61-2	m,p-Xylene	µg/L	NL		5	PC	S	5	POC	S	5
79-20-9	Methyl Acetate	µg/L	NL		NL			50	UOC	S	50
1634-04-4	Methyl Tert-Butyl Ether (MTBE)	µg/L	NL		10		G	10		S	10
108-87-2	Methylcyclohexane	µg/L	NL		NL			50	UOC	S	50
75-09-2	Methylene Chloride (dichloromethane)	µg/L	5		5	PC	S	5	POC	S	5
95-47-6	o-Xylene	µg/L	NL		5	PC	S	5	POC	S	5
100-42-5	Styrene	µg/L	100		5	PC	S	5	POC	S	5
127-18-4	Tetrachloroethene	µg/L	5		5	PC	S	5	POC	S	5
108-88-3	Toluene	µg/L	1,000		5	PC	S	5	POC	S	5
156-60-5	trans-1,2-Dichloroethene	µg/L	100		5	PC	S	5	POC	S	5
10061-02-6	trans-1,3-Dichloropropene	µg/L	NL		0.4	J	S	5	POC	S	0.4
79-01-6	Trichloroethene	µg/L	5		5	PC	S	5	POC	S	5
75-69-4	Trichlorofluoromethane	µg/L	NL		5	PC	S	5	POC	S	5
75-01-4	Vinyl Chloride	µg/L	2		2		S	2		S	2
1330-20-7	Xylenes (total)	µg/L	10,000		5	PC	S	5	POC	S	5

**Notes:**

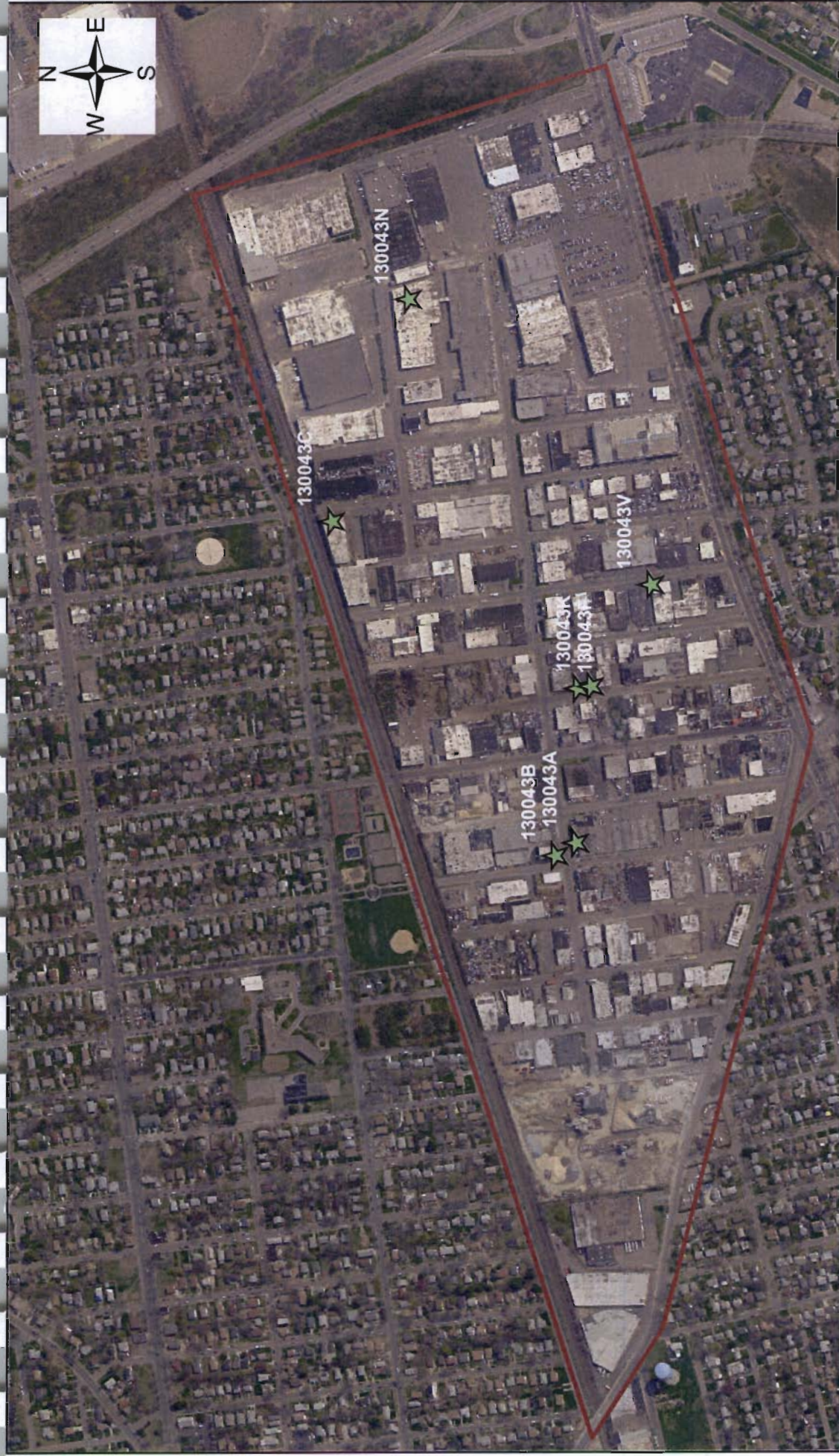
- (1) EPA National Primary Drinking Water Standards (<http://www.epa.gov/safewater/contaminants/index.html>), last updated November 28, 2006.
- (2) NYSDEC. June 1998. TOGS 1.1.1. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. Includes April 2000 and June 2004 Addendum values. (<http://www.dec.ny.gov/regulations/2652.html>)
- (3) New York State Department of Health Drinking Water Standards, NYCRR Title 10, Part 5, Subpart 5-1 Public Water Systems, Effective November 23, 2005 (Statutory authority: Public Health Law 225, Effective May 26, 2004). (<http://www.health.state.ny.us/environmental/water/drinking/part5/subpart5.htm>)
- (4) The maximum contaminant level determination for the sum of principal organic contaminants (POC) and unspecified organic contaminants (UOC) is 100 µg/L.

**Acronyms:**

- J - Applies to the sum of cis-1,3-Dichloropropene and trans-1,3-Dichloropropene
- PC - Principal Organic Contaminant
- T - Value applies to total trihalomethanes (bromodichloromethane, bromoform, chloroform, dibromochloromethane)
- G - Guidance Value
- S - Standard Value
- NL - Chemical name not listed or screening value of this type not listed for the chemical
- TTHMs - Total trihalomethanes
- µg/L - Microgram per liter

## Figures





**Legend**

□ NCIA Boundary

★ Site Locations

**Figure 1-1**  
**Site Location Map**  
**New Cassel Industrial Area**  
**North Hempstead, New York**

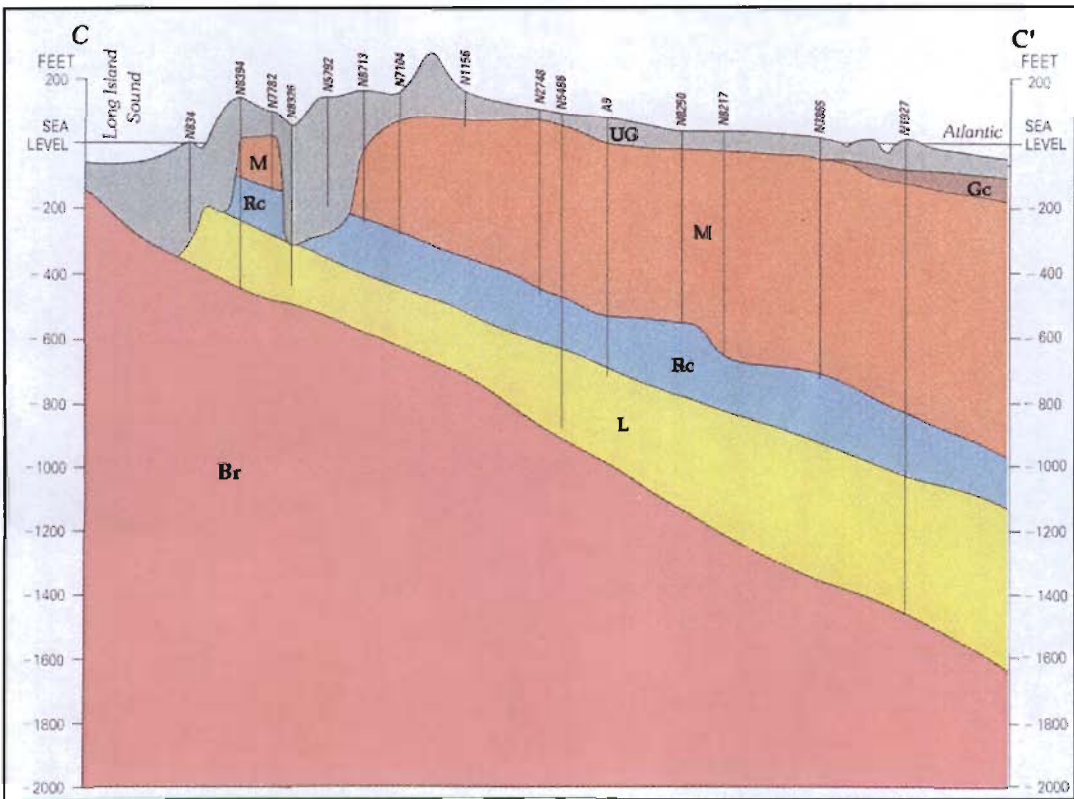
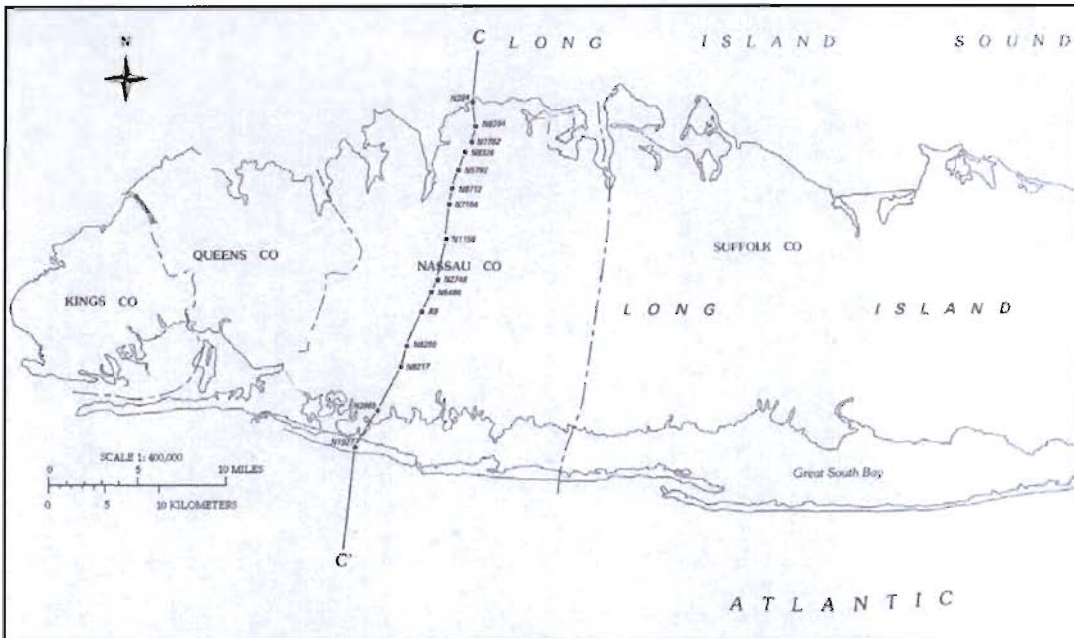


System	Series	Age	Stratigraphic Unit	Hydrostratigraphic Unit	
QUATERNARY	Holocene	Postglacial	Holocene (recent) deposits	Upper glacial aquifer	
	Pleistocene	Wisconsin (upper Pleistocene)	Upper Pleistocene deposits		"20-foot" clay
			"20-foot" clay	Upper glacial aquifer	
		Upper Pleistocene deposits	unconformity		
Sangamon	Gardiners Clay	Gardiners Clay			
			unconformity		
		Pre-Sangamon	Jameco Gravel <sup>1</sup>	Jameco aquifer <sup>1</sup>	
		Pre-Sangamon	Reworked Matawan-Magothy channel deposits	Upper glacial or Magothy aquifer	
			unconformity		
CRETACEOUS	Upper Cretaceous		Monmouth Group	Monmouth greensand	
			unconformity		
			Matawan Group-Magothy Formation, undifferentiated	Magothy aquifer	
			unconformity		
			Raritan Formation	Unnamed clay member	Raritan confining unit
				Lloyd Sand Member	Lloyd aquifer
			unconformity		
		Paleozoic (or) Precambrian	Bedrock	Relatively impermeable bedrock	

<sup>1</sup> Present in Nassau County Only

adapted from Krulikas (1987)

**Figure 2-1**  
**Generalized Regional Stratigraphy**  
**New Cassel Industrial Area**  
**North Hempstead, New York**



(Br = bedrock; L = Lloyd; Rc = Raritan clay; M = Magothy; Gc = Gardiners clay; UG = upper glacial; from Smolensky et al, 1989).

**Figure 2-2**  
**Generalized North-South Cross Section through Nassau County**  
**New Cassel Industrial Area**  
**North Hempstead, New York**



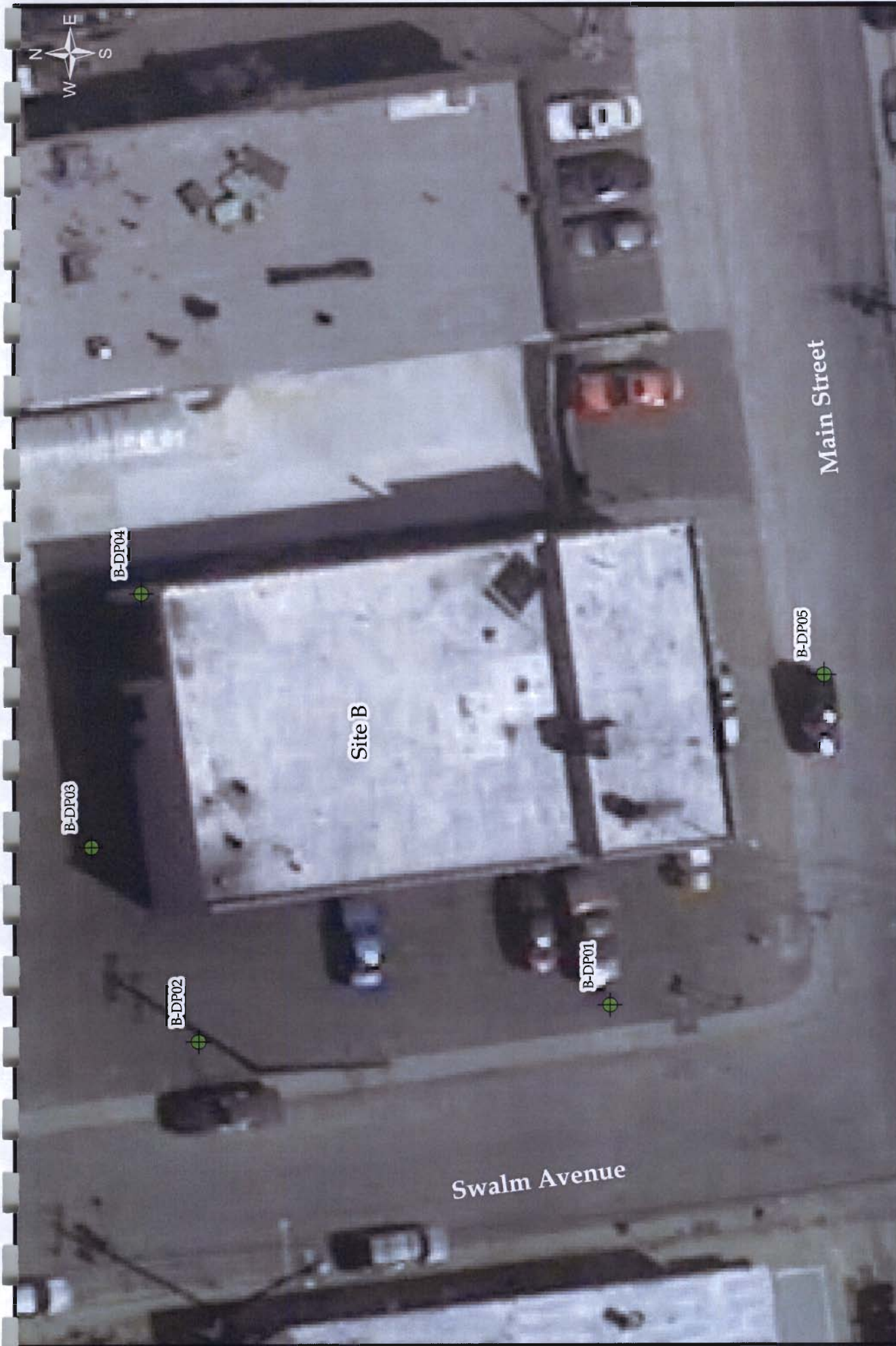


● Sampling Location



Figure 3-1  
Site A Sample Location Map  
570 Main Street  
New Cassel Industrial Area  
North Hempstead, New York





● Sampling Location



Figure 3-2  
Site B Sample Location Map  
567 Main Street  
New Cassel Industrial Area  
North Hempstead, New York



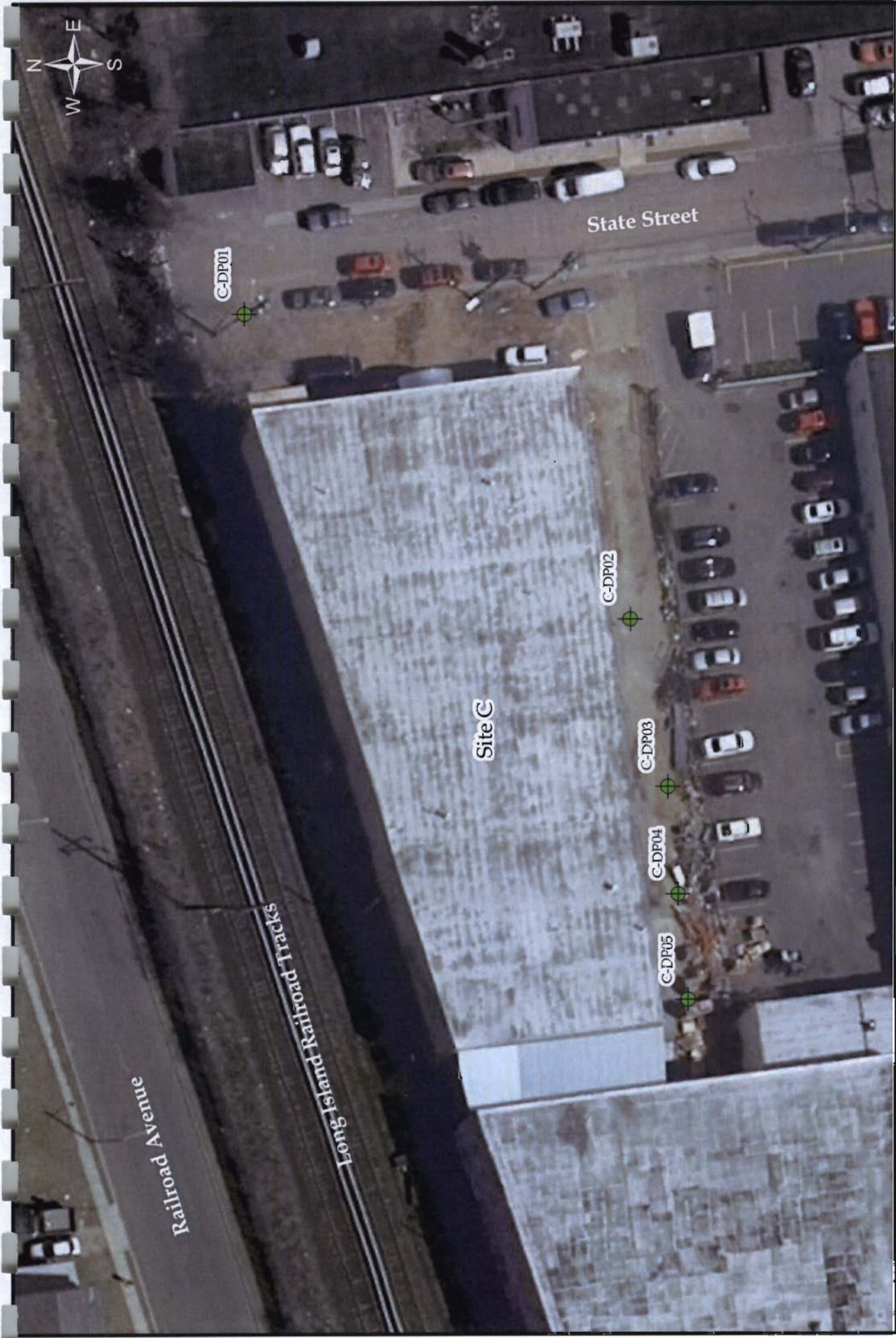


Figure 3-3  
Site C Sample Location Map  
125 State Street  
New Cassel Industrial Area  
North Hempstead, New York

● Sampling Location







● Sampling Location

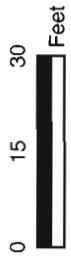


Figure 3-4  
Site F Sample Location Map  
68 Kinkel Street  
New Cassel Industrial Area  
North Hempstead, New York





● Sampling Location

Figure 3-5  
Site K Sample Location Map  
62 Kinkel Street  
New Cassel Industrial Area  
North Hempstead, New York





● Sampling Location

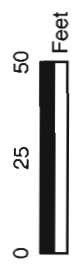


Figure 3-6  
Site N Sample Location Map  
750 Summa Avenue  
New Cassel Industrial Area  
North Hempstead, New York







Figure 3-7  
Site V Sample Location Map  
29 New York Avenue  
New Cassel Industrial Area  
North Hempstead, New York

● Sampling Location







	130043A-DP01-AA 03/14/2008 A-DP01	130043A-DP01-SV08 03/14/2008 A-DP01	130043A-DP01-SV25 03/14/2008 A-DP01	130043A-DP01-SV45 03/14/2008 A-DP01
Tetrachloroethene	ND	67.8 J	94.9	278
cis-1,2-Dichloroethene	ND	ND	ND	24.2
Carbon tetrachloride	0.44	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	8.73 J
Methylene Chloride	1.39 J	3.82 J	4.17 J	3.82 J
Trichloroethene	ND	ND	ND	76.7

	130043A-DP05-SV08 03/13/2008 A-DP05	130043A-DP05-SV25 03/13/2008 A-DP05	130043A-DP05-SV45 03/13/2008 A-DP05	130043A-DP05-SD45 03/13/2008 A-DP05
Tetrachloroethene	3200	42000	94300	224000
cis-1,2-Dichloroethene	ND	227 J	117	286
trans-1,2-Dichloroethene	ND	ND	ND	4.36
1,1,1-Trichloroethane	ND	119 J	159	385
1,1-Dichloroethane	ND	ND	ND	3.64 J
Trichloroethene	25.8	570	661	2620

	130043A-DP02-SV08 03/14/2008 A-DP02	130043A-DP02-SV25 03/14/2008 A-DP02	130043A-DP02-SV45 03/14/2008 A-DP02
Tetrachloroethene	54.9 J	29.2 J	62.4 J
Chloroform	ND	ND	5.37 J
Methylene Chloride	4.52 J	ND	4.52 J
Trichloroethene	45.1 J	161 J	193 J

	130043A-DP04-AA 03/13/2008 A-DP04	130043A-DP04-SV08 03/13/2008 A-DP04	130043A-DP04-SV25 03/13/2008 A-DP04	130043A-DP04-SV45 03/13/2008 A-DP04
Tetrachloroethene	2.17	6710	166000	198000
cis-1,2-Dichloroethene	ND	ND	11.5	31.7
Carbon tetrachloride	0.5	ND	ND	ND
1,1,1-Trichloroethane	ND	19.1	437	589
Methylene Chloride	ND	4.86	ND	ND
1,1-Dichloroethane	ND	ND	ND	4.05 J
Trichloroethene	ND	17.7	437	774

	130043A-DP03A-SV08 03/14/2008 A-DP03A	130043A-DP03A-SV25 03/14/2008 A-DP03A	130043A-DP03A-SV45 03/14/2008 A-DP03A
Tetrachloroethene	624 J	2030 J	5490 J
cis-1,2-Dichloroethene	95.2	2060	5550
trans-1,2-Dichloroethene	ND	18.6 J	43.6
Chloroform	ND	23 J	63.5
1,1,1-Trichloroethane	ND	18 J	33.8
Vinyl Chloride	ND	ND	2.56 J
Methylene Chloride	3.82 J	ND	ND
1,1-Dichloroethane	ND	10.1 J	26.3
Trichloroethene	365 J	2960	6990 J

Main Street  
A-DP01

A-DP05 A-DP02

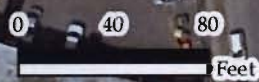
A-DP04

Groundwater Flow

Site A

A-DP03

Swalm Avenue  
A-DP03A



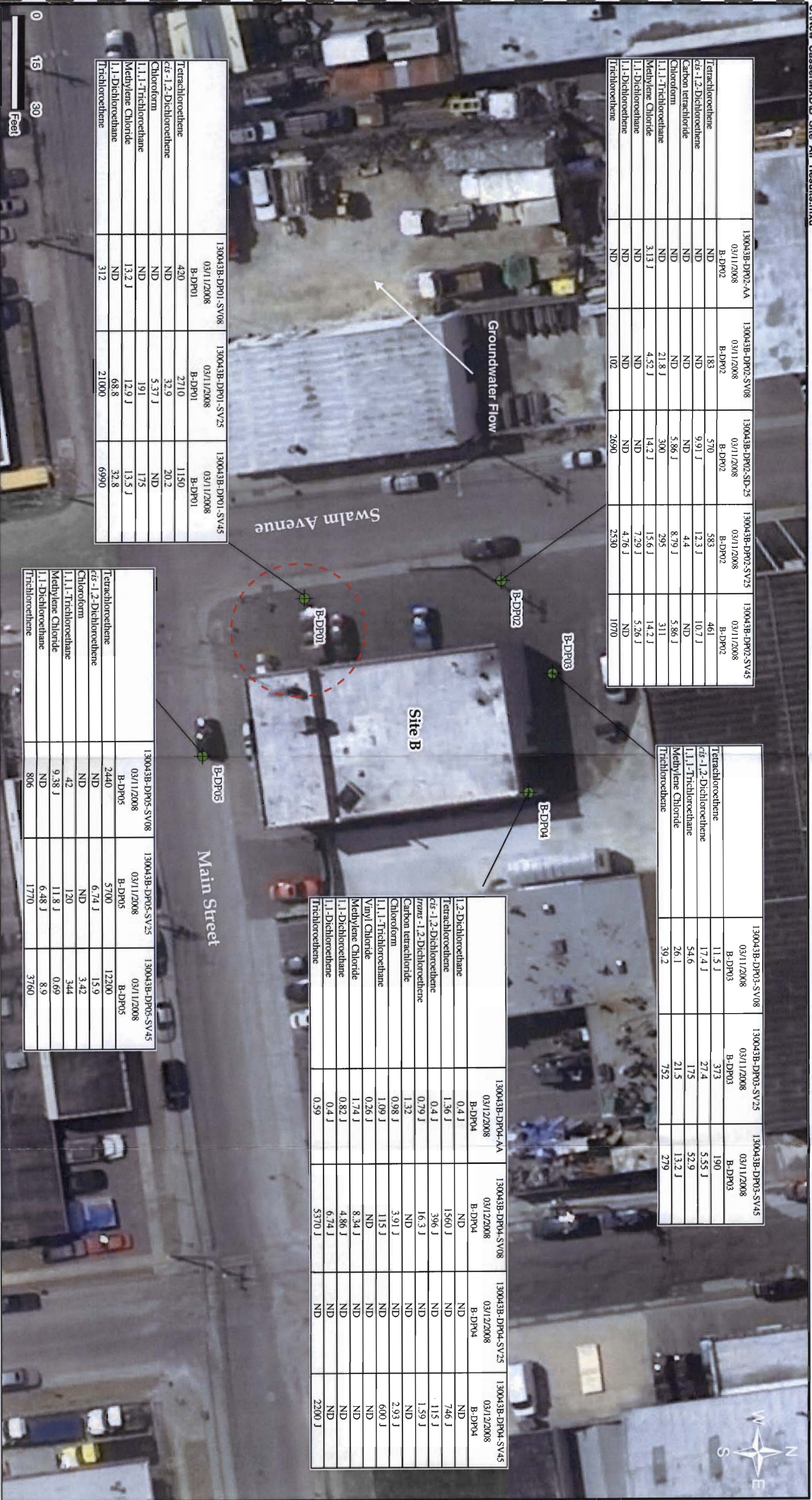
◆ Sampling Location

○ Potential Historical Source Area Based on Previous Documentation

Notes:  
All units in  $\mu\text{g}/\text{m}^3$   
ND=Non-detect

**Figure 4-1**  
**Site A**  
**Soil Vapor Chlorinated VOC Detections**  
**570 Main Street**  
**New Cassel Industrial Area**  
**North Hempstead, New York**





	130043B-DP02-AA 03/11/2008 B-DP02	130043B-DP02-SV08 03/11/2008 B-DP02	130043B-DP02-SD-25 03/11/2008 B-DP02	130043B-DP02-SV25 03/11/2008 B-DP02	130043B-DP02-SV45 03/11/2008 B-DP02
Tetrachloroethene	ND	183	570	583	461
cis-1,2-Dichloroethene	ND	ND	9.91 J	12.3 J	10.7 J
Carbon tetrachloride	ND	ND	ND	4.4	ND
Chloroform	ND	ND	5.86 J	8.79 J	5.86 J
1,1,1-Trichloroethane	ND	21.8 J	300	295	311
Methylene Chloride	3.13 J	4.52 J	14.2 J	15.6 J	14.2 J
1,1-Dichloroethane	ND	ND	ND	7.29 J	5.26 J
1,1-Dichloroethene	ND	ND	ND	4.76 J	ND
Trichloroethene	ND	102	2690	2530	1070

	130043B-DP03-SV08 03/11/2008 B-DP03	130043B-DP03-SV25 03/11/2008 B-DP03	130043B-DP03-SV45 03/11/2008 B-DP03
Tetrachloroethene	11.5 J	373	190
cis-1,2-Dichloroethene	17.4 J	27.4	5.55 J
1,1,1-Trichloroethane	54.6	175	52.9
Methylene Chloride	26.1	21.5	13.2 J
Trichloroethene	39.2	752	279

	130043B-DP04-AA 03/12/2008 B-DP04	130043B-DP04-SV08 03/12/2008 B-DP04	130043B-DP04-SV25 03/12/2008 B-DP04	130043B-DP04-SV45 03/12/2008 B-DP04
1,2-Dichloroethane	0.4 J	ND	ND	ND
Tetrachloroethene	1.36 J	1560 J	ND	746 J
cis-1,2-Dichloroethene	0.4 J	396 J	ND	115 J
trans-1,2-Dichloroethene	0.79 J	16.3 J	ND	1.59 J
Carbon tetrachloride	1.32	ND	ND	ND
Chloroform	0.98 J	3.91 J	ND	2.93 J
1,1,1-Trichloroethane	1.09 J	115 J	ND	600 J
Vinyl Chloride	0.26 J	ND	ND	ND
Methylene Chloride	1.74 J	8.34 J	ND	ND
1,1-Dichloroethane	0.82 J	4.86 J	ND	ND
1,1-Dichloroethene	0.4 J	6.74 J	ND	ND
Trichloroethene	0.59	5370 J	ND	2200 J

	130043B-DP01-SV08 03/11/2008 B-DP01	130043B-DP01-SV25 03/11/2008 B-DP01	130043B-DP01-SV45 03/11/2008 B-DP01
Tetrachloroethene	420	2710	1150
cis-1,2-Dichloroethene	ND	32.9	20.2
Chloroform	ND	5.37 J	ND
1,1,1-Trichloroethane	ND	191	175
Methylene Chloride	13.2 J	12.9 J	13.5 J
1,1-Dichloroethane	ND	68.8	32.8
Trichloroethene	312	21000	6990

	130043B-DP05-SV08 03/11/2008 B-DP05	130043B-DP05-SV25 03/11/2008 B-DP05	130043B-DP05-SV45 03/11/2008 B-DP05
Tetrachloroethene	2440	5700	12200
cis-1,2-Dichloroethene	ND	6.74 J	15.9
Chloroform	ND	ND	3.42
1,1,1-Trichloroethane	42	120	344
Methylene Chloride	9.38 J	11.8 J	0.69
1,1-Dichloroethane	ND	6.48 J	8.9
Trichloroethene	806	1770	3760

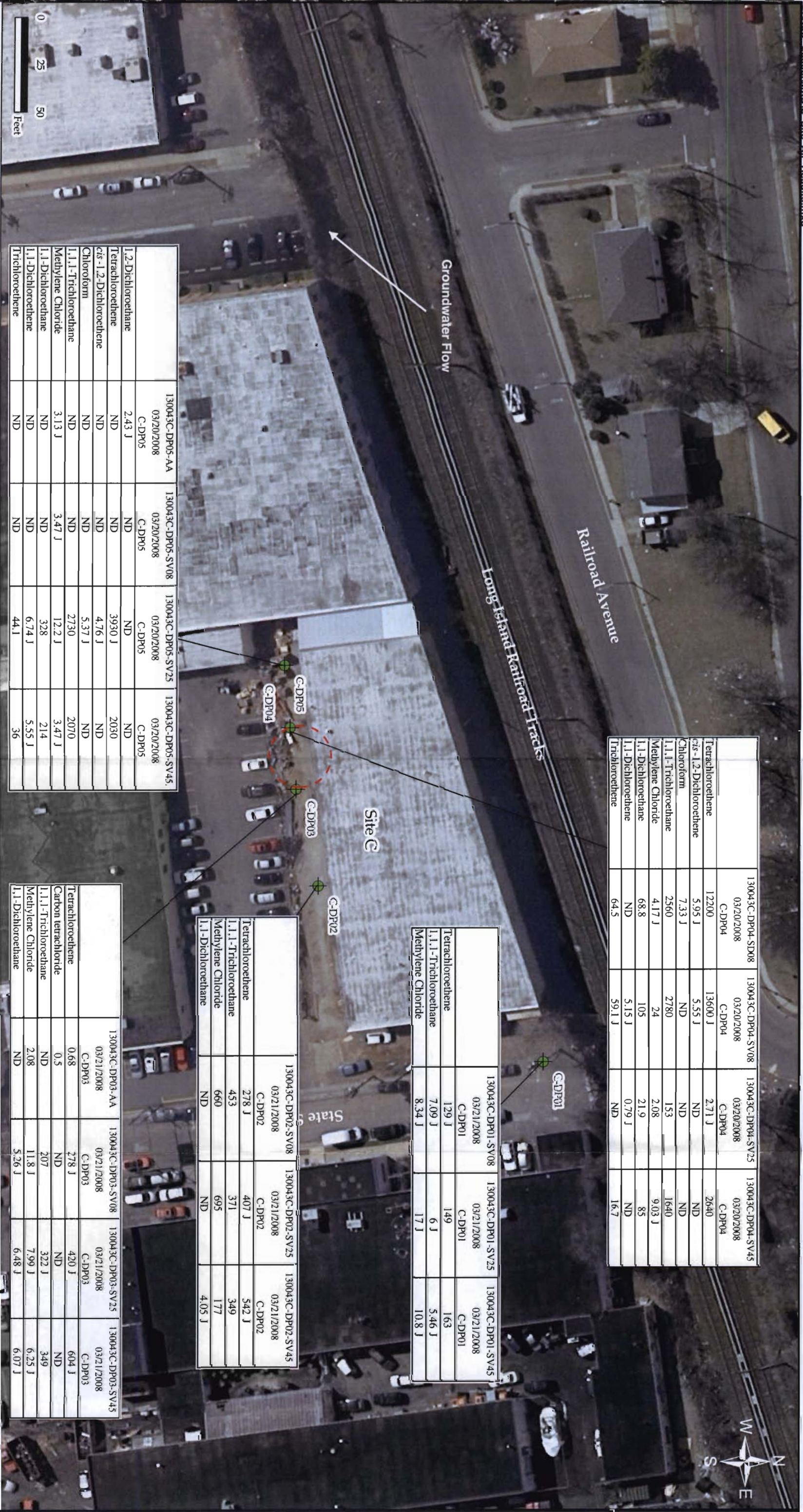
● Sampling Location  
○ Potential Historical Source Area Based on Previous Documentation

Notes:  
All units in  $\mu\text{g}/\text{m}^3$ .  
ND=Non-detect

CDM

Figure 4-2  
Site B  
Soil Vapor Chlorinated VOC Detections  
567 Main Street  
New Cassel Industrial Area  
North Hempstead, New York





Tetrachloroethene	130043C-DP04-SD08 03/20/2008	130043C-DP04-SV08 03/20/2008	130043C-DP04-SV25 03/20/2008	130043C-DP04-SV45 03/20/2008
<i>cis</i> -1,2-Dichloroethene	12200	5.55 J	2.71 J	2640
Chloroform	5.95 J	ND	ND	ND
1,1,1-Trichloroethane	7.33 J	ND	ND	ND
Methylene Chloride	2560	2780	153	1640
1,1-Dichloroethane	4.17 J	24	2.08	9.03 J
1,1-Dichloroethene	68.8	105	21.9	85
Trichloroethene	ND	5.15 J	0.79 J	ND
		59.1 J	ND	16.7

Tetrachloroethene	130043C-DP01-SV08 03/21/2008	130043C-DP01-SV25 03/21/2008	130043C-DP01-SV45 03/21/2008
1,1,1-Trichloroethane	129 J	149	163
Methylene Chloride	7.09 J	6 J	5.46 J
	8.34 J	17 J	10.8 J

Tetrachloroethene	130043C-DP02-SV08 03/21/2008	130043C-DP02-SV25 03/21/2008	130043C-DP02-SV45 03/21/2008
1,1,1-Trichloroethane	278 J	407 J	542 J
Methylene Chloride	453	371	349
1,1-Dichloroethane	660	695	177
1,1-Dichloroethene	ND	ND	4.05 J

1,2-Dichloroethane	130043C-DP05-AA 03/20/2008	130043C-DP05-SV08 03/20/2008	130043C-DP05-SV25 03/20/2008	130043C-DP05-SV45 03/20/2008
Tetrachloroethene	2.43 J	ND	ND	ND
<i>cis</i> -1,2-Dichloroethene	ND	ND	3930 J	2030
Chloroform	ND	ND	4.76 J	ND
1,1,1-Trichloroethane	ND	ND	5.37 J	ND
Methylene Chloride	ND	ND	2730	2070
1,1-Dichloroethane	3.13 J	3.47 J	12.2 J	3.47 J
1,1-Dichloroethene	ND	ND	328	214
Trichloroethene	ND	ND	6.74 J	5.55 J
			44.1	36

Tetrachloroethene	130043C-DP03-AA 03/21/2008	130043C-DP03-SV08 03/21/2008	130043C-DP03-SV25 03/21/2008	130043C-DP03-SV45 03/21/2008
Carbon tetrachloride	0.68	278 J	420 J	604 J
1,1,1-Trichloroethane	0.5	ND	ND	ND
Methylene Chloride	ND	207	322 J	349
1,1-Dichloroethane	2.08	11.8 J	7.99 J	6.25 J
1,1-Dichloroethene	ND	5.26 J	6.48 J	6.07 J

Sampling Location

Potential Historical Source Area  
Based on Previous Documentation

Notes:  
All units in µg/m<sup>3</sup>.  
ND=Non-detect

CDM

Figure 4-3  
Site C

Soil Vapor Chlorinated VOC Detections  
125 State Street  
New Cassel Industrial Area  
North Hempstead, New York





Tetrachloroethene	130043F-DP03-SD08 03/07/2008 F-DP03	130043F-DP03-SV08 03/07/2008 F-DP03	130043F-DP03-SV25 03/07/2008 F-DP03	130043F-DP03-SV45 03/07/2008 F-DP03
Chloroform	244	231	678	949
1,1,1-Trichloroethane	ND	ND	0.98 J	ND
Methylene Chloride	9.28 J	8.18 J	20.7	24 J
Trichloroethene	4.52 J	6.25 J	1.39 J	5.21 J
	ND	ND	29	37.1

Tetrachloroethene	130043F-DP02-AA 03/04/2008 F-DP02	130043F-DP02-SV08 03/04/2008 F-DP02	130043F-DP02-SV25 03/04/2008 F-DP02	130043F-DP02-SV45 03/04/2008 F-DP02
Carbon tetrachloride	3.39	108	210 J	325 J
1,1,1-Trichloroethane	0.44	ND	ND	ND
Methylene Chloride	ND	ND	25.6 J	28.4 J
Trichloroethene	6.95	3.47 J	4.17 J	ND
	ND	5.37	8.6 J	16.7 J

Tetrachloroethene	130043F-DP04-AA 03/07/2008 F-DP04	130043F-DP04-SV08 03/07/2008 F-DP04	130043F-DP04-SV25 03/07/2008 F-DP04	130043F-DP04-SV45 03/07/2008 F-DP04
cis-1,2-Dichloroethene	1.36 J	122	746	1080
1,1,1-Trichloroethane	0.79 J	ND	6.74 J	ND
Vinyl Chloride	5.46	ND	24.6 J	22.9 J
Methylene Chloride	1.79	ND	13.3	ND
1,1-Dichloroethane	2.78 J	3.47 J	4.52 J	ND
Trichloroethene	2.83	ND	23.5	ND
	0.86	ND	96.7	145

Tetrachloroethene	130043F-DP05-SV08 03/07/2008 F-DP05	130043F-DP05-SV25 03/07/2008 F-DP05	130043F-DP05-SV45 03/07/2008 F-DP05
1,1,1-Trichloroethane	163	407	549
Methylene Chloride	ND	12.5 J	28.4
1,1-Dichloroethane	ND	ND	4.52 J
Trichloroethene	ND	ND	6.88 J
	ND	17.2	33.3

Tetrachloroethene	130043F-DP01-SV08 03/04/2008 F-DP01	130043F-DP01-SV25 03/04/2008 F-DP01	130043F-DP01-SV45 03/04/2008 F-DP01
Carbon tetrachloride	2.03 J	210 J	231 J
1,1,1-Trichloroethane	0.5 J	ND	ND
Methylene Chloride	5.91 J	3.82 J	27.8 J
Trichloroethene	0.54 J	10.7 J	19.8 J
			14 J

Sampling Location

\*Previous investigations failed to locate source areas (e.g. cesspools, drainage structures)

Notes:  
All units in µg/m<sup>3</sup>.  
ND=Non-detect

CDM

Figure 4-4  
Site F  
Soil Vapor Chlorinated VOC Detections  
68 Kinkel Street  
New Cassel Industrial Area  
North Hempstead, New York



Tetrachloroethene	130043K-DP01-SD08 03/04/2008 K-DP01	130043K-DP01-SV08 03/04/2008 K-DP01	130043K-DP01-SV25 03/04/2008 K-DP01	130043K-DP01-SV45 03/04/2008 K-DP01
<i>cis</i> -1,2-Dichloroethene	88.2 J	74.6 J	ND	292 J
1,1,1-Trichloroethane	ND	ND	ND	6.34 J
Methylene Chloride	13.6 J	13.6 J	37.6 J	60 J
1,1-Dichloroethane	4.17 J	4.86 J	5.21 J	4.17 J
Trichloroethene	ND	ND	ND	15.8 J
	5.91 J	5.91 J	22 J	50.5 J

Tetrachloroethene	130043K-DP02-SV08 03/05/2008 K-DP02	130043K-DP02-SV25 03/05/2008 K-DP02	130043K-DP02-SV45 03/05/2008 K-DP02
<i>cis</i> -1,2-Dichloroethene	21	264	387
1,1,1-Trichloroethane	ND	6.34 J	15.1 J
1,1-Dichloroethane	8.18	76.4	54.6
Trichloroethene	1.62 J	ND	21.9 J
	6.99	86 J	113

Tetrachloroethene	130043K-DP03-AA 03/05/2008 K-DP03	130043K-DP03-SV08 03/05/2008 K-DP03	130043K-DP03-SV25 03/05/2008 K-DP03	130043K-DP03-SV45 03/05/2008 K-DP03
<i>cis</i> -1,2-Dichloroethene	0.68 J	74.6	217	359
Carbon tetrachloride	ND	ND	15.1 J	18.2 J
Chloroform	0.5	ND	ND	ND
1,1,1-Trichloroethane	ND	ND	ND	6.35 J
Methylene Chloride	ND	7.09 J	40.4 J	52.4
Trichloroethene	1.04 J	4.86 J	ND	ND
	ND	118 J	537	167

Tetrachloroethene	130043K-DP04-AA 03/06/2008 K-DP04	130043K-DP04-SV25 03/06/2008 K-DP04	130043K-DP04-SV45 03/06/2008 K-DP04
<i>cis</i> -1,2-Dichloroethene	102	244	373 J
Carbon tetrachloride	ND	ND	39.3
Chloroform	ND	ND	12.2 J
1,1,1-Trichloroethane	18.6 J	39.3	104
Methylene Chloride	3.82 J	5.56 J	ND
1,1-Dichloroethane	ND	8.09 J	56.7
Trichloroethene	31.2	80.6	231 J



Sampling Location

\*Previous investigations failed to locate source areas (e.g. cesspools, drainage structures)

Notes:  
All units in µg/m<sup>3</sup>.  
ND=Non-detect



Figure 4-5

Site K

Soil Vapor Chlorinated VOC Detections  
62 Kinkel Street  
New Cassel Industrial Area  
North Hempstead, New York



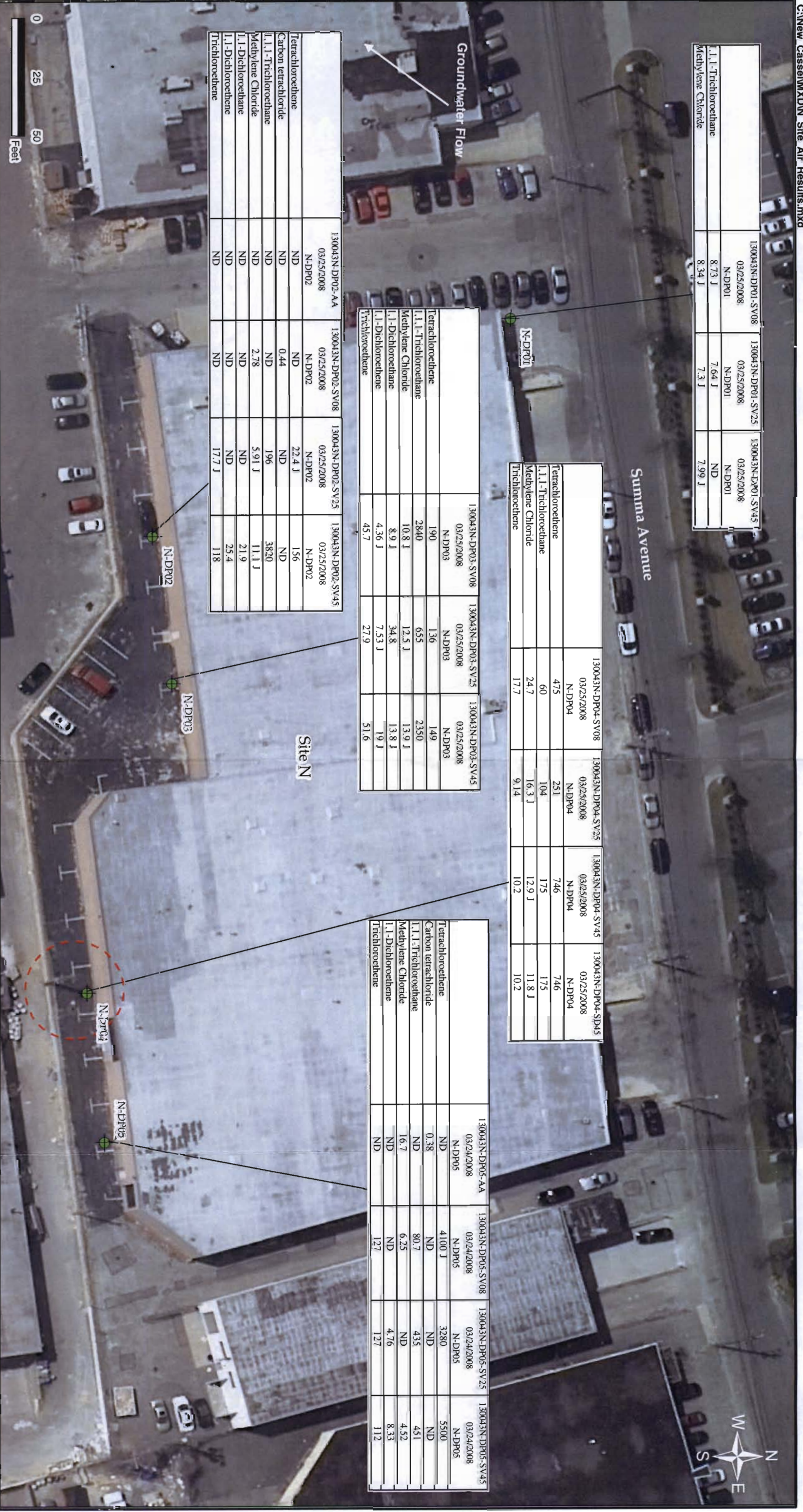
	130043N-DP01-SV08 03/25/2008 N-DP01	130043N-DP01-SV25 03/25/2008 N-DP01	130043N-DP01-SV45 03/25/2008 N-DP01
1,1,1-Trichloroethane	8.73 J	7.64 J	ND
Methylene Chloride	8.34 J	7.3 J	7.99 J

	130043N-DP04-SV08 03/25/2008 N-DP04	130043N-DP04-SV25 03/25/2008 N-DP04	130043N-DP04-SV45 03/25/2008 N-DP04	130043N-DP04-SV45 03/25/2008 N-DP04
Tetrachloroethene	475	251	746	746
1,1,1-Trichloroethane	60	104	175	175
Methylene Chloride	24.7	16.3 J	12.9 J	11.8 J
Trichloroethene	17.7	9.14	10.2	10.2

	130043N-DP03-SV08 03/25/2008 N-DP03	130043N-DP03-SV25 03/25/2008 N-DP03	130043N-DP03-SV45 03/25/2008 N-DP03
Tetrachloroethene	190	136	149
1,1,1-Trichloroethane	2840	655	2350
Methylene Chloride	10.8 J	12.5 J	13.9 J
1,1-Dichloroethane	8.9 J	34.8	13.8 J
1,1-Dichloroethene	4.36 J	7.53 J	19 J
Trichloroethene	45.7	27.9	51.6

	130043N-DP05-AA 03/24/2008 N-DP05	130043N-DP05-SV08 03/24/2008 N-DP05	130043N-DP05-SV25 03/24/2008 N-DP05	130043N-DP05-SV45 03/24/2008 N-DP05
Tetrachloroethene	ND	4100 J	3280	5500
Carbon tetrachloride	0.38	ND	ND	ND
1,1,1-Trichloroethane	ND	80.7	435	451
Methylene Chloride	16.7	6.25	ND	4.52
1,1-Dichloroethane	ND	ND	4.76	8.33
Trichloroethene	ND	127	127	112

	130043N-DP02-AA 03/25/2008 N-DP02	130043N-DP02-SV08 03/25/2008 N-DP02	130043N-DP02-SV25 03/25/2008 N-DP02	130043N-DP02-SV45 03/25/2008 N-DP02
Tetrachloroethene	ND	ND	22.4 J	156
Carbon tetrachloride	ND	0.44	ND	ND
1,1,1-Trichloroethane	ND	ND	196	3820
Methylene Chloride	ND	2.78	5.91 J	11.1 J
1,1-Dichloroethane	ND	ND	ND	21.9
1,1-Dichloroethene	ND	ND	ND	25.4
Trichloroethene	ND	ND	17.7 J	118



- Sampling Location
- Potential Historical Source Area
- Based on Previous Documentation

Notes:  
All units in µg/m<sup>3</sup>.  
ND=Non-detect

Figure 4-6  
Site N  
Soil Vapor Chlorinated VOC Detections  
750 Summa Avenue  
New Cassel Industrial Area  
North Hempstead, New York





Tetrachloroethene	130043V-DP01-SV08 03/18/2008 V-DP01	130043V-DP01-SV25 03/18/2008 V-DP01	130043V-DP01-SV45 03/18/2008 V-DP01
1,1,1-Trichloroethane	38	33.9 J	57.6 J
Methylene Chloride	ND	32.7	65.5
1,1-Dichloroethane	16.7 J	4.86 J	5.56 J
1,1-Dichloroethene	ND	ND	4.05 J
Trichloroethene	6.45	6.34 J	14.7 J

Tetrachloroethene	130043V-DP02-SV45 03/18/2008 V-DP02	130043V-DP02-SV08 03/18/2008 V-DP02	130043V-DP02-SV25 03/18/2008 V-DP02	130043V-DP02-SV45 03/18/2008 V-DP02
1,1,1-Trichloroethane	38	21.7 J	38	19.7 J
Methylene Chloride	33.3	13.6 J	25.6 J	12.5 J
1,1-Dichloroethane	11.5 J	4.17 J	ND	ND
1,1-Dichloroethene	14.2 J	6.07 J	ND	6.48 J
Trichloroethene	14.3 J	5.55 J	ND	6.34 J
	11.8	4.84	ND	4.3

Tetrachloroethene	130043V-DP05-AA 03/17/2008 V-DP05	130043V-DP05-SV08 03/17/2008 V-DP05	130043V-DP05-SV25 03/17/2008 V-DP05	130043V-DP05-SV45 03/17/2008 V-DP05
cis-1,2-Dichloroethene	29.8	108	5760 J	1970
Carbon tetrachloride	ND	11.9 J	1670	436
Chloroform	0.5	ND	ND	ND
1,1,1-Trichloroethane	ND	6.35 J	430 J	156 J
Methylene Chloride	ND	1640	147000 J	51300
1,1-Dichloroethane	2.43	12.5 J	188 J	90.3 J
1,1-Dichloroethene	ND	1010	72900 J	36000
Trichloroethene	ND	18.2 J	1630	357 J
	ND	75.2	3920	1020

Tetrachloroethene	130043V-DP04-SV08 03/18/2008 V-DP04	130043V-DP04-SV25 03/18/2008 V-DP04	130043V-DP04-SV45 03/18/2008 V-DP04
cis-1,2-Dichloroethene	237 J	502	19.7 J
trans-1,2-Dichloroethene	143	476	ND
Chloroform	4.36 J	5.55 J	ND
1,1,1-Trichloroethane	46.4	137	ND
Methylene Chloride	16900	98200	ND
1,1-Dichloroethane	ND	8.14 J	6.25 J
1,1-Dichloroethene	8090	44500	ND
Trichloroethene	139	365	ND
	376 J	1290	5.37

Tetrachloroethene	130043V-DP03-SV08 03/18/2008 V-DP03	130043V-DP03-SV25 03/18/2008 V-DP03	130043V-DP03-SV45 03/18/2008 V-DP03
cis-1,2-Dichloroethene	23.1 J	74.6	10.8 J
1,1,1-Trichloroethane	ND	14.3 J	ND
Methylene Chloride	109	2460	ND
1,1-Dichloroethane	ND	ND	5.56 J
1,1-Dichloroethene	18.2 J	1210	ND
Trichloroethene	ND	39.6	ND
	5.91	48.4	ND

Sampling Location

Potential Historical Source Area  
Based on Previous Documentation

Notes:  
All units in µg/m<sup>3</sup>.  
ND=Non-detect

Figure 4-7  
Site V  
Soil Vapor Chlorinated VOC Detections  
29 New York Avenue  
New Cassel Industrial Area  
North Hempstead, New York





130043B-DP03-GW55	
03/10/2008	
B-DP03	
Tetrachloroethene	<b>5.1</b>
1,1,1-Trichloroethane	4.8
Chloroform	1.3
Methyl t-Butyl Ether	0.84

130043B-DP02-GW55	
03/10/2008	
B-DP02	
Tetrachloroethene	1.8
1,1,1-Trichloroethane	0.99

130043B-DP04-GW55	
03/11/2008	
B-DP04	
Tetrachloroethene	<b>7.1</b>
1,1,1-Trichloroethane	<b>19</b>
1,1-Dichloroethene	2.4

130043B-DP01-GW55	
03/10/2008	
B-DP01	
Tetrachloroethene	1.9
1,1,1-Trichloroethane	1.3

130043B-DP05-GW55	
03/10/2008	
B-DP05	
Tetrachloroethene	<b>5.2</b>
1,1,1-Trichloroethane	1
Trichloroethene	<b>31</b>
Methyl t-Butyl Ether	0.65

Sampling Location  
 Potential Historical Source Area  
 Based on Previous Documentation

Notes:  
 All units in µg/L.  
 All exceedances highlighted and bolded.

Site Specific Groundwater Delineation Criteria		
Toluene		5
Tetrachloroethene		5
<i>cis</i> -1,2-Dichloroethene		5
1,1,1-Trichloroethane		5
Methylene chloride		5
1,1-Dichloroethane		5
1,1-Dichloroethene		5
Trichlorofluoromethane		5
Trichloroethene		5
Chloroform		7
Methyl t-Butyl Ether		10
Methylcyclohexane		50
Acetone		50

**Figure 4-9**  
**Site B**  
**Groundwater VOC Exceedances**  
**567 Main Street**  
**New Cassel Industrial Area**  
**North Hempstead, New York**





130043C-DP05-GW55	03/19/2008	C-DP05	1.9
Tetrachloroethene			2.3
1,1,1-Trichloroethane			0.92

130043C-DP04-GW55	03/19/2008	C-DP04	1.3
Tetrachloroethene			0.71
1,1,1-Trichloroethane			5.1
Acetone			5.6

130043C-DP03-GW55	03/21/2008	C-DP03	1.8 J
Tetrachloroethene			0.74
1,1,1-Trichloroethane			0.61 J
Trichloroethene			

130043C-DP02-GW55	03/21/2008	C-DP02	1.3
Tetrachloroethene			0.53
1,1,1-Trichloroethane			0.8
Methylene chloride			10
Acetone			

130043C-DP01-GW55	03/21/2008	C-DP01	0.66
Tetrachloroethene			8.4
Acetone			

- Sampling Location
- Potential Historical Source Area
- Based on Previous Documentation

Notes:  
 All units in µg/L.  
 All exceedances highlighted and bolded.

Site Specific Groundwater Definition Criteria	
Toluene	5
Tetrachloroethene	5
<i>cis</i> -1,2-Dichloroethene	5
1,1,1-Trichloroethane	5
Methylene chloride	5
1,1-Dichloroethane	5
1,1-Dichloroethene	5
Trichlorofluoromethane	5
Trichloroethene	5
Chloroform	7
Methyl t-Butyl Ether	10
Methylenehexane	50
Acetone	50

Figure 4-10  
 Site C  
 Groundwater VOC Exceedances  
 125 State Street  
 New Cassel Industrial Area  
 North Hempstead, New York





130043F-DP03-GW55	
03/06/2008	
F-DP03	
Toluene	0.58
Tetrachloroethene	<b>9.1</b>
Trichlorofluoromethane	0.59
Trichloroethene	2.9

130043F-DP04-GW55	
03/06/2008	
F-DP04	
Tetrachloroethene	2
Trichloroethene	0.55
Chloroform	0.53
Acetone	9.2

130043F-DP05-GW55	
03/06/2008	
F-DP05	
Tetrachloroethene	<b>53</b>
cis-1,2-Dichloroethene	<b>32</b>
Trichloroethene	<b>47</b>
Methyl t-Butyl Ether	<b>110</b>

130043F-DP01-GW55	
03/03/2008	
F-DP01	
Tetrachloroethene	1.9
Trichloroethene	0.5 J

130043F-DP06-GW55	
03/03/2008	
F-DP01	
Tetrachloroethene	2.7
Trichloroethene	ND

Sampling Location

Previous investigations failed to locate source areas (e.g. cesspools, drainage structures)

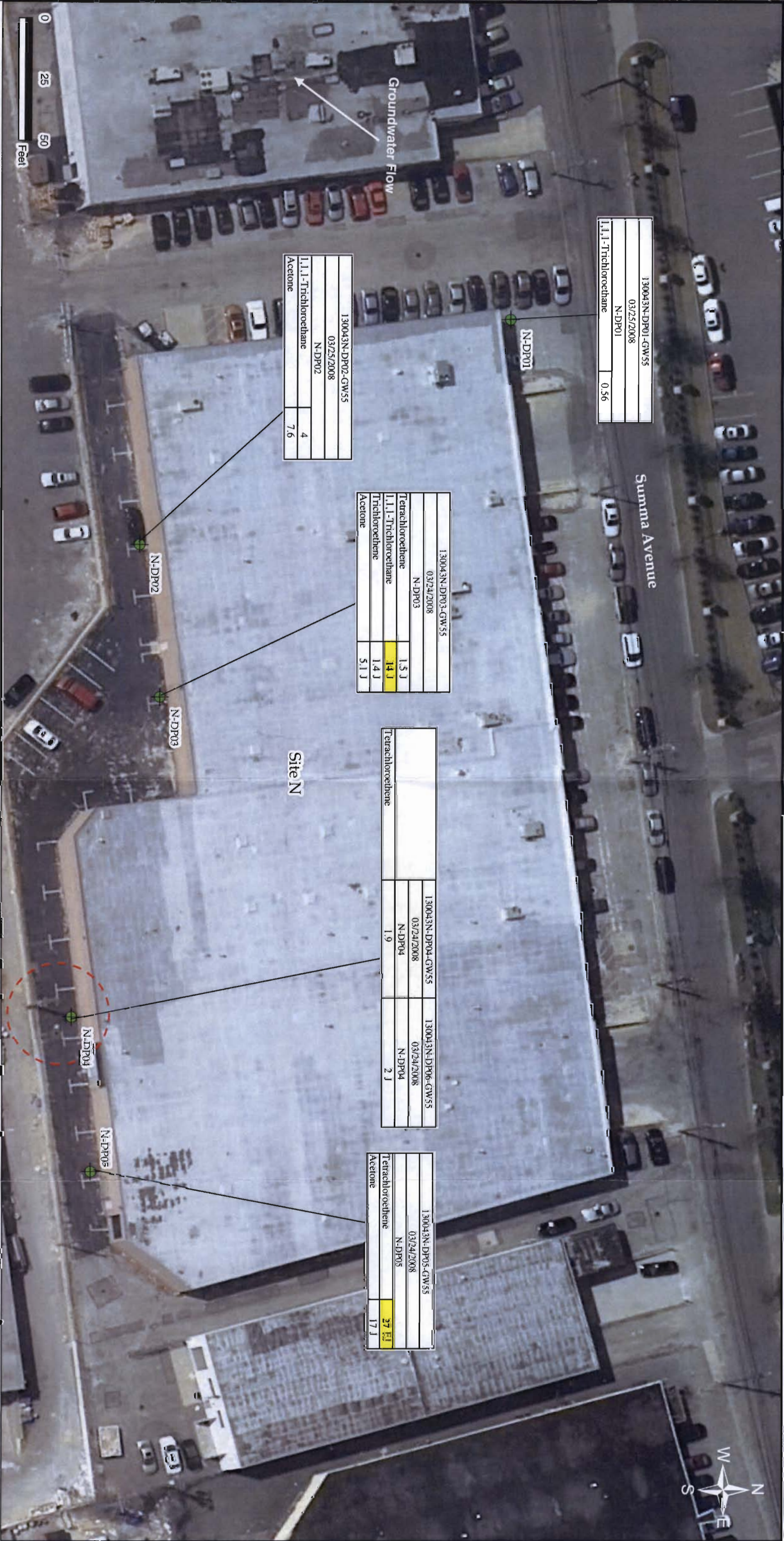
Notes:  
All units in µg/L.  
All exceedances highlighted and bolded.  
ND=Non-detect

CDM

Site Specific Groundwater Delineation Criteria	
Toluene	5
Tetrachloroethene	5
cis-1,2-Dichloroethene	5
1,1,1-Trichloroethane	5
Methylene chloride	5
1,1-Dichloroethane	5
1,1-Dichloroethene	5
Trichlorofluoromethane	5
Trichloroethene	5
Chloroform	7
Methyl t-Butyl Ether	10
Mercylohexane	50
Acetone	50

Figure 4-11  
Site F  
Groundwater VOC Exceedances  
68 Kinkel Street  
New Cassel Industrial Area  
North Hempstead, New York





130043N-DP01-GW55	03/25/2008	N-DP01	0.56
1,1,1-Trichloroethane			

130043N-DP02-GW55	03/25/2008	N-DP02	4
1,1,1-Trichloroethane			7.6
Acetone			

130043N-DP03-GW55	03/24/2008	N-DP03	1.5 J
Tetrachloroethene			14 J
1,1,1-Trichloroethane			1.4 J
Trichloroethene			5.1 J
Acetone			

130043N-DP04-GW55	03/24/2008	N-DP04	2 J
Tetrachloroethene			

130043N-DP05-GW55	03/24/2008	N-DP05	27 E
Tetrachloroethene			17 J
Acetone			

Site Specific Groundwater Delineation Criteria	
Toluene	5
Tetrachloroethene	5
cis-1,2-Dichloroethane	5
1,1,1-Trichloroethane	5
Methylene chloride	5
1,1-Dichloroethane	5
1,1-Dichloroethene	5
Trichlorofluoromethane	5
Trichloroethene	5
Chloroform	7
Methyl t-Butyl Ether	10
Mercylohexane	50
Acetone	50

- Sampling Location
- Potential Historical Source Area Based on Previous Documentation

Notes:  
All units in ug/L.  
All exceedances highlighted and bolded.

Figure 4-13  
Site N  
Groundwater VOC Exceedances  
750 Summa Avenue  
New Cassel Industrial Area  
North Hempstead, New York





130043V-DP01-GW55	
03/18/2008	
V-DP01	
Tetrachloroethene	3
<i>cis</i> -1,2-Dichloroethene	3.4 J
1,1,1-Trichloroethane	43
1,1-Dichloroethane	30
1,1-Dichloroethene	20
Trichloroethene	10
Chloroform	0.53

130043V-DP02-GW55	
03/17/2008	
V-DP02	
Tetrachloroethene	7.3
<i>cis</i> -1,2-Dichloroethene	3 J
1,1,1-Trichloroethane	58
1,1-Dichloroethane	40
1,1-Dichloroethene	53
Trichloroethene	38
Chloroform	1

130043V-DP05-GW55	
03/17/2008	
V-DP05	
Tetrachloroethene	1
<i>cis</i> -1,2-Dichloroethene	1.3
1,1,1-Trichloroethane	23
1,1-Dichloroethane	37
Trichloroethene	1.4

130043V-DP04-GW55		130043V-DP06-GW55	
03/17/2008		03/17/2008	
V-DP04		V-DP04	
Tetrachloroethene	3.4	3.4	3.4
<i>cis</i> -1,2-Dichloroethene	1.4 J	1.5 J	1.5 J
1,1,1-Trichloroethane	70	66	66
1,1-Dichloroethane	45	44	44
1,1-Dichloroethene	21	19	19
Trichloroethene	3.3	3.5	3.5
Chloroform	ND	0.52	0.52

130043V-DP03-GW55	
03/17/2008	
V-DP03	
Tetrachloroethene	4.1
1,1,1-Trichloroethane	22
<i>cis</i> -1,2-Dichloroethene	12
1,1-Dichloroethane	25
1,1-Dichloroethene	10
Trichloroethene	9.8
Chloroform	1.7 J

Sampling Location

Potential Historical Source Area  
Based on Previous Documentation

Notes:  
All units in µg/L.  
All exceedances highlighted and bolded.  
ND=Non-detect

CDM

Site Specific Groundwater Delineation Criteria	
Toluene	5
Tetrachloroethene	5
<i>cis</i> -1,2-Dichloroethene	5
1,1,1-Trichloroethane	5
Methylene chloride	5
1,1-Dichloroethane	5
1,1-Dichloroethene	5
Trichloroethene	5
Chloroform	7
Methyl t-Butyl Ether	10
Methylcyclohexane	50
Acetone	50

Figure 4-14  
Site V  
Groundwater VOC Exceedances  
29 New York Avenue  
New Cassel Industrial Area  
North Hempstead, New York





130043K-DP01-GW55		130043K-DP06-GW55	
03/03/2008		03/03/2008	
K-DP01		K-DP01	
Toluene	ND	Toluene	0.54
Tetrachloroethene	1.3	Tetrachloroethene	0.96
Trichloroethene	0.71	Trichloroethene	0.74
Chloroform	1.4	Chloroform	1.3
Methyl t-Butyl Ether	2.7	Methyl t-Butyl Ether	2.8

130043K-DP02-GW55		03/04/2008	
K-DP02			
Toluene	0.57 J		
Tetrachloroethene	1.4 J		
Trichloroethene	1.2 J		
Chloroform	1 J		
Methyl t-Butyl Ether	8.6 J		

130043K-DP03-GW55		03/04/2008	
K-DP03			
Tetrachloroethene	1.8 J		
cis-1,2-Dichloroethene	1.6 J		
1,1-Dichloroethane	0.5 J		
Trichloroethene	2 J		
Chloroform	0.93 J		
Methyl t-Butyl Ether	6.8 J		

130043K-DP04-GW55		03/05/2008	
K-DP04			
Tetrachloroethene	2.9		
1,1-Dichloroethane	0.94		
Trichloroethene	0.8		
Chloroform	0.57		
Methylcyclohexane	0.88		

130043K-DP05-GW55		03/05/2008	
K-DP05			
Tetrachloroethene	2.6		
cis-1,2-Dichloroethene	1.2		
1,1,1-Trichloroethane	0.81		
1,1-Dichloroethane	4.6		
Trichloroethene	0.82		

Site Specific Groundwater Delineation Criteria

Toluene	5
Tetrachloroethene	5
cis-1,2-Dichloroethene	5
1,1,1-Trichloroethane	5
Methylene chloride	5
1,1-Dichloroethane	5
1,1-Dichloroethene	5
Trichlorofluoromethane	5
Trichloroethene	5
Chloroform	7
Methyl t-Butyl Ether	10
Methylcyclohexane	50
Acetone	50

Sampling Location

\*Previous investigations failed to locate source areas (e.g. cesspools, drainage structures)

Notes:

All units in µg/L.

All exceedances highlighted and bolded.

ND=Non-detect

CDM

Figure 4-12  
Site K  
Groundwater VOC Exceedances  
New Cassel Industrial Area  
62 Kinkel Street  
North Hempstead, New York



**Appendix A**  
**Analytical Results Summary Tables**

*Table A-1 Soil Vapor Analytical Results*

*Table A-2 Groundwater Analytical Results*

*Table A-3 Field Blank and Trip Blank Analytical Results*

**Appendix A**  
**Table A-1 Soil Vapor Analytical Results**

**Table A-1  
Soil Vapor Analytical Results  
New Cassel Industrial Area  
North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	130043A-DP01-AA	130043A-DP01-SV08	130043A-DP01-SV25	130043A-DP01-SV45	
				Sample Date	03/14/2008	03/14/2008	03/14/2008	03/14/2008	
Boring Location				A-DP01	A-DP01	A-DP01	A-DP01	A-DP01	
100-41-4	Ethylbenzene	ug/m3	106.2	0.87	J	21.70	U	21.70	U
100-42-5	Styrene	ug/m3	104.1	2.13	U	21.30	U	21.30	U
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	2.27	U	22.70	U	22.70	U
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	2.27	U	22.70	U	22.70	U
106-46-7	1,4-Dichlorobenzene	ug/m3	147	3.01	U	30.10	U	30.10	U
106-93-4	1,2-Dibromoethane	ug/m3	187.9	3.84	U	38.40	U	38.40	U
106-99-0	1,3-Butadiene	ug/m3	54.09	1.11	U	11.10	U	11.10	U
107-05-1	Allyl Chloride	ug/m3	76.53	1.57	U	15.70	U	15.70	U
107-06-2	1,2-Dichloroethane	ug/m3	98.96	2.02	U	20.20	U	20.20	U
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	2.05	U	20.50	U	20.50	U
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	0.49	J	24.60	U	24.60	U
108-88-3	Toluene	ug/m3	92.14	9.42	J	8.67	J	6.41	J
108-90-7	Chlorobenzene	ug/m3	112.6	2.30	U	23.00	U	23.00	U
109-99-9	Tetrahydrofuran	ug/m3	154	3.15	U	7.56	J	34.00	U
110-54-3	Hexane	ug/m3	86.17	1.76	U	17.60	U	17.60	U
110-82-7	CYCLOHEXANE	ug/m3	84.16	2.07	U	17.20	U	17.20	U
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	3.71	U	37.10	U	37.10	U
123-91-1	1,4-Dioxane	ug/m3	133	2.72	U	27.20	U	27.20	U
124-48-1	Dibromochloromethane	ug/m3	208.3	4.26	U	42.60	U	42.60	U
126777-61-2	m/p-Xylene	ug/m3	106.2	3.04	J	7.38	J	6.08	J
127-18-4	Tetrachloroethene	ug/m3	165.8	3.39	U	67.80	J	94.90	U
142-82-5	n-Heptane	ug/m3	100.2	0.82	J	5.33	J	5.74	J
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	1.98	U	19.80	U	19.80	U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	1.98	U	19.80	U	19.80	U
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	1.80	U	18.00	U	18.00	U
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	0.93	J	23.40	U	23.40	U
541-73-1	1,3-DICHLOROETHENE	ug/m3	147	3.01	U	30.10	U	30.10	U
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	0.44	J	2.52	U	2.52	U
593-60-2	Bromoethene	ug/m3	106.9	2.19	U	21.90	U	21.90	U
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	2.46	U	24.60	U	24.60	U
67-64-1	ACETONE	ug/m3	58.08	13.10	B	68.90	B	99.80	B
67-86-3	CHLOROFORM	ug/m3	119.4	2.44	U	24.40	U	24.40	U
71-43-2	BENZENE	ug/m3	78.11	1.92	J	16.00	U	16.00	U
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	2.73	U	27.30	U	27.30	U
74-83-9	BROMOMETHANE	ug/m3	94.94	1.94	U	19.40	U	19.40	U
74-87-3	CHLOROMETHANE	ug/m3	50.49	1.03	J	10.30	U	10.30	U
75-00-3	CHLOROETHANE	ug/m3	64.52	1.32	U	13.20	U	13.20	U
75-01-4	VINYL CHLORIDE	ug/m3	62.5	1.28	U	12.80	U	12.80	U
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	1.39	J	3.82	J	4.17	J
75-15-0	CARBON DISULFIDE	ug/m3	76.14	1.56	U	15.60	U	15.60	U
75-25-2	BROMOFORM	ug/m3	252.8	5.17	U	51.70	U	51.70	U
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	3.35	U	33.50	U	33.50	U
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	2.02	U	20.20	U	20.20	U
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	1.98	U	19.80	U	19.80	U
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	1.52	U	15.20	U	15.20	U
75-69-4	TRICHLOROFUOROMETHANE	ug/m3	137.4	2.25	J	28.10	U	28.10	U
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	1.98	J	24.70	U	4.94	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4	3.83	U	38.30	U	38.30	U
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9	3.49	U	34.90	U	34.90	U
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	2.31	U	23.10	U	23.10	U
78-93-3	2-BUTANONE	ug/m3	72.11	4.42	J	133.00	J	198.00	J
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	2.73	U	27.30	U	27.30	U
79-01-6	TRICHLOROETHENE	ug/m3	131.4	0.25	U	2.47	U	2.47	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	3.43	U	34.30	U	34.30	U
80-62-6	Methyl Methacrylate	ug/m3	100.117	2.05	U	20.50	U	20.50	U
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8	5.33	U	53.30	U	53.30	U
95-47-6	O-XYLENE	ug/m3	106.2	0.87	J	21.70	U	21.70	U
95-49-8	2-Chlorotoluene	ug/m3	126.58	2.59	U	25.90	U	25.90	U
95-50-1	1,2-DICHLOROETHENE	ug/m3	147	3.01	U	30.10	U	30.10	U
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	1.47	J	4.92	J	4.92	J

Notes:  
U - undefined ug/m3 - micrograms per cubic meter  
SV - Soil Vapor J - estimated  
DP - Direct Pust ID - Identification  
N - presumptive evidence of a compound

**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	Sample Date	Boring Location	130043A-DP02-SV08	130043A-DP02-SV25	130043A-DP02-SV45	130043A-DP03A-SV08	130043A-DP03A-SV25	
				03/14/2008	03/14/2008	03/14/2008	03/14/2008	03/14/2008	03/14/2008			
				A-DP02	A-DP02	A-DP02	A-DP03A	A-DP03A				
100-41-4	Ethylbenzene	ug/m3	106.2	8.69	J		4.78	J	21.70	U	4.34	J
100-42-5	Styrene	ug/m3	104.1	21.30	U		21.30	U	21.30	U	21.30	U
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	22.70	U		22.70	U	22.70	U	22.70	U
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	22.70	U		22.70	U	22.70	U	22.70	U
106-46-7	1,4-Dichlorobenzene	ug/m3	147	30.10	U		30.10	U	30.10	U	30.10	U
106-93-4	1,2-Dibromoethane	ug/m3	187.9	38.40	U		38.40	U	38.40	U	38.40	U
106-99-0	1,3-Butadiene	ug/m3	54.09	11.10	U		11.10	U	11.10	U	11.10	U
107-05-1	Allyl Chloride	ug/m3	76.53	15.70	U		15.70	U	15.70	U	15.70	U
107-06-2	1,2-Dichloroethane	ug/m3	98.96	20.20	U		20.20	U	20.20	U	20.20	U
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	20.50	U		20.50	U	20.50	U	20.50	U
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	24.60	U		24.60	U	24.60	U	24.60	U
108-88-3	Toluene	ug/m3	92.14	12.40	J		18.80	J	12.80	J	13.20	J
108-90-7	Chlorobenzene	ug/m3	112.6	23.00	U		23.00	U	23.00	U	23.00	U
109-99-9	Tetrahydrofuran	ug/m3	154	13.00	J		15.10	J	33.40	J	11.30	J
110-54-3	Hexane	ug/m3	86.17	17.60	U		17.60	U	17.60	U	17.60	U
110-82-7	CYCLOHEXANE	ug/m3	84.16	17.20	U		17.20	U	17.20	U	17.20	U
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	37.10	U		37.10	U	37.10	U	37.10	U
123-91-1	1,4-Dioxane	ug/m3	133	27.20	U		27.20	U	27.20	U	27.20	U
124-48-1	Dibromochloromethane	ug/m3	208.3	42.60	U		42.60	U	42.60	U	42.60	U
126777-61-2	m/p-Xylene	ug/m3	106.2	26.90	J		13.00	J	9.99	J	10.40	J
127-18-4	Tetrachloroethene	ug/m3	165.8	54.90	J		29.20	J	62.40	J	624.00	J
142-82-5	n-Heptane	ug/m3	100.2	9.84	J		6.15	J	23.40	J	14.30	J
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U		19.80	U	19.80	U	95.20	D
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U		19.80	U	19.80	U	19.80	U
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	18.00	U		18.00	U	18.00	U	18.00	U
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	23.40	U		23.40	U	23.40	U	23.40	U
541-73-1	1,3-DICHLOROBENZENE	ug/m3	147	30.10	U		30.10	U	30.10	U	30.10	U
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	2.52	U		2.52	U	2.52	U	2.52	U
593-60-2	Bromoethene	ug/m3	106.9	21.90	U		21.90	U	21.90	U	21.90	U
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	24.60	U		24.60	U	24.60	U	24.60	U
67-64-1	ACETONE	ug/m3	58.08	138.00	B		107.00	B	238.00	B	107.00	B
67-66-3	CHLOROFORM	ug/m3	119.4	24.40	U		24.40	U	5.37	J	24.40	U
71-43-2	BENZENE	ug/m3	78.11	4.47	J		3.51	J	4.79	J	5.11	J
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	27.30	U		27.30	U	27.30	U	27.30	U
74-83-9	BROMOMETHANE	ug/m3	94.94	19.40	U		19.40	U	19.40	U	19.40	U
74-87-3	CHLOROMETHANE	ug/m3	50.49	10.30	U		10.30	U	10.30	U	10.30	U
75-00-3	CHLOROETHANE	ug/m3	64.52	13.20	U		13.20	U	13.20	U	13.20	U
75-01-4	VINYL CHLORIDE	ug/m3	62.5	12.80	U		12.80	U	12.80	U	12.80	U
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	4.52	J		17.40	U	4.52	J	3.82	J
75-15-0	CARBON DISULFIDE	ug/m3	76.14	15.60	U		15.60	U	15.60	U	15.60	U
75-25-2	BROMOFORM	ug/m3	252.8	51.70	U		51.70	U	51.70	U	51.70	U
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	33.50	U		33.50	U	33.50	U	33.50	U
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	20.20	U		20.20	U	20.20	U	20.20	U
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	19.80	U		19.80	U	19.80	U	19.80	U
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	15.20	U		15.20	U	15.20	U	15.20	U
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4	28.10	U		28.10	U	28.10	U	28.10	U
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	24.70	U		24.70	U	24.70	U	24.70	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4	38.30	U		38.30	U	38.30	U	38.30	U
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9	34.90	U		34.90	U	34.90	U	34.90	U
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	23.10	U		23.10	U	23.10	U	23.10	U
78-93-3	2-BUTANONE	ug/m3	72.11	239.00	J		209.00	J	354.00	J	177.00	J
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	27.30	U		27.30	U	27.30	U	27.30	U
79-01-6	TRICHLOROETHENE	ug/m3	131.4	45.10	J		161.00	J	193.00	J	365.00	J
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	34.30	U		34.30	U	34.30	U	34.30	U
80-62-6	Methyl Methacrylate	ug/m3	100.117	20.50	U		20.50	U	20.50	U	20.50	U
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8	53.30	U		53.30	U	53.30	U	53.30	U
95-47-6	O-XYLENE	ug/m3	106.2	9.12	J		21.70	U	21.70	U	21.70	U
95-49-8	2-Chlorotoluene	ug/m3	126.58	25.90	U		25.90	U	25.90	U	25.90	U
95-50-1	1,2-DICHLOROBENZENE	ug/m3	147	30.10	U		30.10	U	30.10	U	30.10	U
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	5.41	J		5.41	J	5.41	J	4.92	J

Notes:

- U - undefined ug/m3 - micrograms per cubic meter
- SV - Soil Vapor J - estimated
- DP - Direct Push ID - Identification
- N - presumptive evidence of a compound



**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID		Sample Date		Boring Location	
				130043A-DP03A-SV45		03/14/2008		130043A-DP04-AA	
				A-DP03A		A-DP04			
100-41-4	Ethylbenzene	ug/m3	106.2	4.34	J	0.43	J		
100-42-5	Styrene	ug/m3	104.1	21.30	U	0.43	U		
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	22.70	U	0.45	U		
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	22.70	U	0.45	U		
106-46-7	1,4-Dichlorobenzene	ug/m3	147	30.10	U	0.60	U		
106-93-4	1,2-Dibromoethane	ug/m3	187.9	38.40	U	0.77	U		
106-99-0	1,3-Butadiene	ug/m3	54.09	11.10	U	0.22	U		
107-05-1	Allyl Chloride	ug/m3	76.53	15.70	U	0.31	U		
107-06-2	1,2-Dichloroethane	ug/m3	98.96	20.20	U	0.40	U		
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	20.50	U	0.41	U		
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	24.60	U	0.49	U		
108-88-3	Toluene	ug/m3	92.14	13.20	J	2.26			
108-90-7	Chlorobenzene	ug/m3	112.6	23.00	U	0.46	U		
109-99-9	Tetrahydrofuran	ug/m3	154	44.10	J	0.63	U		
110-54-3	Hexane	ug/m3	86.17	17.60	U	0.35	U		
110-82-7	CYCLOHEXANE	ug/m3	84.16	17.20	U	0.34	U		
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	37.10	U	0.74	UJ		
123-91-1	1,4-Dioxane	ug/m3	133	27.20	U	0.54	U		
124-48-1	Dibromochloromethane	ug/m3	208.3	42.60	U	0.85	U		
126777-61-2	m/p-Xylene	ug/m3	106.2	12.20	J	1.30			
127-18-4	Tetrachloroethene	ug/m3	165.8	5490.00	JD	2.17			
142-82-5	n-Heptane	ug/m3	100.2	10.70	J	0.41			
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	5550.00	D	0.40	U		
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	43.60		0.40	U		
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	18.00	U	0.36	U		
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	23.40	U	0.47	U		
541-73-1	1,3-DICHLOROENZENE	ug/m3	147	30.10	U	0.60	U		
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	2.52	U	0.50			
593-60-2	Bromoethene	ug/m3	106.9	21.90	U	0.44	U		
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	24.60	U	0.49	U		
67-64-1	ACETONE	ug/m3	58.08	207.00	B	6.18	B		
67-66-3	CHLOROFORM	ug/m3	119.4	63.50		0.49	U		
71-43-2	BENZENE	ug/m3	78.11	3.19	J	0.96			
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	33.80		0.55	U		
74-83-9	BROMOMETHANE	ug/m3	94.94	19.40	U	0.39	U		
74-87-3	CHLOROMETHANE	ug/m3	50.49	10.30	U	1.24			
75-00-3	CHLOROETHANE	ug/m3	64.52	13.20	U	0.26	U		
75-01-4	VINYL CHLORIDE	ug/m3	62.5	2.56	J	0.10	U		
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	17.40	U	12.20	UJ		
75-15-0	CARBON DISULFIDE	ug/m3	76.14	15.60	U	0.31	U		
75-25-2	BROMOFORM	ug/m3	252.8	51.70	U	1.03	U		
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	33.50	U	0.67	U		
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	26.30		0.40	U		
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	19.80	U	0.40	U		
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	15.20	U	0.30	U		
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4	10.10	J	1.12			
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	24.70	U	2.47			
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4	38.30	U	0.77	U		
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9	34.90	U	0.70	U		
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	23.10	U	0.46	U		
78-93-3	2-BUTANONE	ug/m3	72.11	292.00	J	1.77	BJ		
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	27.30	U	0.55	U		
79-01-6	TRICHLOROETHENE	ug/m3	131.4	6990.00	JD	0.21	U		
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	12.40	J	0.69	U		
80-62-6	Methyl Methacrylate	ug/m3	100.117	20.50	U	0.41	U		
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8	53.30	U	1.07	UJ		
95-47-6	O-XYLENE	ug/m3	106.2	21.70	U	0.43	J		
95-49-8	2-Chlorotoluene	ug/m3	126.58	25.90	U	0.52	U		
95-50-1	1,2-DICHLOROENZENE	ug/m3	147	30.10	U	0.60	U		
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	4.92	J	0.49	J		

Notes:

- U - undefined ug/m3 - micrograms per cubic meter
- SV - Soil Vapor J - estimated
- DP - Direct Pust ID - Identification
- N - presumptive evidence of a compound

**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	Sample Date	Boring Location	130043A-DP04-SV08	130043A-DP04-SV25	130043A-DP04-SV45	130043A-DP05-SD45	130043A-DP05-SV08	
				03/13/2008	03/13/2008	03/13/2008	03/13/2008	03/13/2008	03/13/2008	A-DP04	A-DP04	A-DP04
100-41-4	Ethylbenzene	ug/m3	106.2	4.34	U		4.34	U	4.34	U	4.34	U
100-42-5	Styrene	ug/m3	104.1	4.26	U		4.26	U	4.26	U	4.26	U
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	4.54	U		4.54	U	4.54	U	4.54	U
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	4.54	U		4.54	U	4.54	U	4.54	U
106-46-7	1,4-Dichlorobenzene	ug/m3	147	6.01	U		6.01	U	6.01	U	6.01	U
106-93-4	1,2-Dibromoethane	ug/m3	187.9	7.69	U		7.69	U	7.69	U	7.69	U
106-99-0	1,3-Butadiene	ug/m3	54.09	2.21	U		2.21	U	2.21	U	2.21	U
107-05-1	Allyl Chloride	ug/m3	76.53	3.13	U		3.13	U	3.13	U	3.13	U
107-06-2	1,2-Dichloroethane	ug/m3	98.96	4.05	U		4.05	U	4.05	U	4.05	U
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	4.10	U		4.10	U	4.10	U	4.10	U
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	4.92	U		4.92	U	4.92	U	4.92	U
108-88-3	Toluene	ug/m3	92.14	13.90			12.10		8.29		10.60	
108-90-7	Chlorobenzene	ug/m3	112.6	4.61	U		4.61	U	4.61	U	4.61	U
109-99-9	Tetrahydrofuran	ug/m3	154	6.30	U		25.20		29.60		6.30	U
110-54-3	Hexane	ug/m3	86.17	21.10			12.70		20.40		13.00	
110-82-7	CYCLOHEXANE	ug/m3	84.16	3.44	U		3.44	U	7.23		3.44	U
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	7.42	U		7.42	U	7.42	U	7.42	U
123-91-1	1,4-Dioxane	ug/m3	133	5.44	U		5.44	U	5.44	U	5.44	U
124-48-1	Dibromochloromethane	ug/m3	208.3	8.52	U		8.52	U	8.52	U	8.52	U
126777-61-2	m/p-Xylene	ug/m3	106.2	6.08			9.56		9.12		14.30	
127-18-4	Tetrachloroethene	ug/m3	165.8	6710.00	D		166000.00	ED	198000.00	ED	224000.00	ED
142-82-5	n-Heptane	ug/m3	100.2	13.10			7.79		10.20		8.20	
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	3.96	U		11.50		31.70		286.00	
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	3.96	U		3.96	U	3.96	U	4.36	
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	3.61	U		3.61	U	3.61	U	3.61	U
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	8.87			4.67	U	4.67	U	4.67	U
541-73-1	1,3-DICHLOROBENZENE	ug/m3	147	6.01	U		6.01	U	6.01	U	6.01	U
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	2.52	U		2.52	U	2.52	U	2.52	U
593-60-2	Bromoethene	ug/m3	106.9	4.37	U		4.37	U	4.37	U	4.37	U
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	4.92	U		4.92	U	4.92	U	4.92	U
67-64-1	ACETONE	ug/m3	58.08	56.10	JB		41.30	JB	38.70	JB	44.70	JB
67-66-3	CHLOROFORM	ug/m3	119.4	4.88	U		4.88	U	4.88	U	4.88	U
71-43-2	BENZENE	ug/m3	78.11	5.43			4.47		3.83		3.19	U
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	19.10			437.00		589.00	D	385.00	
74-83-9	BROMOMETHANE	ug/m3	94.94	3.88	U		3.88	U	3.88	U	3.88	U
74-87-3	CHLOROMETHANE	ug/m3	50.49	2.07	U		2.07	U	2.07	U	2.07	U
75-00-3	CHLOROETHANE	ug/m3	64.52	2.64	U		2.64	U	2.64	U	2.64	U
75-01-4	VINYL CHLORIDE	ug/m3	62.5	1.02	U		1.02	U	1.02	U	1.02	U
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	4.86			3.47	U	3.47	U	3.47	U
75-15-0	CARBON DISULFIDE	ug/m3	76.14	3.11	U		3.11	U	3.11	U	3.11	U
75-25-2	BROMOFORM	ug/m3	252.8	10.30	U		10.30	U	10.30	U	10.30	U
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	6.70	U		6.70	U	6.70	U	6.70	U
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	4.05	U		4.05	U	4.05	J	3.64	J
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	3.96	U		3.96	U	3.96	U	3.96	U
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	3.03	U		3.03	U	3.03	U	3.03	U
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4	5.62	U		5.62	U	5.62	U	8.99	
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	4.94	U		4.94	U	4.94	U	4.94	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroetha	ug/m3	187.4	75.90			2910.00	D	4410.00	D	4320.00	D
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroeth	ug/m3	170.9	6.99	U		6.99	U	6.99	U	6.99	U
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	4.62	U		4.62	U	4.62	U	4.62	U
78-93-3	2-BUTANONE	ug/m3	72.11	90.20	J		127.00	J	103.00	J	109.00	J
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	5.46	U		5.46	U	5.46	U	5.46	U
79-01-6	TRICHLOROETHENE	ug/m3	131.4	17.70			437.00		774.00		2620.00	D
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	6.87	U		6.87	U	6.87	U	6.87	U
80-62-6	Methyl Methacrylate	ug/m3	100.117	4.09	U		4.09	U	4.09	U	4.09	U
87-68-3	HEXACHLOROBTADIENE	ug/m3	260.8	10.70	U		10.70	U	10.70	U	10.70	U
95-47-6	O-XYLENE	ug/m3	106.2	4.34	U		4.34	U	4.34	U	4.78	
95-49-8	2-Chlorotoluene	ug/m3	126.58	5.18	U		5.18	U	5.18	U	5.18	U
95-50-1	1,2-DICHLOROBENZENE	ug/m3	147	6.01	U		6.01	U	6.01	U	6.01	U
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	4.92	U		4.92	U	4.92	U	4.92	U

Notes:

- U - undefined ug/m3 - micrograms per cubic meter
- SV - Soil Vapor J - estimated
- DP - Direct Pust ID - Identification
- N - presumptive evidence of a compound

Table A-1  
Soil Vapor Analytical Results  
New Cassel Industrial Area  
North Hempstead, NY

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	Sample Date	Boring Location	130043A-DP05-SV25	130043A-DP05-SV45	130043B-DP01-SV08	130043B-DP01-SV25	130043B-DP01-SV45
				A-DP05	03/13/2008	A-DP05	03/13/2008	B-DP01	03/11/2008	B-DP01	03/11/2008
100-41-4	Ethylbenzene	ug/m3	106.2	4.34	U		4.34	U	5.21	J	208.00
100-42-5	Styrene	ug/m3	104.1	4.26	U		4.26	U	2.64	UJ	2.64
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	4.54	U		4.54	U	2.27	U	2.27
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	4.54	U		4.54	U	2.59	U	2.59
106-46-7	1,4-Dichlorobenzene	ug/m3	147	6.01	U		6.01	U	1.50	U	1.50
106-93-4	1,2-Dibromoethane	ug/m3	187.9	7.69	U		7.69	U	9.99	U	9.99
106-99-0	1,3-Butadiene	ug/m3	54.09	2.21	UJ		2.21	U	0.80	U	0.80
107-05-1	Allyl Chloride	ug/m3	76.53	3.13	UJ		3.13	U	1.91	U	1.91
107-06-2	1,2-Dichloroethane	ug/m3	98.96	4.05	U		4.05	U	2.02	U	2.02
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	4.10	U		4.10	U	2.05	U	2.05
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	4.92	U		4.92	U	1.72	UJ	1.72
108-88-3	Toluene	ug/m3	92.14	8.67	U		9.42	U	24.90	U	45.20
108-90-7	Chlorobenzene	ug/m3	112.6	4.61	U		4.61	U	1.20	U	1.20
109-99-9	Tetrahydrofuran	ug/m3	154	32.80	U		6.30	U	25.20	J	40.30
110-54-3	Hexane	ug/m3	86.17	3.52	UJ		3.52	U	0.92	U	0.92
110-82-7	CYCLOHEXANE	ug/m3	84.16	3.44	UJ		3.44	U	0.41	U	0.41
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	7.42	U		7.42	U	21.50	J	2.60
123-91-1	1,4-Dioxane	ug/m3	133	5.44	U		5.44	U	2.50	U	2.50
124-48-1	Dibromochloromethane	ug/m3	208.3	8.52	U		8.52	U	2.22	U	2.22
126777-61-2	m/p-Xylene	ug/m3	106.2	5.65	U		6.52	U	13.00	J	695.00
127-18-4	Tetrachloroethene	ug/m3	165.8	42000.00	ED		94300.00	ED	420.00	U	2710.00
142-82-5	n-Heptane	ug/m3	100.2	5.33	J		4.10	U	4.92	J	7.79
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	227.00	J		117.00	U	1.39	U	32.90
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	3.96	UJ		3.96	U	1.23	U	1.23
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	3.61	UJ		3.61	U	0.61	U	0.61
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	4.67	U		4.67	U	1.17	U	1.17
541-73-1	1,3-DICHLOROETHANE	ug/m3	147	6.01	U		6.01	U	1.02	U	1.02
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	2.52	U		2.52	U	1.07	U	1.07
593-60-2	Bromoethene	ug/m3	106.9	4.37	UJ		4.37	U	1.05	U	1.05
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	4.92	U		4.92	U	1.28	UJ	1.28
67-64-1	ACETONE	ug/m3	58.08	62.70	JB		15.90	JB	59.40	B	138.00
67-66-3	CHLOROFORM	ug/m3	119.4	4.88	UJ		4.88	U	1.51	U	5.37
71-43-2	BENZENE	ug/m3	78.11	3.51	U		3.19	U	30.30	U	8.63
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	119.00	J		159.00	U	1.20	U	191.00
74-83-9	BROMOMETHANE	ug/m3	94.94	3.88	UJ		3.88	U	0.93	U	0.93
74-87-3	CHLOROMETHANE	ug/m3	50.49	2.07	UJ		2.07	U	0.52	U	0.52
75-00-3	CHLOROETHANE	ug/m3	64.52	2.64	UJ		2.64	U	0.45	U	0.45
75-01-4	VINYL CHLORIDE	ug/m3	62.5	1.02	UJ		1.02	U	0.61	U	0.61
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	3.47	UJ		3.47	U	13.20	J	12.90
75-15-0	CARBON DISULFIDE	ug/m3	76.14	3.11	UJ		3.11	U	0.47	U	0.47
75-25-2	BROMOFORM	ug/m3	252.8	10.30	U		10.30	U	1.55	U	1.55
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	6.70	U		6.70	U	3.35	U	3.35
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	4.05	UJ		4.05	U	0.97	U	68.80
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	3.96	UJ		3.96	U	0.99	U	0.99
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	3.03	UJ		3.03	U	2.39	U	2.39
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4	5.62	UJ		5.62	J	5.62	J	10.10
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	4.94	UJ		4.94	U	6.92	J	5.44
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4	743.00	J		973.00	U	10.70	J	29.90
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9	6.99	UJ		6.99	U	1.54	U	1.54
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	4.62	U		4.62	U	2.22	U	2.22
78-93-3	2-BUTANONE	ug/m3	72.11	179.00	U		29.20	J	227.00	B	280.00
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	5.46	U		5.46	U	2.40	U	2.40
79-01-6	TRICHLOROETHENE	ug/m3	131.4	570.00	U		661.00	U	312.00	U	21000.00
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	6.87	U		6.87	U	1.65	U	1.65
80-62-6	Methyl Methacrylate	ug/m3	100.117	4.09	U		4.09	U	2.58	U	2.58
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8	10.70	U		10.70	U	28.80	J	2.35
95-47-6	O-XYLENE	ug/m3	106.2	4.34	U		4.34	U	5.21	J	182.00
95-49-8	2-Chlorotoluene	ug/m3	126.58	5.18	U		5.18	U	1.97	UJ	1.97
95-50-1	1,2-DICHLOROETHANE	ug/m3	147	6.01	U		6.01	U	1.32	U	1.32
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	4.92	U		4.92	U	1.18	U	1.18

Notes:  
 U - undefined ug/m3 - micrograms per cubic meter  
 SV - Soil Vapor J - estimated  
 DP - Direct Push ID - Identification  
 N - presumptive evidence of a compound

**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	Sample Date	Boring Location	130043B-DP02-AA	130043B-DP02-SD25	130043B-DP02-SV08	130043B-DP02-SV25	130043B-DP02-SV45
							03/11/2008	03/11/2008	03/11/2008	03/11/2008	03/11/2008
							B-DP02	B-DP02	B-DP02	B-DP02	B-DP02
100-41-4	Ethylbenzene	ug/m3	106.2	6.95				43.00	17.40 J	47.80	565.00 D
100-42-5	Styrene	ug/m3	104.1	2.13 U				2.64 UJ	2.64 UJ	2.64 UJ	2.64 UJ
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	2.27 U				2.27 U	2.27 U	2.27 U	2.27 U
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	2.27 U				2.59 U	2.59 U	2.59 U	2.59 U
106-46-7	1,4-Dichlorobenzene	ug/m3	147	3.01 U				1.50 U	1.50 U	6.01 J	1.50 U
106-93-4	1,2-Dibromoethane	ug/m3	187.9	3.84 U				9.99 U	9.99 U	9.99 U	9.99 U
106-99-0	1,3-Butadiene	ug/m3	54.09	1.11 U				0.80 U	0.80 U	0.80 U	0.80 U
107-05-1	Allyl Chloride	ug/m3	76.53	1.57 U				1.91 U	1.91 U	1.91 U	1.91 U
107-06-2	1,2-Dichloroethane	ug/m3	98.96	2.02 U				2.02 U	2.02 U	2.02 U	2.02 U
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	0.82 J				2.05 U	2.05 U	2.05 U	2.05 U
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	2.46 U				1.72 U	5.90 J	7.37 J	1.72 U
108-88-3	Toluene	ug/m3	92.14	10.20				71.60	75.40	71.60	41.50
108-90-7	Chlorobenzene	ug/m3	112.6	2.30 U				1.20 U	1.20 U	1.20 U	1.20 U
109-99-9	Tetrahydrofuran	ug/m3	154	3.15 U				5.29 U	5.29 U	5.29 U	35.30
110-54-3	Hexane	ug/m3	86.17	1.76 UJ				0.92 U	0.92 U	0.92 U	0.92 U
110-82-7	CYCLOHEXANE	ug/m3	84.16	1.72 U				0.41 U	0.41 U	0.41 U	0.41 U
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	3.71 U				17.80 J	16.30 J	24.50 J	30.40 J
123-91-1	1,4-Dioxane	ug/m3	133	2.72 U				2.50 U	2.50 U	2.50 U	2.50 U
124-48-1	Dibromochloromethane	ug/m3	208.3	4.26 U				2.22 U	2.22 U	2.22 U	2.22 U
126777-61-2	m/p-Xylene	ug/m3	106.2	22.60				126.00	60.80	139.00	1610.00 D
127-18-4	Tetrachloroethene	ug/m3	165.8	3.39 U				570.00	183.00	583.00	461.00
142-82-5	n-Heptane	ug/m3	100.2	0.41 J				8.20 J	16.00 J	10.70 J	10.70 J
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	1.98 U				9.91 J	1.39 U	12.30 J	10.70 J
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	1.98 U				1.23 U	1.23 U	1.23 U	1.23 U
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	1.80 U				0.61 U	0.61 U	0.61 U	0.61 U
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	0.93 J				1.17 U	6.54 J	1.17 U	1.17 U
541-73-1	1,3-DICHLOROETHENE	ug/m3	147	3.01 U				1.02 U	1.02 U	6.61 J	1.02 U
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	0.25 U				1.07 U	1.07 U	4.40	1.07 U
593-60-2	Bromoethene	ug/m3	106.9	2.19 U				1.05 U	1.05 U	1.05 U	1.05 U
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	2.46 U				4.92 J	6.88 J	7.87 J	1.28 UJ
67-64-1	ACETONE	ug/m3	58.08	11.20 U				1730.00 DB	1020.00 DB	1590.00 DB	121.00 B
67-66-3	CHLOROFORM	ug/m3	119.4	2.44 U				5.86 J	1.51 U	8.79 J	5.86 J
71-43-2	BENZENE	ug/m3	78.11	1.60				7.99 J	12.80 J	10.50 J	6.07 J
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	2.73 U				300.00	21.80 J	295.00	311.00
74-83-9	BROMOMETHANE	ug/m3	94.94	1.94 U				0.93 U	0.93 U	0.93 U	0.93 U
74-87-3	CHLOROMETHANE	ug/m3	50.49	1.24 J				0.52 U	0.52 U	2.07 J	0.52 U
75-00-3	CHLOROETHANE	ug/m3	64.52	1.32 U				0.45 U	0.45 U	0.45 U	0.45 U
75-01-4	VINYL CHLORIDE	ug/m3	62.5	1.28 U				0.61 U	0.61 U	0.61 U	0.61 U
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	3.13 J				14.20 J	4.52 J	15.60 J	14.20 J
75-15-0	CARBON DISULFIDE	ug/m3	76.14	1.56 U				0.47 U	0.47 U	0.47 U	0.47 U
75-25-2	BROMOFORM	ug/m3	252.8	5.17 U				1.55 U	1.55 U	1.55 U	1.55 U
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	3.35 U				3.35 U	3.35 U	3.35 U	3.35 U
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	2.02 U				0.97 U	0.97 U	7.29 J	5.26 J
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	1.98 U				0.99 U	0.99 U	4.76 J	0.99 U
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	1.52 U				5.76 J	4.55 J	7.58 J	4.55 J
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4	1.69 J				61.80	5.62 J	56.20	73.10
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	31.60 J				7.42 J	6.43 J	10.90 J	8.41 J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4	3.83 U				7.66 J	1.99 U	11.50 J	9.20 J
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9	3.49 U				1.54 U	1.54 U	1.54 U	1.54 U
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	2.31 U				2.22 U	2.22 U	2.22 U	2.22 U
78-93-3	2-BUTANONE	ug/m3	72.11	2.65 J				29.50 B	26.50 B	32.40 B	383.00 B
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	2.73 U				2.40 U	2.40 U	2.40 U	2.40 U
79-01-6	TRICHLOROETHENE	ug/m3	131.4	0.25 U				2690.00 D	102.00	2530.00 D	1070.00 D
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	3.43 U				1.65 U	1.65 U	1.65 U	1.65 U
80-62-6	Methyl Methacrylate	ug/m3	100.117	2.05 U				2.58 U	2.58 U	2.58 U	2.58 U
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8	5.33 U				36.30 J	39.50 J	48.00 J	50.10 J
95-47-6	O-XYLENE	ug/m3	106.2	4.34				31.30	17.80 J	36.10	365.00 D
95-49-8	2-Chlorotoluene	ug/m3	126.58	2.59 U				1.97 U	1.97 U	5.18 J	1.97 U
95-50-1	1,2-DICHLOROETHENE	ug/m3	147	3.01 U				1.32 U	1.32 U	7.82 J	1.32 U
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	0.98 J				29.50	28.00	35.40	1.18 U

Notes:  
U - undefined ug/m3 - micrograms per cubic meter  
SV - Soil Vapor J - estimated  
DP - Direct Push ID - Identification  
N - presumptive evidence of a compound

**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	Sample Date	Boring Location	130043B-DP03-SV08	130043B-DP03-SV25	130043B-DP03-SV45	130043B-DP04-AA	130043B-DP04-SV08		
				03/11/2008	03/11/2008	03/11/2008	03/12/2008	03/12/2008					
				B-DP03	B-DP03	B-DP03	B-DP04	B-DP04	B-DP04	B-DP04	B-DP04		
100-41-4	Ethylbenzene	ug/m3	106.2	0.78	U		25.60	29.50		0.43	J	3.47	J
100-42-5	Styrene	ug/m3	104.1	2.64	UJ		2.64	2.64	UJ	0.26	UJ	2.13	U
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	2.27	U		2.27	2.27	U	0.23	U	2.27	U
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	2.59	U		2.59	2.59	U	0.26	U	2.27	U
106-46-7	1,4-Dichlorobenzene	ug/m3	147	1.50	U		1.50	1.50	U	0.15	U	3.01	U
106-93-4	1,2-Dibromoethane	ug/m3	187.9	9.99	U		9.99	9.99	U	1.00	U	3.84	U
106-99-0	1,3-Butadiene	ug/m3	54.09	0.80	U		0.80	0.80	U	0.08	U	1.11	U
107-05-1	Allyl Chloride	ug/m3	76.53	1.91	U		1.91	1.91	U	0.63	J	1.57	U
107-06-2	1,2-Dichloroethane	ug/m3	98.96	2.02	U		2.02	2.02	U	0.40	J	2.02	U
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	2.05	U		2.05	2.05	U	0.20	U	2.05	U
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	1.72	U		1.72	1.72	UJ	0.17	U	2.46	U
108-88-3	Toluene	ug/m3	92.14	1.81	U		56.50	52.80		1.51	J	9.80	J
108-90-7	Chlorobenzene	ug/m3	112.6	1.20	U		1.20	1.20	U	0.46	J	2.30	U
109-99-9	Tetrahydrofuran	ug/m3	154	5.29	U		5.29	8.82	J	0.53	U	8.19	J
110-54-3	Hexane	ug/m3	86.17	0.92	U		0.92	0.92	U	0.09	U	1.76	UJ
110-82-7	CYCLOHEXANE	ug/m3	84.16	0.41	U		0.41	0.41	U	0.04	U	1.72	U
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	2.60	U		2.60	2.60	U	0.26	U	3.71	U
123-91-1	1,4-Dioxane	ug/m3	133	2.50	U		2.50	2.50	U	0.25	U	2.72	U
124-48-1	Dibromochloromethane	ug/m3	208.3	2.22	U		2.22	2.22	U	0.22	U	4.26	U
126777-61-2	m/p-Xylene	ug/m3	106.2	1.87	U		113.00	78.20		1.30	J	9.56	J
127-18-4	Tetrachloroethene	ug/m3	165.8	11.50	J		373.00	190.00		1.36	J	1560.00	JD
142-82-5	n-Heptane	ug/m3	100.2	0.98	U		6.15	11.50	J	0.41	J	6.97	J
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	17.40	J		27.40	5.55	J	0.40	J	396.00	JD
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	1.23	U		1.23	1.23	U	0.79	J	16.30	J
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	0.61	U		5.77	0.61	U	0.36	J	1.80	UJ
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	1.17	U		1.17	1.17	U	0.47	J	2.34	U
541-73-1	1,3-DICHLOROETHENE	ug/m3	147	1.02	U		1.02	1.02	U	0.10	U	3.01	U
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	1.07	U		1.07	1.07	U	1.32		0.25	U
593-60-2	Bromoethene	ug/m3	106.9	1.05	U		1.05	1.05	U	0.87	J	2.19	U
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	1.28	UJ		1.28	1.28	UJ	0.13	UJ	2.46	U
67-64-1	ACETONE	ug/m3	58.08	2380.00	DB		1620.00	92.60	B	7.13	U	333.00	JDB
67-66-3	CHLOROFORM	ug/m3	119.4	1.51	U		1.51	1.51	U	0.98	J	3.91	J
71-43-2	BENZENE	ug/m3	78.11	1.41	U		7.67	9.90	J	0.96	J	3.83	J
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	54.60			175.00	52.90		1.09	J	115.00	JD
74-83-9	BROMOMETHANE	ug/m3	94.94	0.93	U		0.93	0.93	U	0.78	J	1.94	U
74-87-3	CHLOROMETHANE	ug/m3	50.49	0.52	U		0.52	22.70		1.65		1.03	U
75-00-3	CHLOROETHANE	ug/m3	64.52	0.45	U		0.45	0.45	U	0.53	J	1.32	U
75-01-4	VINYL CHLORIDE	ug/m3	62.5	0.61	U		0.61	0.61	U	0.26	J	1.28	U
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	26.10			21.50	13.20	J	1.74	J	8.34	J
75-15-0	CARBON DISULFIDE	ug/m3	76.14	0.47	U		0.47	0.47	U	0.31	J	6.23	J
75-25-2	BROMOFORM	ug/m3	252.8	1.55	U		1.55	1.55	U	0.16	U	5.17	U
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	3.35	U		3.35	3.35	U	0.67	J	3.35	U
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	0.97	U		0.97	0.97	U	0.81	J	4.86	J
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	0.99	U		0.99	0.99	U	0.40	J	6.74	J
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	3.33	J		7.58	2.39	U	0.24	U	1.52	U
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4	107.00			78.70	19.70	J	2.81	J	169.00	JD
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	11.40	J		5.44	5.44	J	3.46		3.46	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4	1.99	U		1.99	1.99	U	2.30	J	3.07	J
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9	1.54	U		1.54	1.54	U	1.40	J	3.49	U
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	2.22	U		2.22	2.22	U	0.46	J	2.31	U
78-93-3	2-BUTANONE	ug/m3	72.11	18.00	B		28.90	209.00	B	1.47	U	472.00	JD
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	2.40	U		2.40	2.40	U	0.24	U	2.73	U
79-01-6	TRICHLOROETHENE	ug/m3	131.4	39.20			752.00	279.00		0.59		5370.00	EDJ
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	1.65	U		1.65	1.65	U	0.69	J	3.43	U
80-62-6	Methyl Methacrylate	ug/m3	100.117	2.58	U		2.58	2.58	U	0.26	U	2.05	U
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8	34.10	J		2.35	2.35	U	0.23	U	5.33	U
95-47-6	O-XYLENE	ug/m3	106.2	1.04	U		26.50	18.20	J	0.43	J	2.17	U
95-49-8	2-Chlorotoluene	ug/m3	126.58	1.97	U		1.97	1.97	UJ	0.20	U	2.59	U
95-50-1	1,2-DICHLOROETHENE	ug/m3	147	1.32	U		1.32	1.32	U	0.13	U	3.01	U
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	21.60	J		1.18	1.18	U	1.97	J	1.47	J

Notes:  
U - undefined ug/m3 - micrograms per cubic meter  
SV - Soil Vapor J - estimated  
DP - Direct Pust ID - Identification  
N - presumptive evidence of a compound

**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	Sample Date	Boring Location	130043B-DP04-SV25	130043B-DP04-SV45	130043B-DP05-SV08	130043B-DP05-SV25	130043B-DP05-SV45
							03/12/2008	03/12/2008	03/11/2008	03/11/2008	03/11/2008
							B-DP04	B-DP04	A-DP05	B-DP05	B-DP05
100-41-4	Ethylbenzene	ug/m3	106.2	5.65				2.17	12.60 J	16.10 J	7.38 J
100-42-5	Styrene	ug/m3	104.1	2.13 U				2.13 U	2.64 UJ	2.64 UJ	0.26 UJ
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	2.27 U				2.27 U	2.27 U	2.27 U	0.23 U
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	2.27 U				2.27 U	2.59 U	2.59 U	0.26 U
106-46-7	1,4-Dichlorobenzene	ug/m3	147	3.01 U				3.01 U	1.50 U	1.50 U	0.15 UJ
106-93-4	1,2-Dibromoethane	ug/m3	187.9	3.84 U				3.84 U	9.99 U	9.99 U	1.00 UJ
106-99-0	1,3-Butadiene	ug/m3	54.09	1.11 U				1.11 U	0.80 U	0.80 U	0.08 U
107-05-1	Allyl Chloride	ug/m3	76.53	1.57 U				1.57 U	1.91 U	1.91 U	0.19 U
107-06-2	1,2-Dichloroethane	ug/m3	98.96	2.02 U				2.02 U	2.02 U	2.02 U	0.20 U
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	2.05 U				2.05 U	2.05 U	2.05 U	0.20 U
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	2.46 U				2.46 U	1.72 U	1.72 UJ	0.98 J
108-88-3	Toluene	ug/m3	92.14	7.16				8.29	45.20	45.20	64.10 JD
108-90-7	Chlorobenzene	ug/m3	112.6	2.30 U				2.30 U	1.20 U	1.20 U	0.12 UJ
109-99-9	Tetrahydrofuran	ug/m3	154	3.15 U				69.30	5.29 U	26.50 J	46.60
110-54-3	Hexane	ug/m3	86.17	1.76 UJ				1.76 UJ	0.92 U	0.92 U	0.09 U
110-82-7	CYCLOHEXANE	ug/m3	84.16	1.72 U				1.72 U	0.41 U	0.41 U	0.04 U
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	3.71 U				3.71 U	26.70 J	16.30 J	0.26 UJ
123-91-1	1,4-Dioxane	ug/m3	133	2.72 U				2.72 U	2.50 U	2.50 U	0.25 U
124-48-1	Dibromochloromethane	ug/m3	208.3	4.26 U				4.26 U	2.22 U	2.22 U	0.22 UJ
126777-61-2	m/p-Xylene	ug/m3	106.2	17.40				6.52	40.40	47.80	26.10 J
127-18-4	Tetrachloroethene	ug/m3	165.8	3.39 U				746.00 JD	2440.00 D	5700.00 D	12200.00 D
142-82-5	n-Heptane	ug/m3	100.2	0.82 J				5.74 J	9.43 J	6.56 J	9.43
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	1.98 U				115.00 JD	1.39 U	6.74 J	15.90
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	1.98 U				1.59 J	1.23 U	1.23 U	0.12 U
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	1.80 U				34.60 J	0.61 U	0.61 U	0.06 U
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	0.47 J				2.34 U	1.17 U	1.17 U	0.12 U
541-73-1	1,3-DICHLOROETHANE	ug/m3	147	3.01 U				3.01 U	1.02 U	1.02 U	0.10 UJ
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	0.25 U				0.25 U	1.07 U	1.07 U	0.11 U
593-60-2	Bromoethene	ug/m3	106.9	2.19 U				2.19 U	1.05 U	1.05 U	0.10 U
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	2.46 U				2.46 U	1.28 UJ	1.28 UJ	1.47 J
67-84-1	ACETONE	ug/m3	58.08	17.10 B				784.00 JDB	83.10 B	87.90 B	356.00 DB
67-66-3	CHLOROFORM	ug/m3	119.4	2.44 U				2.93 J	1.51 U	1.51 U	3.42
71-43-2	BENZENE	ug/m3	78.11	1.60 J				2.88	8.31 J	7.03 J	7.99
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	2.73 U				600.00 JD	42.00	120.00	344.00 D
74-83-9	BROMOMETHANE	ug/m3	94.94	1.94 U				1.94 U	0.93 U	0.93 U	0.09 U
74-87-3	CHLOROMETHANE	ug/m3	50.49	2.89 J				1.03 U	0.52 U	0.52 U	0.41 J
75-00-3	CHLOROETHANE	ug/m3	64.52	1.32 U				1.32 U	0.45 U	0.45 U	0.04 U
75-01-4	VINYL CHLORIDE	ug/m3	62.5	1.28 U				1.28 U	0.61 U	0.61 U	0.06 U
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	1.74 U				1.74 U	9.38 J	11.80 J	0.69 J
75-15-0	CARBON DISULFIDE	ug/m3	76.14	1.56 U				1.56 U	0.47 U	0.47 U	1.87
75-25-2	BROMOFORM	ug/m3	252.8	5.17 U				5.17 U	1.55 U	1.55 U	0.16 UJ
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	3.35 U				3.35 U	3.35 U	3.35 U	0.33 U
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	2.02 U				2.02 U	0.97 U	6.48 J	8.90
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	1.98 U				1.98 U	0.99 U	0.99 U	0.10 U
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	1.52 U				1.52 U	2.39 U	4.85 J	2.43
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4	1.12 J				444.00 JD	10.10 J	24.20 J	18.00
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	2.97 J				2.47 U	0.84 U	4.94 J	3.46
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4	3.83 U				3.07 J	84.30	376.00	996.00 D
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9	3.49 U				3.49 U	1.54 U	1.54 U	0.15 U
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	2.31 U				2.31 U	2.22 U	2.22 U	0.22 U
78-93-3	2-BUTANONE	ug/m3	72.11	0.88 J				1270.00 JD	201.00 B	201.00 B	855.00 DB
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	2.73 U				2.73 U	2.40 U	2.40 U	0.24 U
79-01-6	TRICHLOROETHENE	ug/m3	131.4	0.25 U				2200.00 JD	806.00	1770.00 D	3760.00 D
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	3.43 U				3.43 U	1.65 U	1.65 U	0.16 UJ
80-62-6	Methyl Methacrylate	ug/m3	100.117	2.05 U				2.05 U	2.58 U	2.58 U	0.26 UJ
87-88-3	HEXACHLOROBUTADIENE	ug/m3	260.8	5.33 U				5.33 U	48.00 J	24.50 J	0.23 UJ
95-47-6	O-XYLENE	ug/m3	106.2	3.47				2.17 U	12.20 J	15.20 J	6.08 J
95-49-8	2-Chlorotoluene	ug/m3	126.58	2.59 U				2.59 U	1.97 U	1.97 UJ	0.20 UJ
95-50-1	1,2-DICHLOROETHANE	ug/m3	147	3.01 U				3.01 U	1.32 U	1.32 U	0.13 UJ
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	0.98 U				2.46 U	21.60 J	1.18 U	1.97 J

Notes:

- U - undefined ug/m3 - micrograms per cubic meter
- SV - Soil Vapor J - estimated
- DP - Direct Pust ID - Identification
- N - presumptive evidence of a compound

**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	Sample Date	Boring Location	130043C-DP01-SV08	130043C-DP01-SV25	130043C-DP01-SV45	130043C-DP02-SV08	130043C-DP02-SV25			
				03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008					
				C-DP01	C-DP01	C-DP01	C-DP02	C-DP02						
100-41-4	Ethylbenzene	ug/m3	106.2	9.12	J		9.56	J	14.80	J	12.20	J	9.56	J
100-42-5	Styrene	ug/m3	104.1	21.30	U		21.30	U	21.30	U	21.30	U	21.30	U
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	22.70	U		22.70	U	22.70	U	22.70	U	22.70	U
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	22.70	U		22.70	U	22.70	U	22.70	U	22.70	U
106-46-7	1,4-Dichlorobenzene	ug/m3	147	30.10	U		30.10	U	30.10	U	30.10	U	30.10	U
106-93-4	1,2-Dibromoethane	ug/m3	187.9	38.40	U		38.40	U	38.40	U	38.40	U	38.40	U
106-99-0	1,3-Butadiene	ug/m3	54.09	11.10	U		11.10	U	11.10	U	11.10	U	11.10	U
107-05-1	Allyl Chloride	ug/m3	76.53	15.70	U		15.70	U	15.70	U	15.70	U	15.70	U
107-06-2	1,2-Dichloroethane	ug/m3	98.96	20.20	U		20.20	U	20.20	U	20.20	U	20.20	U
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	20.50	U		20.50	U	5.33	J	20.50	U	20.50	U
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	24.60	U		24.60	U	24.60	U	24.60	U	24.60	U
108-88-3	Toluene	ug/m3	92.14	45.20	U		45.20	U	52.80	J	60.30	J	45.20	J
108-90-7	Chlorobenzene	ug/m3	112.6	23.00	U		23.00	U	23.00	U	23.00	U	23.00	U
109-99-9	Tetrahydrofuran	ug/m3	154	31.50	U		31.50	U	31.50	U	31.50	U	31.50	U
110-54-3	Hexane	ug/m3	86.17	17.60	U		17.60	U	17.60	U	17.60	U	17.60	U
110-82-7	CYCLOHEXANE	ug/m3	84.16	17.20	U		17.20	U	17.20	U	17.20	U	17.20	U
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	37.10	U		37.10	U	37.10	U	37.10	U	37.10	U
123-91-1	1,4-Dioxane	ug/m3	133	27.20	U		27.20	U	27.20	U	27.20	U	27.20	U
124-48-1	Dibromochloromethane	ug/m3	208.3	42.60	U		42.60	U	42.60	U	42.60	U	42.60	U
126777-61-2	m/p-Xylene	ug/m3	106.2	33.40	J		32.60	J	52.10	J	39.10	J	32.60	J
127-18-4	Tetrachloroethene	ug/m3	165.8	129.00	J		149.00	J	163.00	J	278.00	J	407.00	J
142-82-5	n-Heptane	ug/m3	100.2	13.90	J		16.80	J	17.60	J	36.50	J	15.20	J
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U		19.80	U	19.80	U	19.80	U	19.80	U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U		19.80	U	19.80	U	19.80	U	19.80	U
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	18.00	U		14.40	J	18.00	U	18.00	U	18.00	U
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	31.80	U		23.40	U	23.40	U	23.40	U	23.40	U
541-73-1	1,3-DICHLOROETHENE	ug/m3	147	30.10	U		30.10	U	30.10	U	30.10	U	30.10	U
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	2.52	U		2.52	U	2.52	U	2.52	U	2.52	U
593-60-2	Bromoethene	ug/m3	106.9	21.90	U		21.90	U	21.90	U	21.90	U	21.90	U
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	24.60	U		24.60	U	24.60	U	24.60	U	24.60	U
67-64-1	ACETONE	ug/m3	58.08	1210.00	DB		1310.00	DB	1970.00	DB	1160.00	DB	1120.00	DB
67-66-3	CHLOROFORM	ug/m3	119.4	24.40	U		24.40	U	24.40	U	24.40	U	24.40	U
71-43-2	BENZENE	ug/m3	78.11	8.63	J		8.31	J	14.40	J	18.20	J	6.39	J
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	7.09	J		6.00	J	5.46	J	453.00	J	371.00	J
74-83-9	BROMOMETHANE	ug/m3	94.94	19.40	U		19.40	U	19.40	U	19.40	U	19.40	U
74-87-3	CHLOROMETHANE	ug/m3	50.49	10.30	U		10.30	U	10.30	U	10.30	U	10.30	U
75-00-3	CHLOROETHANE	ug/m3	64.52	13.20	U		13.20	U	13.20	U	13.20	U	13.20	U
75-01-4	VINYL CHLORIDE	ug/m3	62.5	12.80	U		12.80	U	12.80	U	12.80	U	12.80	U
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	8.34	J		17.00	J	10.80	J	660.00	D	695.00	D
75-15-0	CARBON DISULFIDE	ug/m3	76.14	15.60	U		15.60	U	15.60	U	15.60	U	15.60	U
75-25-2	BROMOFORM	ug/m3	252.8	51.70	U		51.70	U	51.70	U	51.70	U	51.70	U
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	33.50	U		33.50	U	33.50	U	33.50	U	33.50	U
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	20.20	U		20.20	U	20.20	U	20.20	U	20.20	U
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	19.80	U		19.80	U	19.80	U	19.80	U	19.80	U
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	15.20	U		15.20	U	15.20	U	15.20	U	15.20	U
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4	28.10	U		28.10	U	28.10	U	28.10	U	28.10	U
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	24.70	U		5.93	J	24.70	U	24.70	U	24.70	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4	38.30	U		38.30	U	38.30	U	38.30	U	38.30	U
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9	34.90	U		34.90	U	34.90	U	34.90	U	34.90	U
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	23.10	U		23.10	U	23.10	U	23.10	U	23.10	U
78-93-3	2-BUTANONE	ug/m3	72.11	29.20	J		21.20	J	91.40	J	29.50	J	18.90	J
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	27.30	U		27.30	U	27.30	U	27.30	U	27.30	U
79-01-6	TRICHLOROETHENE	ug/m3	131.4	2.47	U		2.47	U	2.47	U	2.47	U	2.47	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	34.30	U		34.30	U	34.30	U	34.30	U	34.30	U
80-62-6	Methyl Methacrylate	ug/m3	100.117	20.50	U		20.50	U	20.50	U	20.50	U	20.50	U
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8	53.30	U		53.30	U	53.30	U	53.30	U	53.30	U
95-47-6	O-XYLENE	ug/m3	106.2	9.99	J		8.69	J	13.90	J	9.99	J	7.38	J
95-49-8	2-Chlorotoluene	ug/m3	126.58	25.90	U		25.90	U	25.90	U	25.90	U	25.90	U
95-50-1	1,2-DICHLOROETHENE	ug/m3	147	30.10	U		30.10	U	30.10	U	30.10	U	30.10	U
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	11.80	J		8.36	J	13.80	J	11.30	J	10.30	J

Notes:

- U - undefined ug/m3 - micrograms per cubic meter
- SV - Soil Vapor J - estimated
- DP - Direct Pust ID - Identification
- N - presumptive evidence of a compound

**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	Sample Date	Boring Location	130043C-DP02-SV45	130043C-DP03-AA	130043C-DP03-SV08	130043C-DP03-SV25	130043C-DP03-SV45			
				03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008	03/21/2008				
				C-DP02	C-DP03	C-DP03	C-DP03	C-DP03	C-DP03	C-DP03				
100-41-4	Ethylbenzene	ug/m3	106.2	13.90	J		0.87	J	73.80	J	9.56	J	11.70	J
100-42-5	Styrene	ug/m3	104.1	21.30	U		0.43	J	21.30	U	21.30	U	21.30	U
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	22.70	U		2.27	U	22.70	U	22.70	U	22.70	U
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	22.70	U		2.27	U	22.70	U	22.70	U	22.70	U
106-46-7	1,4-Dichlorobenzene	ug/m3	147	30.10	U		3.01	U	30.10	U	30.10	U	30.10	U
106-93-4	1,2-Dibromoethane	ug/m3	187.9	38.40	U		3.84	U	38.40	U	38.40	U	38.40	U
106-99-0	1,3-Butadiene	ug/m3	54.09	11.10	U		1.11	U	11.10	U	11.10	U	11.10	U
107-05-1	Allyl Chloride	ug/m3	76.53	15.70	U		1.57	U	15.70	U	15.70	U	15.70	U
107-06-2	1,2-Dichloroethane	ug/m3	98.96	20.20	U		2.02	U	20.20	U	20.20	U	20.20	U
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	20.50	U		2.05	U	20.50	U	20.50	U	20.50	U
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	24.60	U		2.46	U	24.60	U	24.60	U	24.60	U
108-88-3	Toluene	ug/m3	92.14	64.10	J		6.78	J	35.00	J	41.50	J	49.00	J
108-90-7	Chlorobenzene	ug/m3	112.6	23.00	U		2.30	U	23.00	U	23.00	U	23.00	U
109-99-9	Tetrahydrofuran	ug/m3	154	31.50	U		3.15	U	31.50	U	31.50	U	31.50	U
110-54-3	Hexane	ug/m3	86.17	17.60	U		1.76	U	17.60	U	17.60	U	17.60	U
110-82-7	CYCLOHEXANE	ug/m3	84.16	17.20	U		1.72	U	17.20	U	17.20	U	17.20	U
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	37.10	U		3.71	U	37.10	U	37.10	U	37.10	U
123-91-1	1,4-Dioxane	ug/m3	133	27.20	U		2.72	U	27.20	U	27.20	U	27.20	U
124-48-1	Dibromochloromethane	ug/m3	208.3	42.60	U		4.26	U	42.60	U	42.60	U	42.60	U
126777-61-2	m/p-Xylene	ug/m3	106.2	52.10	J		1.74	J	217.00	J	29.50	J	43.40	J
127-18-4	Tetrachloroethene	ug/m3	165.8	542.00	J		0.68	J	278.00	J	420.00	J	604.00	J
142-82-5	n-Heptane	ug/m3	100.2	17.20	J		0.41	J	16.40	J	14.80	J	13.50	J
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U		1.98	U	19.80	U	19.80	U	19.80	U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U		1.98	U	19.80	U	19.80	U	19.80	U
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	18.00	U		1.80	U	18.00	U	18.00	U	18.00	U
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	23.40	U		2.34	U	23.40	U	23.40	U	23.40	U
541-73-1	1,3-DICHLOROETHENE	ug/m3	147	30.10	U		3.01	U	30.10	U	30.10	U	30.10	U
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	2.52	U		0.50	U	2.52	U	2.52	U	2.52	U
593-60-2	Bromoethene	ug/m3	106.9	21.90	U		2.19	U	21.90	U	21.90	U	21.90	U
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	24.60	U		2.46	U	24.60	U	24.60	U	24.60	U
67-64-1	ACETONE	ug/m3	58.08	903.00	DB		6.18	B	1120.00	DB	1520.00	DB	1140.00	DB
67-66-3	CHLOROFORM	ug/m3	119.4	24.40	U		2.44	U	24.40	U	24.40	U	24.40	U
71-43-2	BENZENE	ug/m3	78.11	9.26	J		0.64	J	6.71	J	8.63	J	7.35	J
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	349.00	U		2.73	U	207.00	J	322.00	J	349.00	J
74-83-9	BROMOMETHANE	ug/m3	94.94	19.40	U		1.94	U	19.40	U	19.40	U	19.40	U
74-87-3	CHLOROMETHANE	ug/m3	50.49	10.30	U		1.24	U	10.30	U	10.30	U	10.30	U
75-00-3	CHLOROETHANE	ug/m3	64.52	13.20	U		1.32	U	13.20	U	13.20	U	13.20	U
75-01-4	VINYL CHLORIDE	ug/m3	62.5	12.80	U		1.28	U	12.80	U	12.80	U	12.80	U
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	177.00	U		2.08	U	11.80	J	7.99	J	6.25	J
75-15-0	CARBON DISULFIDE	ug/m3	76.14	15.60	U		1.56	U	15.60	U	15.60	U	15.60	U
75-25-2	BROMOFORM	ug/m3	252.8	51.70	U		5.17	U	51.70	U	51.70	U	51.70	U
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	33.50	U		3.35	U	33.50	U	33.50	U	33.50	U
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	4.05	J		2.02	U	5.26	J	6.48	J	6.07	J
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	19.80	U		1.98	U	19.80	U	19.80	U	19.80	U
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	15.20	U		1.52	U	15.20	U	15.20	U	15.20	U
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4	28.10	U		1.12	J	28.10	U	28.10	U	28.10	U
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	5.93	J		1.98	J	24.70	U	24.70	U	24.70	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4	38.30	U		3.83	U	38.30	U	38.30	U	38.30	U
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9	34.90	U		3.49	U	34.90	U	34.90	U	34.90	U
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	23.10	U		2.31	U	23.10	U	23.10	U	23.10	U
78-93-3	2-BUTANONE	ug/m3	72.11	24.80	J		1.47	J	19.80	J	28.60	J	32.40	J
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	27.30	U		2.73	U	27.30	U	27.30	U	27.30	U
79-01-6	TRICHLOROETHENE	ug/m3	131.4	2.47	U		0.25	U	2.47	U	2.47	U	2.47	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	34.30	U		3.43	U	34.30	U	34.30	U	34.30	U
80-62-6	Methyl Methacrylate	ug/m3	100.117	20.50	U		2.05	U	20.50	U	20.50	U	20.50	U
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8	53.30	U		5.33	U	53.30	U	53.30	U	53.30	U
95-47-6	O-XYLENE	ug/m3	106.2	13.00	J		0.43	J	47.80	J	7.38	J	11.30	J
95-49-8	2-Chlorotoluene	ug/m3	126.58	25.90	U		2.59	U	25.90	U	25.90	U	25.90	U
95-50-1	1,2-DICHLOROETHENE	ug/m3	147	30.10	U		3.01	U	30.10	U	30.10	U	30.10	U
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	12.30	J		2.46	U	8.85	J	10.80	J	11.30	J

Notes:

U - undefined ug/m3 - micrograms per cubic meter  
SV - Soil Vapor J - estimated  
DP - Direct Pust ID - Identification  
N - presumptive evidence of a compound



**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	Sample Date	Boring Location	130043C-DP04-SV08	130043C-DP04-SV08	130043C-DP04-SV25	130043C-DP04-SV45	130043C-DP05-AA			
				C-DP04	03/20/2008	C-DP04	03/20/2008	C-DP04	03/20/2008	F-DP04	03/20/2008	C-DP05		
100-41-4	Ethylbenzene	ug/m3	106.2	8.69	J		9.56	J	2.17	UJ	8.25	J	1.74	J
100-42-5	Styrene	ug/m3	104.1	21.30	U		21.30	UJ	2.13	UJ	21.30	U	2.98	J
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	22.70	U		22.70	UJ	2.27	U	22.70	U	9.08	U
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	22.70	U		22.70	UJ	2.27	U	22.70	U	9.08	U
106-46-7	1,4-Dichlorobenzene	ug/m3	147	30.10	U		30.10	UJ	3.01	UJ	30.10	U	12.00	U
106-93-4	1,2-Dibromoethane	ug/m3	187.9	38.40	U		38.40	UJ	3.84	UJ	38.40	U	15.40	U
106-99-0	1,3-Butadiene	ug/m3	54.09	11.10	U		11.10	U	1.11	UJ	11.10	U	4.42	U
107-05-1	Aliyl Chloride	ug/m3	76.53	15.70	U		15.70	U	1.57	U	15.70	U	6.26	U
107-06-2	1,2-Dichloroethane	ug/m3	98.96	20.20	U		20.20	UJ	2.02	U	20.20	U	2.43	J
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	20.50	U		20.50	UJ	2.05	U	20.50	U	8.20	U
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	4.92	J		4.92	J	2.46	UJ	24.60	U	9.83	U
108-88-3	Toluene	ug/m3	92.14	37.70	U		41.50	J	1.88	U	36.20	U	121.00	U
108-90-7	Chlorobenzene	ug/m3	112.6	23.00	U		23.00	UJ	2.30	UJ	23.00	U	9.21	U
109-99-9	Tetrahydrofuran	ug/m3	154	31.50	U		31.50	U	21.40	U	31.50	U	12.60	U
110-54-3	Hexane	ug/m3	86.17	17.60	U		17.60	U	1.76	U	17.60	U	7.05	U
110-82-7	CYCLOHEXANE	ug/m3	84.16	17.20	U		17.20	U	1.72	U	17.20	U	6.88	U
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	37.10	U		37.10	UJ	3.71	UJ	10.40	J	14.80	U
123-91-1	1,4-Dioxane	ug/m3	133	27.20	U		27.20	UJ	2.72	U	27.20	U	10.90	U
124-48-1	Dibromochloromethane	ug/m3	208.3	42.60	U		42.60	UJ	4.26	UJ	42.60	U	17.00	U
126777-61-2	m/p-Xylene	ug/m3	106.2	31.70	U		35.20	J	2.17	UJ	27.80	U	4.34	J
127-18-4	Tetrachloroethene	ug/m3	165.8	12200.00	D		13600.00	JD	2.71	J	2640.00	D	13.60	U
142-82-5	n-Heptane	ug/m3	100.2	6.56	J		7.38	J	2.05	U	9.84	J	4.51	J
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	5.95	J		5.55	J	1.98	U	19.80	U	7.93	U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U		19.80	U	1.98	U	19.80	U	7.93	U
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	18.00	U		18.00	U	1.80	U	18.00	U	7.21	U
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	23.40	U		23.40	UJ	2.34	U	23.40	U	2.34	J
541-73-1	1,3-DICHLOROETHENE	ug/m3	147	30.10	U		30.10	UJ	3.01	UJ	30.10	U	12.00	U
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	2.52	U		2.52	UJ	0.25	U	2.52	U	1.01	U
593-60-2	Bromoethene	ug/m3	106.9	21.90	U		21.90	U	2.19	U	21.90	U	8.74	U
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	24.60	U		24.60	UJ	2.46	UJ	24.60	U	9.83	U
67-64-1	ACETONE	ug/m3	58.08	150.00	B		228.00	B	164.00	DB	641.00	DB	59.40	B
67-66-3	CHLOROFORM	ug/m3	119.4	7.33	J		24.40	U	2.44	U	24.40	U	9.77	U
71-43-2	BENZENE	ug/m3	78.11	6.07	J		6.71	J	1.60	U	5.11	J	1.60	J
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	2560.00	D		2780.00	D	153.00	D	1640.00	D	10.90	U
74-83-9	BROMOMETHANE	ug/m3	94.94	19.40	U		19.40	U	1.94	U	19.40	U	7.77	U
74-87-3	CHLOROMETHANE	ug/m3	50.49	10.30	U		10.30	U	1.03	U	10.30	U	1.65	J
75-00-3	CHLOROETHANE	ug/m3	64.52	13.20	U		13.20	U	1.32	U	13.20	U	5.28	U
75-01-4	VINYL CHLORIDE	ug/m3	62.5	12.80	U		12.80	U	1.28	U	12.80	U	5.11	U
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	4.17	J		24.00	U	2.08	U	9.03	J	3.13	J
75-15-0	CARBON DISULFIDE	ug/m3	76.14	15.60	U		15.60	U	1.25	J	15.60	U	6.23	U
75-25-2	BROMOFORM	ug/m3	252.8	51.70	UJ		51.70	UJ	5.17	UJ	51.70	U	20.70	U
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	33.50	U		33.50	UJ	3.35	U	33.50	U	13.40	U
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	68.80	U		105.00	U	21.90	U	85.00	U	8.09	U
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	19.80	U		5.15	J	0.79	J	19.80	U	7.93	U
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	3.64	J		15.20	U	1.52	U	6.06	J	6.06	U
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4	28.10	U		28.10	U	1.12	J	28.10	U	11.20	U
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	24.70	U		24.70	U	2.47	J	24.70	U	2.47	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4	38.30	U		38.30	U	3.83	U	38.30	U	15.30	U
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9	34.90	U		34.90	U	3.49	U	34.90	U	14.00	U
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	23.10	U		23.10	UJ	2.31	U	23.10	U	9.24	U
78-93-3	2-BUTANONE	ug/m3	72.11	12.40	J		29.50	J	0.88	J	15.90	U	8.85	U
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	27.30	U		27.30	UJ	2.73	U	27.30	U	10.90	U
79-01-6	TRICHLOROETHENE	ug/m3	131.4	64.50	U		59.10	J	0.25	U	16.70	U	0.97	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	34.30	U		34.30	UJ	3.43	UJ	34.30	U	13.70	U
80-62-6	Methyl Methacrylate	ug/m3	100.117	20.50	U		20.50	UJ	2.05	UJ	20.50	U	8.19	U
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8	53.30	U		53.30	UJ	5.33	UJ	53.30	U	21.30	U
95-47-6	O-XYLENE	ug/m3	106.2	10.90	J		10.90	J	2.17	UJ	7.38	J	8.69	U
95-49-8	2-Chlorotoluene	ug/m3	126.58	25.90	U		25.90	UJ	2.59	UJ	25.90	U	10.40	U
95-50-1	1,2-DICHLOROETHENE	ug/m3	147	30.10	U		30.10	UJ	3.01	UJ	30.10	U	12.00	U
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	12.80	J		24.60	UJ	2.46	UJ	11.30	J	9.83	U

Notes:

- U - undefined ug/m3 - micrograms per cubic meter
- SV - Soil Vapor J - estimated
- DP - Direct Push ID - Identification
- N - presumptive evidence of a compound

**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	130043C-DP05-SV08		130043C-DP05-SV25		130043F-DP01-SV08		130043F-DP01-SV25		130043F-DP01-SV45	
				Sample ID	Sample Date	Sample ID	Sample Date	Sample ID	Sample Date	Sample ID	Sample Date	Sample ID	Sample Date
Boring Location				C-DP05		C-DP05		F-DP01		F-DP01		F-DP01	
100-41-4	Ethylbenzene	ug/m3	106.2	21.70	U	19.10	J	1.74	J	20.40	J	11.70	J
100-42-5	Styrene	ug/m3	104.1	21.30	U	21.30	UJ	2.13	U	21.30	U	21.30	U
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	22.70	U	22.70	U	2.27	U	22.70	U	22.70	U
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	22.70	U	22.70	U	2.27	U	22.70	U	22.70	U
106-46-7	1,4-Dichlorobenzene	ug/m3	147	30.10	U	30.10	U	3.01	U	30.10	U	30.10	U
106-93-4	1,2-Dibromoethane	ug/m3	187.9	38.40	U	38.40	U	3.84	U	38.40	U	38.40	U
106-99-0	1,3-Butadiene	ug/m3	54.09	11.10	U	11.10	UJ	1.11	U	11.10	U	11.10	U
107-05-1	Allyl Chloride	ug/m3	76.53	15.70	U	15.70	U	1.57	U	15.70	U	15.70	U
107-06-2	1,2-Dichloroethane	ug/m3	98.96	20.20	U	20.20	U	2.02	U	20.20	U	20.20	U
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	20.50	U	20.50	U	0.82	J	20.50	U	20.50	U
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	24.60	U	8.36	J	0.49	J	7.37	J	24.60	U
108-88-3	Toluene	ug/m3	92.14	196.00		132.00		5.65	J	52.80	J	37.70	J
108-90-7	Chlorobenzene	ug/m3	112.6	23.00	U	23.00	U	2.30	U	23.00	U	23.00	U
109-99-9	Tetrahydrofuran	ug/m3	154	31.50	U	31.50	U	1.26	J	31.50	U	31.50	U
110-54-3	Hexane	ug/m3	86.17	17.60	U	10.60	J	2.11	J	17.60	U	17.60	U
110-82-7	CYCLOHEXANE	ug/m3	84.16	17.20	U	17.20	U	0.69	J	4.13	J	7.57	J
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	37.10	U	37.10	U	3.71	U	37.10	U	37.10	U
123-91-1	1,4-Dioxane	ug/m3	133	27.20	U	27.20	U	2.72	U	7.62	J	7.62	J
124-48-1	Dibromochloromethane	ug/m3	208.3	42.60	U	42.60	U	4.26	U	42.60	U	42.60	U
126777-61-2	m/p-Xylene	ug/m3	106.2	21.70	U	36.50	J	5.65	J	47.80	J	24.30	J
127-18-4	Tetrachloroethene	ug/m3	165.8	33.90	U	3930.00	JD	2.03	J	210.00	J	231.00	J
142-82-5	n-Heptane	ug/m3	100.2	4.51	J	9.84	J	1.23	J	26.20	J	22.50	J
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U	4.76	J	1.98	U	19.80	U	19.80	U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U	19.80	U	1.98	U	19.80	U	19.80	U
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	18.00	U	18.00	U	1.80	U	18.00	U	18.00	U
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	23.40	U	23.40	U	0.47	J	23.40	U	23.40	U
541-73-1	1,3-DICHLOROETHENE	ug/m3	147	30.10	U	30.10	U	3.01	U	30.10	U	30.10	U
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	2.52	U	2.52	U	0.50	J	2.52	U	2.52	U
593-60-2	Bromoethene	ug/m3	106.9	21.90	U	21.90	U	2.19	U	21.90	U	21.90	U
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	24.60	U	4.92	J	0.49	J	24.60	U	24.60	U
67-64-1	ACETONE	ug/m3	58.08	109.00	B	162.00	B	42.80	JD	1470.00	JD	1500.00	JD
67-66-3	CHLOROFORM	ug/m3	119.4	24.40	U	5.37	J	2.44	U	24.40	U	24.40	U
71-43-2	BENZENE	ug/m3	78.11	16.00	U	11.50	J	1.28	J	8.31	J	8.31	J
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	27.30	U	2730.00	D	2.73	U	26.40	J	27.80	J
74-83-9	BROMOMETHANE	ug/m3	94.94	19.40	U	19.40	U	1.94	U	19.40	U	19.40	U
74-87-3	CHLOROMETHANE	ug/m3	50.49	10.30	U	10.30	U	2.07	J	10.30	U	10.30	U
75-00-3	CHLOROETHANE	ug/m3	64.52	13.20	U	13.20	U	1.32	U	13.20	U	13.20	U
75-01-4	VINYL CHLORIDE	ug/m3	62.5	12.80	U	12.80	U	1.28	U	12.80	U	12.80	U
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	3.47	J	12.20	J	5.91	J	3.82	J	19.80	J
75-15-0	CARBON DISULFIDE	ug/m3	76.14	15.60	U	15.60	U	1.56	U	15.60	U	15.60	U
75-25-2	BROMOFORM	ug/m3	252.8	51.70	U	51.70	U	5.17	U	51.70	U	51.70	U
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	33.50	U	33.50	U	3.35	U	33.50	U	33.50	U
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	20.20	U	328.00		2.02	U	20.20	U	20.20	U
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	19.80	U	6.74	J	1.98	U	19.80	U	19.80	U
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	15.20	U	6.97	J	0.91	J	12.10	J	8.79	J
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4	28.10	U	28.10	U	2.25	J	24.70	J	29.80	J
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	4.94	J	24.70	U	2.97	J	6.92	J	7.91	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4	38.30	U	38.30	U	0.77	J	38.30	U	38.30	U
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9	34.90	U	34.90	U	3.49	U	34.90	U	34.90	U
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	23.10	U	23.10	U	2.31	U	23.10	U	23.10	U
78-93-3	2-BUTANONE	ug/m3	72.11	14.70	J	10.60	J	2.95	J	13.00	J	10.90	J
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	27.30	U	27.30	U	2.73	U	27.30	U	27.30	U
79-01-6	TRICHLOROETHENE	ug/m3	131.4	2.47	U	44.10		0.54	J	10.70	J	14.00	J
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	34.30	U	34.30	U	3.43	U	34.30	U	34.30	U
80-62-6	Methyl Methacrylate	ug/m3	100.117	20.50	U	20.50	U	2.05	U	20.50	U	20.50	U
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8	53.30	U	53.30	U	5.33	U	53.30	U	53.30	U
95-47-6	O-XYLENE	ug/m3	106.2	21.70	U	21.70	J	1.74	J	11.30	J	6.52	J
95-49-8	2-Chlorotoluene	ug/m3	126.58	25.90	U	25.90	U	2.59	U	25.90	U	25.90	U
95-50-1	1,2-DICHLOROETHENE	ug/m3	147	30.10	U	30.10	U	3.01	U	30.10	U	30.10	U
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	24.60	U	32.00		1.97	J	16.20	J	24.60	U

Notes:

- U - undefined ug/m3 - micrograms per cubic meter
- SV - Soil Vapor J - estimated
- DP - Direct Pust ID - Identification
- N - presumptive evidence of a compound

**Table A-1  
Soil Vapor Analytical Results  
New Cassel Industrial Area  
North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Sample ID		130043F-DP02-AA		130043F-DP02-SV08		130043F-DP02-SV25		130043F-DP02-SV45		130043F-DP03-SD08	
			Molecular Weight	Sample Date	Boring Location	Sample Date	Boring Location	Sample Date	Boring Location	Sample Date	Boring Location	Sample Date	Boring Location	Sample Date
					03/04/2008	F-DP02	03/04/2008	F-DP02	03/04/2008	F-DP02	03/04/2008	F-DP02	03/07/2008	F-DP03
100-41-4	Ethylbenzene	ug/m3	106.2	0.87	J	23.50		24.80	J		40.40	J	21.70	U
100-42-5	Styrene	ug/m3	104.1	2.13	U	21.30	U	21.30	U		21.30	U	21.30	U
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	2.27	U	22.70	U	22.70	U		22.70	U	22.70	U
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	2.27	U	22.70	U	22.70	U		22.70	U	22.70	U
106-46-7	1,4-Dichlorobenzene	ug/m3	147	3.01	U	30.10	U	30.10	U		30.10	U	30.10	U
106-93-4	1,2-Dibromoethane	ug/m3	187.9	3.84	U	38.40	U	38.40	U		38.40	U	38.40	U
106-99-0	1,3-Butadiene	ug/m3	54.09	1.11	U	11.10	U	11.10	U		11.10	U	11.10	U
107-05-1	Allyl Chloride	ug/m3	76.53	1.57	U	15.70	U	15.70	U		15.70	U	15.70	U
107-06-2	1,2-Dichloroethane	ug/m3	98.96	2.02	U	20.20	U	20.20	U		20.20	U	20.20	U
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	0.41	J	20.50	U	20.50	U		20.50	U	20.50	U
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	2.46	U	7.37	J	7.37	J		9.34	J	24.60	U
108-88-3	Toluene	ug/m3	92.14	4.52	J	60.30	U	52.80	J		113.00	J	5.65	J
108-90-7	Chlorobenzene	ug/m3	112.6	2.30	U	23.00	U	23.00	U		23.00	U	23.00	U
109-99-9	Tetrahydrofuran	ug/m3	154	3.15	U	31.50	U	31.50	U		31.50	U	31.50	U
110-54-3	Hexane	ug/m3	86.17	1.76	U	13.70	J	17.60	U		17.60	U	17.60	U
110-82-7	CYCLOHEXANE	ug/m3	84.16	1.72	U	17.20	U	3.10	J		13.80	J	17.20	U
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	3.71	U	37.10	U	37.10	U		37.10	U	37.10	U
123-91-1	1,4-Dioxane	ug/m3	133	2.72	U	27.20	U	27.20	U		27.20	U	27.20	U
124-48-1	Dibromochloromethane	ug/m3	208.3	4.26	U	42.60	U	42.60	U		42.60	U	42.60	U
126777-61-2	m/p-Xylene	ug/m3	106.2	2.61	U	78.20	U	69.50	J		122.00	J	21.70	U
127-18-4	Tetrachloroethene	ug/m3	165.8	3.39	U	108.00	U	210.00	J		325.00	J	23.10	J
142-82-5	n-Heptane	ug/m3	100.2	1.23	J	13.50	J	20.50	J		69.70	J	20.50	U
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	1.98	U	19.80	U	19.80	U		19.80	U	19.80	U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	1.98	U	19.80	U	19.80	U		19.80	U	19.80	U
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	1.80	U	18.00	U	18.00	U		18.00	U	18.00	U
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	0.47	J	23.40	U	23.40	U		10.30	J	23.40	U
541-73-1	1,3-DICHLOROETHENE	ug/m3	147	3.01	U	30.10	U	30.10	U		30.10	U	30.10	U
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	0.44	U	2.52	U	2.52	U		2.52	U	2.52	U
593-60-2	Bromoethene	ug/m3	106.9	2.19	U	21.90	U	21.90	U		21.90	U	21.90	U
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	2.46	U	6.88	J	5.90	J		9.83	J	24.60	U
67-64-1	ACETONE	ug/m3	58.08	16.20	J	1430.00	JD	1070.00	D		3560.00	JD	28.50	U
67-66-3	CHLOROFORM	ug/m3	119.4	2.44	U	24.40	U	24.40	U		24.40	U	24.40	U
71-43-2	BENZENE	ug/m3	78.11	1.28	J	6.39	J	6.71	J		26.80	J	16.00	U
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	2.73	U	27.30	U	25.60	J		28.40	J	27.30	U
74-83-9	BROMOMETHANE	ug/m3	94.94	1.94	U	19.40	U	19.40	U		19.40	U	19.40	U
74-87-3	CHLOROMETHANE	ug/m3	50.49	1.24	U	10.30	U	10.30	U		10.30	U	10.30	U
75-00-3	CHLOROETHANE	ug/m3	64.52	1.32	UJ	13.20	U	13.20	U		13.20	U	13.20	U
75-01-4	VINYL CHLORIDE	ug/m3	62.5	1.28	UJ	12.80	U	12.80	U		12.80	U	12.80	U
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	6.95	U	3.47	J	4.17	J		17.40	U	5.91	J
75-15-0	CARBON DISULFIDE	ug/m3	76.14	1.56	U	15.60	U	15.60	U		15.60	U	15.60	U
75-25-2	BROMOFORM	ug/m3	252.8	5.17	U	51.70	U	51.70	U		51.70	U	51.70	U
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	3.35	U	33.50	U	33.50	U		33.50	U	33.50	U
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	2.02	U	20.20	U	20.20	U		20.20	U	20.20	U
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	1.98	U	19.80	U	19.80	U		19.80	U	19.80	U
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	1.52	U	15.20	U	9.09	J		15.50	J	15.20	U
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4	2.81	J	28.10	U	30.90	J		41.60	J	28.10	U
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	2.47	J	24.70	U	7.42	J		8.41	J	4.94	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4	0.77	J	38.30	U	38.30	U		38.30	U	38.30	U
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9	3.49	U	34.90	U	34.90	U		34.90	U	34.90	U
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	2.31	U	23.10	U	23.10	U		23.10	U	23.10	U
78-93-3	2-BUTANONE	ug/m3	72.11	1.77	U	14.20	J	12.10	J		17.10	J	5.01	J
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	2.73	U	27.30	U	27.30	U		27.30	U	27.30	U
79-01-6	TRICHLOROETHENE	ug/m3	131.4	0.25	U	5.37	U	8.60	J		16.70	J	2.47	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	3.43	U	34.30	U	34.30	U		34.30	U	34.30	U
80-62-6	Methyl Methacrylate	ug/m3	100.117	2.05	U	20.50	U	20.50	U		20.50	U	20.50	U
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8	5.33	U	53.30	U	53.30	U		53.30	U	53.30	U
95-47-6	O-XYLENE	ug/m3	106.2	0.87	J	20.00	J	16.90	J		33.40	J	21.70	U
95-49-8	2-Chlorotoluene	ug/m3	126.58	2.59	U	25.90	U	25.90	U		25.90	U	25.90	U
95-50-1	1,2-DICHLOROETHENE	ug/m3	147	3.01	U	30.10	U	30.10	U		30.10	U	30.10	U
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	0.98	J	18.20	J	18.70	J		23.10	J	24.60	U

Notes:  
 U - undefined ug/m3 - micrograms per cubic meter  
 SV - Soil Vapor J - estimated  
 DP - Direct Push ID - Identification  
 N - presumptive evidence of a compound

**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID 130043F-DP03-SV08		Sample ID 130043F-DP03-SV25		Sample ID 130043F-DP03-SV45		Sample ID 130043F-DP04-AA		Sample ID 130043F-DP04-SV08	
				Sample Date	Boring Location	Sample Date	Boring Location	Sample Date	Boring Location	Sample Date	Boring Location	Sample Date	Boring Location
				03/07/2008	F-DP03	03/07/2008	F-DP03	03/07/2008	F-DP03	03/07/2008	F-DP04	03/07/2008	F-DP04
100-41-4	Ethylbenzene	ug/m3	106.2	21.70	U	21.30		15.20	J	2.17	U	21.70	U
100-42-5	Styrene	ug/m3	104.1	21.30	U	1.28	J	21.30	U	2.13	U	21.30	U
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	22.70	U	2.27	U	22.70	U	2.27	U	22.70	U
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	22.70	U	2.27	U	22.70	U	2.27	U	22.70	U
106-46-7	1,4-Dichlorobenzene	ug/m3	147	30.10	U	3.01	U	30.10	U	3.01	U	30.10	U
106-93-4	1,2-Dibromoethane	ug/m3	187.9	38.40	U	3.84	U	38.40	U	3.84	U	38.40	U
106-99-0	1,3-Butadiene	ug/m3	54.09	11.10	U	1.11	U	11.10	U	1.11	U	11.10	U
107-05-1	Allyl Chloride	ug/m3	76.53	15.70	U	1.57	U	15.70	U	1.57	U	15.70	U
107-06-2	1,2-Dichloroethane	ug/m3	98.96	20.20	U	2.02	U	20.20	U	2.02	U	20.20	U
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	20.50	U	1.23	J	20.50	U	2.05	U	20.50	U
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	24.60	U	6.39		5.90	J	2.46	U	24.60	U
108-88-3	Toluene	ug/m3	92.14	7.54	J	71.60		64.10		2.26		15.80	J
108-90-7	Chlorobenzene	ug/m3	112.6	23.00	U	2.30	U	23.00	U	2.30	U	23.00	U
109-99-9	Tetrahydrofuran	ug/m3	154	31.50	U	3.15	U	31.50	U	3.15	U	31.50	U
110-54-3	Hexane	ug/m3	86.17	17.60	U	8.81		17.60	U	1.76	U	17.60	U
110-82-7	CYCLOHEXANE	ug/m3	84.16	17.20	U	1.72	J	17.20	U	1.72	U	17.20	U
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	37.10	U	3.71	U	37.10	U	3.71	U	37.10	U
123-91-1	1,4-Dioxane	ug/m3	133	27.20	U	2.72	U	27.20	U	2.72	U	27.20	U
124-48-1	Dibromochloromethane	ug/m3	208.3	42.60	U	4.26	U	42.60	U	4.26	U	42.60	U
126777-61-2	m/p-Xylene	ug/m3	106.2	5.65	J	65.20		56.50		2.17	U	12.20	J
127-18-4	Tetrachloroethene	ug/m3	165.8	63.10	U	678.00	D	949.00		1.36	J	40.70	
142-82-5	n-Heptane	ug/m3	100.2	20.50	U	6.15		5.74	J	2.05	U	20.50	U
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U	1.98	U	19.80	U	0.79	J	19.80	U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U	1.98	U	19.80	U	1.98	U	19.80	U
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	18.00	U	1.80	U	18.00	U	1.80	U	18.00	U
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	23.40	U	2.34	U	23.40	U	2.34	U	23.40	U
541-73-1	1,3-DICHLOROETHENE	ug/m3	147	30.10	U	3.01	U	30.10	U	3.01	U	30.10	U
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	2.52	U	0.25	U	2.52	U	0.25	U	2.52	U
593-60-2	Bromoethene	ug/m3	106.9	21.90	U	2.19	U	21.90	U	2.19	U	21.90	U
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	24.60	U	6.88		6.39	J	2.46	U	24.60	U
67-64-1	ACETONE	ug/m3	58.08	68.90	B	356.00	DB	594.00	DB	6.18	B	99.80	B
67-66-3	CHLOROFORM	ug/m3	119.4	24.40	U	0.98	J	24.40	U	2.44	U	24.40	U
71-43-2	BENZENE	ug/m3	78.11	16.00	U	7.03		7.67	J	0.32	J	3.83	J
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	27.30	U	20.70		24.00	J	5.46		27.30	U
74-83-9	BROMOMETHANE	ug/m3	94.94	19.40	U	1.94	U	19.40	U	1.94	U	19.40	U
74-87-3	CHLOROMETHANE	ug/m3	50.49	10.30	U	1.03	U	10.30	U	0.62	J	10.30	U
75-00-3	CHLOROETHANE	ug/m3	64.52	13.20	U	1.32	U	13.20	U	10.00		13.20	U
75-01-4	VINYL CHLORIDE	ug/m3	62.5	12.80	U	1.28	U	12.80	U	1.79		12.80	U
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	4.52	J	1.39	J	5.21	J	2.78	J	17.40	UJ
75-15-0	CARBON DISULFIDE	ug/m3	76.14	15.60	U	1.56	U	15.60	U	1.56	U	9.03	J
75-25-2	BROMOFORM	ug/m3	252.8	51.70	U	5.17	U	51.70	U	5.17	U	51.70	U
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	33.50	U	3.35	U	33.50	U	3.35	U	33.50	U
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	20.20	U	2.02	U	20.20	U	2.83		20.20	U
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	19.80	U	1.98	U	19.80	U	1.98	U	19.80	U
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	15.20	U	1.52	J	5.15	J	1.52	U	15.20	U
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4	8.43	J	34.80		48.90		0.56	J	10.70	J
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	7.42	J	11.90	J	12.90	J	0.99	J	24.70	UJ
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4	38.30	U	1.53	J	38.30	U	1.53	J	38.30	U
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9	34.90	U	3.49	U	34.90	U	3.49	U	34.90	U
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	23.10	U	2.31	U	23.10	U	2.31	U	23.10	U
78-93-3	2-BUTANONE	ug/m3	72.11	6.78	J	12.40	B	17.40		0.59	J	5.60	J
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	27.30	U	2.73	U	27.30	U	2.73	U	27.30	U
79-01-6	TRICHLOROETHENE	ug/m3	131.4	2.47	U	29.00		37.10		0.86		2.47	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	34.30	U	3.43	U	34.30	U	3.43	U	34.30	U
80-62-6	Methyl Methacrylate	ug/m3	100.117	20.50	U	2.05	U	20.50	U	2.05	U	20.50	U
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8	22.40	J	5.33	U	26.70	J	5.33	U	21.30	J
95-47-6	O-XYLENE	ug/m3	106.2	21.70	U	21.30		16.90	J	2.17	U	21.70	U
95-49-8	2-Chlorotoluene	ug/m3	126.58	25.90	U	2.59	U	25.90	U	2.59	U	25.90	U
95-50-1	1,2-DICHLOROETHENE	ug/m3	147	30.10	U	3.01	U	30.10	U	3.01	U	30.10	U
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	24.60	U	18.20		24.60	U	2.46	U	24.60	U

Notes:

- U - undefined ug/m3 - micrograms per cubic meter
- SV - Soil Vapor J - estimated
- DP - Direct Pust ID - Identification
- N - presumptive evidence of a compound

Table A-1  
Soil Vapor Analytical Results  
New Cassel Industrial Area  
North Hempstead, NY

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	Sample Date	Boring Location	130043F-DP04-SV25	130043F-DP04-SV45	130043F-DP05-SV08	130043F-DP05-SV25	130043F-DP05-SV45	
				F-DP04	03/07/2008	F-DP04	03/07/2008	F-DP05	03/07/2008	F-DP05	03/07/2008	
100-41-4	Ethylbenzene	ug/m3	106.2	10.40	J		11.70	J	9.99	J	9.56	J
100-42-5	Styrene	ug/m3	104.1	21.30	U		21.30	U	21.30	U	21.30	U
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	22.70	U		22.70	U	22.70	U	22.70	U
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	22.70	U		22.70	U	22.70	U	22.70	U
106-46-7	1,4-Dichlorobenzene	ug/m3	147	30.10	U		30.10	U	30.10	U	30.10	U
106-93-4	1,2-Dibromoethane	ug/m3	187.9	38.40	U		38.40	U	38.40	U	38.40	U
106-99-0	1,3-Butadiene	ug/m3	54.09	11.10	U		11.10	U	11.10	U	11.10	U
107-05-1	Allyl Chloride	ug/m3	76.53	15.70	U		15.70	U	15.70	U	15.70	U
107-06-2	1,2-Dichloroethane	ug/m3	98.96	20.20	U		20.20	U	20.20	U	20.20	U
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	20.50	U		20.50	U	20.50	U	20.50	U
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	5.90	J		6.39	J	4.92	J	24.60	U
108-88-3	Toluene	ug/m3	92.14	34.30	U		45.20	U	36.90	U	41.50	U
108-90-7	Chlorobenzene	ug/m3	112.6	23.00	U		23.00	U	23.00	U	23.00	U
109-99-9	Tetrahydrofuran	ug/m3	154	31.50	U		31.50	U	31.50	U	31.50	U
110-54-3	Hexane	ug/m3	86.17	17.60	U		17.60	U	17.60	U	17.60	U
110-82-7	CYCLOHEXANE	ug/m3	84.16	17.20	U		17.20	U	17.20	U	17.20	U
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	37.10	U		37.10	U	37.10	U	37.10	U
123-91-1	1,4-Dioxane	ug/m3	133	27.20	U		27.20	U	27.20	U	27.20	U
124-48-1	Dibromochloromethane	ug/m3	208.3	42.60	U		42.60	U	42.60	U	42.60	U
126777-61-2	m/p-Xylene	ug/m3	106.2	47.80	U		52.10	U	52.10	U	43.40	U
127-18-4	Tetrachloroethene	ug/m3	165.8	746.00	U		1080.00	U	163.00	U	407.00	U
142-82-5	n-Heptane	ug/m3	100.2	20.50	U		4.92	J	20.50	U	4.51	J
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	6.74	J		19.80	U	19.80	U	19.80	U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U		19.80	U	19.80	U	19.80	U
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	18.00	U		18.00	U	18.00	U	18.00	U
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	23.40	U		23.40	U	23.40	U	23.40	U
541-73-1	1,3-DICHLOROETHENE	ug/m3	147	30.10	U		30.10	U	30.10	U	30.10	U
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	2.52	U		2.52	U	2.52	U	2.52	U
593-60-2	Bromoethene	ug/m3	106.9	21.90	U		21.90	U	21.90	U	21.90	U
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	4.92	J		5.41	J	4.92	J	24.60	U
67-64-1	ACETONE	ug/m3	58.08	451.00	B		475.00	B	285.00	B	181.00	B
67-66-3	CHLOROFORM	ug/m3	119.4	24.40	U		24.40	U	24.40	U	24.40	U
71-43-2	BENZENE	ug/m3	78.11	4.15	J		5.11	J	4.47	J	5.75	J
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	24.60	J		22.90	J	27.30	U	12.50	J
74-83-9	BROMOMETHANE	ug/m3	94.94	19.40	U		19.40	U	19.40	U	19.40	U
74-87-3	CHLOROMETHANE	ug/m3	50.49	10.30	U		10.30	U	10.30	U	10.30	U
75-00-3	CHLOROETHANE	ug/m3	64.52	87.10	U		13.20	U	13.20	U	13.20	U
75-01-4	VINYL CHLORIDE	ug/m3	62.5	13.30	U		12.80	U	12.80	U	12.80	U
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	4.52	J		17.40	UJ	17.40	UJ	17.40	UJ
75-15-0	CARBON DISULFIDE	ug/m3	76.14	15.60	U		15.60	U	8.10	J	15.60	U
75-25-2	BROMOFORM	ug/m3	252.8	51.70	U		51.70	U	51.70	U	51.70	U
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	33.50	U		33.50	U	33.50	U	33.50	U
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	23.50	U		20.20	U	20.20	U	20.20	U
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	19.80	U		19.80	U	19.80	U	19.80	U
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	15.20	U		3.94	J	15.20	U	15.20	U
75-69-4	TRICHLOROFUOROMETHANE	ug/m3	137.4	29.80	U		50.60	U	6.74	J	15.20	J
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	18.80	J		14.80	J	24.70	UJ	8.90	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4	12.30	J		12.30	J	38.30	U	38.30	U
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9	34.90	U		34.90	U	34.90	U	34.90	U
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	23.10	U		23.10	U	23.10	U	23.10	U
78-93-3	2-BUTANONE	ug/m3	72.11	8.26	J		21.80	U	9.44	J	11.20	J
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	27.30	U		27.30	U	27.30	U	27.30	U
79-01-6	TRICHLOROETHENE	ug/m3	131.4	96.70	U		145.00	U	2.47	U	17.20	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	34.30	U		34.30	U	34.30	U	34.30	U
80-62-6	Methyl Methacrylate	ug/m3	100.117	20.50	U		20.50	U	20.50	U	20.50	U
87-68-3	HEXACHLOROBTADIENE	ug/m3	260.8	23.50	J		23.50	J	21.30	J	53.30	U
95-47-6	O-XYLENE	ug/m3	106.2	12.60	J		13.90	J	13.00	J	10.90	J
95-49-8	2-Chlorotoluene	ug/m3	126.58	25.90	U		25.90	U	25.90	U	25.90	U
95-50-1	1,2-DICHLOROETHENE	ug/m3	147	30.10	U		30.10	U	30.10	U	30.10	U
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	24.60	U		24.60	U	24.60	U	24.60	U

Notes:

- U - undefined ug/m3 - micrograms per cubic meter
- SV - Soil Vapor J - estimated
- DP - Direct Push ID - Identification
- N - presumptive evidence of a compound



**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	Sample Date	Boring Location	130043K-DP01-SV08	130043K-DP01-SV08	130043K-DP01-SV25	130043K-DP01-SV45	130043K-DP02-SV08		
				03/04/2008	03/04/2008	03/04/2008	03/04/2008	03/04/2008	03/05/2008				
				K-DP01	K-DP01	K-DP01	K-DP01	K-DP01	K-DP01	K-DP02			
100-41-4	Ethylbenzene	ug/m3	106.2	13.50	J		11.70	J	17.40	J	20.00	J	2.61
100-42-5	Styrene	ug/m3	104.1	21.30	U		21.30	U	21.30	U	21.30	U	2.13
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	22.70	U		22.70	U	22.70	U	22.70	U	2.27
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	22.70	U		22.70	U	22.70	U	22.70	U	2.27
106-46-7	1,4-Dichlorobenzene	ug/m3	147	30.10	U		30.10	U	30.10	U	30.10	U	3.01
106-93-4	1,2-Dibromoethane	ug/m3	187.9	38.40	U		38.40	U	38.40	U	38.40	U	3.84
106-99-0	1,3-Butadiene	ug/m3	54.09	11.10	U		11.10	U	11.10	U	11.10	U	1.11
107-05-1	Allyl Chloride	ug/m3	76.53	15.70	U		15.70	U	15.70	U	15.70	U	1.57
107-06-2	1,2-Dichloroethane	ug/m3	98.96	20.20	U		20.20	U	20.20	U	20.20	U	2.02
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	20.50	U		20.50	U	20.50	U	20.50	U	2.05
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	24.60	U		24.60	U	5.41	J	6.39	J	0.98
108-88-3	Toluene	ug/m3	92.14	36.60	J		30.50	J	56.50	J	56.50	J	4.52
108-90-7	Chlorobenzene	ug/m3	112.6	23.00	U		23.00	U	23.00	U	23.00	U	2.30
109-99-9	Tetrahydrofuran	ug/m3	154	31.50	U		31.50	U	31.50	U	31.50	U	3.15
110-54-3	Hexane	ug/m3	86.17	30.70	J		25.40	J	17.60	U	17.60	U	1.76
110-82-7	CYCLOHEXANE	ug/m3	84.16	7.92	J		8.26	J	7.23	J	5.85	J	1.72
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	37.10	U		37.10	U	37.10	U	37.10	U	3.71
123-91-1	1,4-Dioxane	ug/m3	133	27.20	U		27.20	U	27.20	U	27.20	U	2.72
124-48-1	Dibromochloromethane	ug/m3	208.3	42.60	U		42.60	U	42.60	U	42.60	U	4.26
126777-61-2	m/p-Xylene	ug/m3	106.2	38.70	J		34.30	J	43.40	J	52.10	J	7.38
127-18-4	Tetrachloroethene	ug/m3	165.8	88.20	J		74.60	J	170.00	J	292.00	J	21.00
142-82-5	n-Heptane	ug/m3	100.2	27.90	J		29.90	J	32.40	J	30.70	J	1.23
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U		19.80	U	19.80	U	6.34	J	1.98
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U		19.80	U	19.80	U	19.80	U	1.98
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	18.00	U		18.00	U	18.00	U	18.00	U	1.80
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	10.30	J		8.41	J	7.01	J	23.40	U	2.34
541-73-1	1,3-DICHLOROETHENE	ug/m3	147	30.10	U		30.10	U	30.10	U	30.10	U	3.01
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	2.52	U		2.52	U	2.52	U	2.52	U	0.25
593-60-2	Bromoethene	ug/m3	106.9	21.90	U		21.90	U	21.90	U	21.90	U	2.19
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	2.95	J		24.60	U	24.60	U	24.60	U	0.98
67-64-1	ACETONE	ug/m3	58.08	356.00	J		333.00	J	831.00	JD	1540.00	JD	1310.00
67-66-3	CHLOROFORM	ug/m3	119.4	24.40	U		24.40	U	24.40	U	24.40	U	2.44
71-43-2	BENZENE	ug/m3	78.11	6.71	J		5.75	J	10.50	J	8.63	J	0.64
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	13.60	J		13.60	J	37.80	J	60.00	J	8.18
74-83-9	BROMOMETHANE	ug/m3	94.94	19.40	U		19.40	U	19.40	U	19.40	U	1.94
74-87-3	CHLOROMETHANE	ug/m3	50.49	10.30	U		10.30	U	10.30	U	10.30	U	1.03
75-00-3	CHLOROETHANE	ug/m3	64.52	13.20	U		13.20	U	13.20	U	13.20	U	1.32
75-01-4	VINYL CHLORIDE	ug/m3	62.5	12.80	U		12.80	U	12.80	U	12.80	U	1.28
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	4.17	J		4.86	J	5.21	J	4.17	J	1.74
75-15-0	CARBON DISULFIDE	ug/m3	76.14	4.36	J		3.74	J	15.60	U	15.60	U	1.56
75-25-2	BROMOFORM	ug/m3	252.8	51.70	U		51.70	U	51.70	U	51.70	U	5.17
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	33.50	U		33.50	U	33.50	U	33.50	U	3.35
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	20.20	U		20.20	U	20.20	U	15.80	J	1.62
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	19.80	U		19.80	U	19.80	U	19.80	U	1.98
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	15.20	U		15.20	U	6.67	J	7.88	J	0.30
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4	5.62	J		5.62	J	16.30	J	37.70	J	1.12
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	3.96	J		24.70	U	4.94	J	8.41	J	2.47
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4	38.30	U		38.30	U	38.30	U	38.30	U	3.83
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9	34.90	U		34.90	U	34.90	U	34.90	U	3.49
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	23.10	U		23.10	U	23.10	U	23.10	U	2.31
78-93-3	2-BUTANONE	ug/m3	72.11	13.90	J		11.20	J	5.31	J	7.67	J	1.47
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	27.30	U		27.30	U	27.30	U	27.30	U	2.73
79-01-6	TRICHLOROETHENE	ug/m3	131.4	5.91	J		5.91	J	22.00	J	50.50	J	6.99
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	34.30	U		34.30	U	34.30	U	34.30	U	3.43
80-62-6	Methyl Methacrylate	ug/m3	100.117	20.50	U		20.50	U	20.50	U	20.50	U	2.05
87-68-3	HEXACHLOROBUTADIENE	ug/m3	280.8	53.30	U		53.30	U	53.30	U	53.30	U	5.33
95-47-6	O-XYLENE	ug/m3	106.2	9.56	J		8.69	J	9.99	J	10.90	J	1.74
95-49-8	2-Chlorotoluene	ug/m3	126.58	25.90	U		25.90	U	25.90	U	25.90	U	2.59
95-50-1	1,2-DICHLOROETHENE	ug/m3	147	30.10	U		30.10	U	30.10	U	30.10	U	3.01
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	8.36	J		6.88	J	10.80	J	13.30	J	2.46

Notes:

- U - undefined ug/m3 - micrograms per cubic meter
- SV - Soil Vapor J - estimated
- DP - Direct Pusi ID - Identification
- N - presumptive evidence of a compound

**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	Sample Date	Boring Location	130043K-DP02-SV25	130043K-DP02-SV45	130043K-DP03-AA	130043K-DP03-SV08	130043K-DP03-SV25
				03/05/2008	03/05/2008	03/05/2008	03/05/2008	03/05/2008	03/05/2008	03/05/2008	03/05/2008
				K-DP02	K-DP02	K-DP03	K-DP03	K-DP03	K-DP03	K-DP03	K-DP03
100-41-4	Ethylbenzene	ug/m3	106.2	30.00			13.00 J		0.87 J	20.80 J	6.95 J
100-42-5	Styrene	ug/m3	104.1	21.30 U			42.60 U		2.13 U	21.30 U	42.60 U
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	22.70 U			45.40 U		2.27 U	22.70 U	45.40 U
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	22.70 U			45.40 U		2.27 U	22.70 U	45.40 U
106-46-7	1,4-Dichlorobenzene	ug/m3	147	30.10 U			60.10 U		3.01 U	30.10 U	60.10 U
106-93-4	1,2-Dibromoethane	ug/m3	187.9	38.40 U			76.90 U		3.84 U	38.40 U	76.90 U
106-99-0	1,3-Butadiene	ug/m3	54.09	11.10 U			22.10 U		1.11 U	11.10 U	22.10 U
107-05-1	Allyl Chloride	ug/m3	76.53	15.70 U			31.30 U		1.57 U	15.70 U	31.30 U
107-06-2	1,2-Dichloroethane	ug/m3	98.96	20.20 U			40.50 U		2.02 U	20.20 U	40.50 U
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	20.50 U			41.00 U		2.05 U	20.50 U	41.00 U
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	24.60 U			49.20 U		2.46 U	7.87 J	49.20 U
108-88-3	Toluene	ug/m3	92.14	79.10 J			41.50		4.52	34.30 J	24.90 J
108-90-7	Chlorobenzene	ug/m3	112.6	23.00 U			46.10 U		2.30 U	23.00 U	46.10 U
109-99-9	Tetrahydrofuran	ug/m3	154	31.50 U			88.20		3.15 U	31.50 U	63.00 U
110-54-3	Hexane	ug/m3	86.17	17.60 U			35.20 U		1.76 U	17.60 U	35.20 U
110-82-7	CYCLOHEXANE	ug/m3	84.16	17.20 U			34.40 U		1.72 U	17.20 U	34.40 U
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	37.10 U			74.20 U		3.71 U	37.10 U	74.20 U
123-91-1	1,4-Dioxane	ug/m3	133	4.35 J			54.40 U		2.72 U	27.20 U	54.40 U
124-48-1	Dibromochloromethane	ug/m3	208.3	42.60 U			85.20 U		4.26 U	42.60 U	85.20 U
126777-61-2	m/p-Xylene	ug/m3	106.2	73.80 U			52.10		3.04	60.80	28.70 J
127-18-4	Tetrachloroethene	ug/m3	165.8	264.00			387.00		0.68 J	74.60	217.00
142-82-5	n-Heptane	ug/m3	100.2	22.90			41.00 U		1.64 J	9.43 J	41.00 U
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	6.34 J			15.10 J		1.98 U	19.80 U	15.10 J
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80 U			19.80 U		1.98 U	19.80 U	39.60 U
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	18.00 U			36.10 U		1.80 U	18.00 U	36.10 U
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	23.40 U			46.70 U		0.47 J	23.40 U	46.70 U
541-73-1	1,3-DICHLOROBENZENE	ug/m3	147	30.10 U			60.10 U		3.01 U	30.10 U	60.10 U
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	2.52 U			5.03 U		0.50	2.52 U	5.03 U
593-60-2	Bromoethene	ug/m3	106.9	21.90 UJ			43.70 U		2.19 U	21.90 U	43.70 U
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	24.60 U			49.20 U		2.46 U	5.41 J	49.20 U
67-64-1	ACETONE	ug/m3	58.08	736.00 DB			230.00 J		7.60 J	665.00 JD	164.00 J
67-66-3	CHLOROFORM	ug/m3	119.4	24.40 U			48.80 U		2.44 U	24.40 U	48.80 U
71-43-2	BENZENE	ug/m3	78.11	14.10 J			8.31 J		0.96 J	5.11 J	16.00 J
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	76.40			54.60		2.73 U	7.09 J	40.40 J
74-83-9	BROMOMETHANE	ug/m3	94.94	19.40 U			38.80 UJ		1.94 UJ	19.40 U	38.80 UJ
74-87-3	CHLOROMETHANE	ug/m3	50.49	10.30 U			20.70 U		1.03 J	3.51 J	20.70 U
75-00-3	CHLOROETHANE	ug/m3	64.52	13.20 UJ			26.40 UJ		1.32 UJ	13.20 UJ	26.40 UJ
75-01-4	VINYL CHLORIDE	ug/m3	62.5	12.80 UJ			25.60 UJ		1.28 UJ	12.80 UJ	25.60 UJ
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	17.40 U			34.70 U		1.04 J	4.86 J	34.70 U
75-15-0	CARBON DISULFIDE	ug/m3	76.14	15.60 U			31.10 U		1.56 U	15.60 U	31.10 U
75-25-2	BROMOFORM	ug/m3	252.8	51.70 U			103.00 U		5.17 U	51.70 U	103.00 U
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	33.50 U			67.00 U		3.35 U	33.50 U	67.00 U
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	20.20 U			21.90 J		2.02 U	20.20 U	40.50 U
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	19.80 U			39.60 U		1.98 U	19.80 U	39.60 U
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	15.20 U			30.30 U		1.52 U	6.97 J	30.30 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4	23.00 J			36.00 J		1.12 J	8.99 J	21.40 J
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	7.42 J			7.91 J		2.47 J	24.70 U	49.40 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4	38.30 U			76.60 U		0.77 J	38.30 U	76.60 U
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9	34.90 U			69.90 U		3.49 U	34.90 U	69.90 U
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	23.10 U			46.20 U		2.31 U	23.10 U	46.20 U
78-93-3	2-BUTANONE	ug/m3	72.11	23.90 J			245.00		1.18 J	14.70 J	324.00
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	27.30 U			54.60 U		2.73 U	27.30 U	54.60 U
79-01-6	TRICHLOROETHENE	ug/m3	131.4	86.00 J			113.00		0.25 U	118.00 J	537.00
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	34.30 U			68.70 U		3.43 U	34.30 U	68.70 U
80-62-6	Methyl Methacrylate	ug/m3	100.117	20.50 U			40.90 U		2.05 U	20.50 U	40.90 U
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8	53.30 U			107.00 U		5.33 U	53.30 U	107.00 U
95-47-6	O-XYLENE	ug/m3	106.2	21.70 U			12.20 J		0.87 J	13.90 J	6.95 J
95-49-8	2-Chlorotoluene	ug/m3	126.58	25.90 U			51.80 U		2.59 U	25.90 U	51.80 U
95-50-1	1,2-DICHLOROBENZENE	ug/m3	147	30.10 U			60.10 U		3.01 U	30.10 U	60.10 U
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	21.60 J			49.20 U		0.98 J	19.70 J	5.90 J

Notes:

- U - undefined ug/m3 - micrograms per cubic meter
- SV - Soil Vapor J - estimated
- DP - Direct Plus! ID - Identification
- N - presumptive evidence of a compound

**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	Sample Date	Boring Location	130043K-DP03-SV45	130043K-DP04-SV08	130043K-DP04-SV25	130043K-DP04-SV45	130043K-DP05-AA			
				K-DP03	03/05/2008	K-DP03	03/06/2008	K-DP04	03/06/2008	K-DP04	03/06/2008	K-DP05		
100-41-4	Ethylbenzene	ug/m3	106.2	8.69	J		21.70	U	4.34	J	10.40	J	2.17	U
100-42-5	Styrene	ug/m3	104.1	21.30	U		21.30	UJ	8.52	UJ	21.30	U	2.13	U
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	22.70	U		22.70	U	9.08	U	22.70	U	2.27	U
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	22.70	U		22.70	U	9.08	U	22.70	U	2.27	U
106-46-7	1,4-Dichlorobenzene	ug/m3	147	30.10	U		30.10	U	12.00	U	30.10	U	3.01	U
106-93-4	1,2-Dibromoethane	ug/m3	187.9	38.40	U		38.40	U	15.40	U	38.40	U	3.84	U
106-99-0	1,3-Butadiene	ug/m3	54.09	11.10	U		11.10	U	4.42	U	11.10	U	1.11	U
107-05-1	Allyl Chloride	ug/m3	76.53	15.70	U		15.70	U	6.26	U	15.70	U	1.57	U
107-06-2	1,2-Dichloroethane	ug/m3	98.96	20.20	U		20.20	U	8.09	U	20.20	U	2.02	U
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	20.50	U		20.50	U	8.20	U	20.50	U	2.05	U
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	24.60	U		24.60	U	9.83	U	24.60	U	2.46	U
108-88-3	Toluene	ug/m3	92.14	33.50	U		18.50	J	41.50	J	29.00	J	2.26	J
108-90-7	Chlorobenzene	ug/m3	112.6	23.00	U		23.00	U	9.21	U	23.00	U	2.30	U
109-99-9	Tetrahydrofuran	ug/m3	154	31.50	U		31.50	U	23.30	J	36.50	J	3.15	U
110-54-3	Hexane	ug/m3	86.17	17.60	U		17.60	U	7.05	U	17.60	U	1.76	U
110-82-7	CYCLOHEXANE	ug/m3	84.16	17.20	U		17.20	U	6.88	U	17.20	U	1.72	U
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	37.10	U		17.10	J	14.80	U	37.10	U	3.71	U
123-91-1	1,4-Dioxane	ug/m3	133	27.20	U		27.20	U	10.90	U	27.20	U	2.72	U
124-48-1	Dibromochloromethane	ug/m3	208.3	42.60	U		42.60	U	17.00	U	42.60	U	4.26	U
126777-61-2	m/p-Xylene	ug/m3	106.2	34.70	U		8.25	J	12.20	J	43.40	J	0.87	J
127-18-4	Tetrachloroethene	ug/m3	165.8	359.00	U		102.00	J	244.00	J	373.00	J	3.39	U
142-82-5	n-Heptane	ug/m3	100.2	9.84	J		4.51	J	16.80	J	11.50	J	2.46	J
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	18.20	J		19.80	U	7.93	U	39.30	J	1.98	U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U		19.80	U	7.93	U	19.80	U	1.98	U
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	18.00	U		18.00	U	7.21	U	4.33	J	1.80	U
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	4.20	J		23.40	U	9.34	U	23.40	U	2.34	U
541-73-1	1,3-DICHLOROBENZENE	ug/m3	147	30.10	U		30.10	U	12.00	U	30.10	U	3.01	U
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	2.52	U		2.52	U	1.01	U	2.52	U	0.57	U
593-60-2	Bromoethene	ug/m3	106.9	21.90	U		21.90	U	8.74	U	21.90	U	2.19	U
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	24.60	U		24.60	UJ	9.83	UJ	24.80	U	2.46	U
67-64-1	ACETONE	ug/m3	58.08	261.00	J		40.40	U	90.30	B	157.00	J	11.40	J
67-66-3	CHLOROFORM	ug/m3	119.4	6.35	J		24.40	U	9.77	U	12.20	J	2.44	U
71-43-2	BENZENE	ug/m3	78.11	5.43	J		5.11	J	5.75	J	6.39	J	0.96	J
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	52.40	U		18.60	J	39.30	J	104.00	J	2.73	U
74-83-9	BROMOMETHANE	ug/m3	94.94	19.40	UJ		19.40	U	7.77	U	19.40	U	1.94	U
74-87-3	CHLOROMETHANE	ug/m3	50.49	10.30	U		10.30	U	4.13	U	10.30	UJ	1.65	U
75-00-3	CHLOROETHANE	ug/m3	64.52	13.20	UJ		13.20	U	5.28	U	13.20	U	3.17	U
75-01-4	VINYL CHLORIDE	ug/m3	62.5	12.80	UJ		12.80	U	5.11	U	12.80	U	0.77	J
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	17.40	U		3.82	J	5.56	J	17.40	U	1.39	J
75-15-0	CARBON DISULFIDE	ug/m3	76.14	2.49	J		15.60	U	6.23	U	15.60	U	1.56	U
75-25-2	BROMOFORM	ug/m3	252.8	51.70	U		51.70	U	20.70	U	51.70	U	5.17	U
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	33.50	U		33.50	U	13.40	U	33.50	U	3.35	U
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	20.20	U		20.20	U	8.09	J	56.70	J	0.40	J
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	19.80	U		19.80	U	7.93	U	19.80	U	1.98	U
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	15.20	U		15.20	U	2.43	J	15.20	U	1.52	U
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4	28.70	U		11.20	J	19.10	J	42.70	J	1.69	J
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	6.43	J		5.93	J	5.44	J	9.40	J	2.97	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4	8.43	J		38.30	U	3.07	J	22.20	J	0.77	J
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9	34.90	U		34.90	U	14.00	U	34.90	U	3.49	U
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	23.10	U		23.10	U	9.24	U	23.10	U	2.31	U
78-93-3	2-BUTANONE	ug/m3	72.11	383.00	U		41.30	U	109.00	B	501.00	JD	1.18	J
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	27.30	U		27.30	U	10.90	U	27.30	U	2.73	U
79-01-6	TRICHLOROETHENE	ug/m3	131.4	167.00	U		31.20	J	80.60	J	231.00	J	0.25	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	34.30	U		34.30	U	13.70	U	34.30	U	3.43	U
80-62-6	Methyl Methacrylate	ug/m3	100.117	20.50	U		20.50	U	8.19	U	20.50	U	2.05	U
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8	53.30	U		36.30	J	10.70	J	53.30	U	5.33	U
95-47-6	O-XYLENE	ug/m3	106.2	21.70	U		21.70	U	3.47	J	9.99	J	2.17	U
95-49-8	2-Chlorotoluene	ug/m3	126.58	25.90	U		25.90	U	10.40	U	25.90	U	2.59	U
95-50-1	1,2-DICHLOROBENZENE	ug/m3	147	30.10	U		30.10	U	12.00	U	30.10	U	3.01	U
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	4.42	J		24.60	U	9.83	U	4.92	J	2.46	U

Notes:

- U - undefined ug/m3 - micrograms per cubic meter
- SV - Soil Vapor J - estimated
- DP - Direct Pust ID - Identification
- N - presumptive evidence of a compound

**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	Sample Date	Boring Location	130043K-DP05-SV08	130043K-DP05-SV25	130043K-DP05-SV45	130043N-DP01-SV08	130043N-DP01-SV25		
				03/06/2008	03/06/2008	03/06/2008	03/25/2008	03/25/2008	K-DP05	K-DP05	K-DP05	N-DP01	N-DP01
100-41-4	Ethylbenzene	ug/m3	106.2				5.21 J	5.65 J	7.82 J	43.40	4.34 J		
100-42-5	Styrene	ug/m3	104.1				21.30 U	21.30 U	21.30 U	21.30 U	21.30 U		
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111				22.70 U	22.70 U	22.70 U	22.70 U	22.70 U		
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111				22.70 U	22.70 U	22.70 U	22.70 U	22.70 U		
106-46-7	1,4-Dichlorobenzene	ug/m3	147				30.10 U	30.10 U	30.10 U	30.10 U	30.10 U		
106-93-4	1,2-Dibromoethane	ug/m3	187.9				38.40 U	38.40 U	38.40 U	38.40 U	38.40 U		
106-99-0	1,3-Butadiene	ug/m3	54.09				11.10 U	11.10 U	11.10 U	11.10 U	11.10 U		
107-05-1	Allyl Chloride	ug/m3	76.53				15.70 U	15.70 U	15.70 U	15.70 U	15.70 U		
107-06-2	1,2-Dichloroethane	ug/m3	98.96				20.20 U	20.20 U	20.20 U	20.20 U	20.20 U		
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2				20.50 U	20.50 U	20.50 U	20.50 U	20.50 U		
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2				24.60 U	24.60 U	24.60 U	24.60 U	24.60 U		
108-88-3	Toluene	ug/m3	92.14				23.70 J	30.10	37.30	7.16 J	10.60 J		
108-90-7	Chlorobenzene	ug/m3	112.6				23.00 U	23.00 U	23.00 U	23.00 U	23.00 U		
109-99-9	Tetrahydrofuran	ug/m3	154				10.10 J	35.30	75.60	13.20 J	16.40 J		
110-54-3	Hexane	ug/m3	86.17				17.60 U	17.60 U	17.60 U	17.60 U	17.60 U		
110-82-7	CYCLOHEXANE	ug/m3	84.16				6.54 J	17.20 U	17.20 U	17.20 U	17.20 U		
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5				37.10 U	37.10 U	37.10 U	37.10 U	37.10 U		
123-91-1	1,4-Dioxane	ug/m3	133				27.20 U	27.20 U	27.20 U	27.20 U	27.20 U		
124-48-1	Dibromochloromethane	ug/m3	208.3				42.60 U	42.60 U	42.60 U	42.60 U	42.60 U		
126777-61-2	m/p-Xylene	ug/m3	106.2				18.70 J	19.50 J	29.10	156.00	13.00 J		
127-18-4	Tetrachloroethene	ug/m3	165.8				74.60 J	644.00	746.00	2.71 U	2.71 U		
142-82-5	n-Heptane	ug/m3	100.2				20.10 J	11.10 J	18.00 J	20.50 U	6.15 J		
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94				19.80 U	9.91 J	25.80	19.80 U	19.80 U		
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94				19.80 U	19.80 U	19.80 U	19.80 U	19.80 U		
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15				18.00 U	18.00 U	18.00 U	18.00 U	18.00 U		
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2				12.10 J	23.40 U	23.40 U	23.40 U	23.40 U		
541-73-1	1,3-DICHLOROETHENE	ug/m3	147				30.10 U	30.10 U	30.10 U	30.10 U	30.10 U		
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8				2.52 U	2.52 U	2.52 U	2.52 U	2.52 U		
593-60-2	Bromoethene	ug/m3	106.9				21.90 U	21.90 U	21.90 U	21.90 U	21.90 U		
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2				24.60 U	24.60 U	24.60 U	24.60 U	24.60 U		
67-64-1	ACETONE	ug/m3	58.08				135.00 U	68.90 U	689.00 DBJ	178.00 B	121.00 B		
67-66-3	CHLOROFORM	ug/m3	119.4				24.40 U	24.40 U	24.40 U	24.40 U	24.40 U		
71-43-2	BENZENE	ug/m3	78.11				7.35 J	5.11 J	8.63 J	16.00 U	5.75 J		
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4				27.30 U	39.80	147.00	8.73 J	7.64 J		
74-83-9	BROMOMETHANE	ug/m3	94.94				19.40 U	19.40 U	19.40 U	19.40 U	19.40 U		
74-87-3	CHLOROMETHANE	ug/m3	50.49				10.30 U	10.30 U	10.30 U	10.30 U	10.30 U		
75-00-3	CHLOROETHANE	ug/m3	64.52				13.20 U	13.20 U	13.20 U	13.20 U	13.20 U		
75-01-4	VINYL CHLORIDE	ug/m3	62.5				12.80 U	12.80 U	12.80 U	12.80 U	12.80 U		
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94				18.10 J	17.40 U	6.95 J	8.34 J	7.30 J		
75-15-0	CARBON DISULFIDE	ug/m3	76.14				15.60 U	15.60 U	15.60 U	15.60 U	15.60 U		
75-25-2	BROMOFORM	ug/m3	252.8				51.70 U	51.70 U	51.70 U	51.70 U	51.70 U		
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8				33.50 U	33.50 U	33.50 U	33.50 U	33.50 U		
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96				20.20 U	37.20	312.00	20.20 U	20.20 U		
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94				19.80 U	19.80 U	19.80 U	19.80 U	19.80 U		
75-65-0	tert-Butyl Alcohol	ug/m3	74.12				15.20 U	15.20 U	15.20 U	5.76 J	7.88 J		
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4				6.74 J	13.50 J	27.00 J	28.10 U	10.70 J		
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9				24.70 U	24.70 U	7.42 J	24.70 U	24.70 U		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4				38.30 U	38.30 U	35.30 J	38.30 U	38.30 U		
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9				34.90 U	34.90 U	34.90 U	34.90 U	34.90 U		
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113				23.10 U	23.10 U	23.10 U	23.10 U	23.10 U		
78-93-3	2-BUTANONE	ug/m3	72.11				97.30 J	147.00	324.00	174.00	218.00 J		
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4				27.30 U	27.30 U	27.30 U	27.30 U	27.30 U		
79-01-6	TRICHLOROETHENE	ug/m3	131.4				40.80 J	403.00	258.00	2.47 U	2.47 U		
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9				34.30 U	34.30 U	34.30 U	34.30 U	34.30 U		
80-62-6	Methyl Methacrylate	ug/m3	100.117				20.50 U	20.50 U	20.50 U	20.50 U	20.50 U		
87-88-3	HEXACHLOROBUTADIENE	ug/m3	260.8				30.90 J	33.10 J	36.30 J	53.30 U	53.30 U		
95-47-6	O-XYLENE	ug/m3	106.2				5.21 J	4.78 J	6.52 J	47.80	21.70 U		
95-49-8	2-Chlorotoluene	ug/m3	126.58				25.90 U	25.90 U	25.90 U	25.90 U	25.90 U		
95-50-1	1,2-DICHLOROETHENE	ug/m3	147				30.10 U	30.10 U	30.10 U	30.10 U	30.10 U		
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2				24.60 U	24.60 U	24.60 U	24.60 U	24.60 U		

Notes:

- U - undefined ug/m3 - micrograms per cubic meter
- SV - Soil Vapor J - estimated
- DP - Direct Pust ID - Identification
- N - presumptive evidence of a compound

**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	Sample Date	Boring Location	130043N-DP01-SV45	130043N-DP02-AA	130043N-DP02-SV08	130043N-DP02-SV25	130043N-DP02-SV45	
				03/25/2008	03/25/2008	03/25/2008	03/25/2008	03/25/2008	03/25/2008	03/25/2008		
				N-DP01	N-DP02	N-DP02	N-DP02	N-DP02	N-DP02	N-DP02	N-DP02	
100-41-4	Ethylbenzene	ug/m3	106.2	6.08	J		2.17	U	2.17	U	6.08	J
100-42-5	Styrene	ug/m3	104.1	21.30	U		2.13	U	2.13	U	21.30	U
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	22.70	U		2.27	U	2.27	U	22.70	U
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	22.70	U		2.27	U	2.27	U	22.70	U
106-46-7	1,4-Dichlorobenzene	ug/m3	147	30.10	U		3.01	U	3.01	U	30.10	U
106-93-4	1,2-Dibromoethane	ug/m3	187.9	38.40	U		3.84	U	3.84	U	38.40	U
108-99-0	1,3-Butadiene	ug/m3	54.09	11.10	U		1.11	U	1.11	U	11.10	U
107-05-1	Allyl Chloride	ug/m3	76.53	15.70	U		1.57	U	1.57	U	15.70	U
107-06-2	1,2-Dichloroethane	ug/m3	98.96	20.20	U		2.02	U	2.02	U	20.20	U
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	5.33	J		2.05	U	2.05	U	20.50	U
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	24.60	U		2.46	U	2.46	U	24.60	U
108-88-3	Toluene	ug/m3	92.14	21.10	U		1.88	U	2.64	U	13.20	J
108-90-7	Chlorobenzene	ug/m3	112.6	23.00	U		2.30	U	2.30	U	23.00	U
109-99-9	Tetrahydrofuran	ug/m3	154	23.90	J		3.15	U	3.15	U	29.00	J
110-54-3	Hexane	ug/m3	86.17	17.60	U		1.76	U	1.76	U	17.60	U
110-82-7	CYCLOHEXANE	ug/m3	84.16	17.20	U		1.72	U	1.72	U	17.20	U
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	37.10	U		3.71	U	3.71	U	37.10	U
123-91-1	1,4-Dioxane	ug/m3	133	27.20	U		2.72	U	2.72	U	27.20	U
124-48-1	Dibromochloromethane	ug/m3	208.3	42.60	U		4.26	U	4.26	U	42.60	U
126777-61-2	m/p-Xylene	ug/m3	106.2	15.20	J		2.17	U	0.87	J	18.20	J
127-18-4	Tetrachloroethene	ug/m3	165.8	2.71	U		0.00	U	0.00	U	22.40	J
142-82-5	n-Heptane	ug/m3	100.2	20.90	U		2.05	U	2.05	U	6.15	J
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U		1.98	U	1.98	U	19.80	U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U		1.98	U	1.98	U	19.80	U
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	18.00	U		1.80	U	1.80	U	18.00	U
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	23.40	U		2.34	U	2.34	U	23.40	U
541-73-1	1,3-DICHLOROETHENE	ug/m3	147	30.10	U		3.01	U	3.01	U	30.10	U
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	2.52	U		0.25	U	0.44	U	2.52	U
593-60-2	Bromoethene	ug/m3	106.9	21.90	U		2.19	U	2.19	U	21.90	U
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	24.60	U		2.46	U	2.46	U	24.60	U
67-64-1	ACETONE	ug/m3	58.08	285.00	B		1.43	U	5.46	U	235.00	B
67-66-3	CHLOROFORM	ug/m3	119.4	24.40	U		2.44	U	2.44	U	24.40	U
71-43-2	BENZENE	ug/m3	78.11	19.20	U		1.60	U	0.64	J	4.15	J
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	27.30	U		2.73	U	2.73	U	196.00	U
74-83-9	BROMOMETHANE	ug/m3	94.94	19.40	U		1.94	U	1.94	U	19.40	U
74-87-3	CHLOROMETHANE	ug/m3	50.49	10.30	U		1.03	U	3.30	U	10.30	U
75-00-3	CHLOROETHANE	ug/m3	64.52	13.20	U		1.32	U	1.32	U	13.20	U
75-01-4	VINYL CHLORIDE	ug/m3	62.5	12.80	U		1.28	U	1.28	U	12.80	U
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	7.99	J		1.74	U	2.78	U	5.91	J
75-15-0	CARBON DISULFIDE	ug/m3	76.14	15.60	U		1.56	U	1.56	U	15.60	U
75-25-2	BROMOFORM	ug/m3	252.8	51.70	U		5.17	U	5.17	U	51.70	U
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	33.50	U		3.35	U	3.35	U	33.50	U
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	20.20	U		2.02	U	2.02	U	20.20	U
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	19.80	U		1.98	U	1.98	U	19.80	U
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	15.20	U		1.52	U	1.52	U	7.28	J
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4	48.90	U		2.81	U	2.81	U	28.10	U
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	24.70	U		2.47	U	2.47	J	24.70	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroetha	ug/m3	187.4	38.30	U		3.83	U	0.77	J	38.30	U
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroeth	ug/m3	170.9	34.90	U		3.49	U	3.49	U	34.90	U
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	23.10	U		2.31	U	2.31	U	23.10	U
78-93-3	2-BUTANONE	ug/m3	72.11	413.00	J		1.47	U	1.18	J	283.00	D
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	27.30	U		2.73	U	2.73	U	27.30	U
79-01-6	TRICHLOROETHENE	ug/m3	131.4	2.47	U		0.25	U	0.25	U	17.70	J
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	34.30	U		3.43	U	3.43	U	34.30	U
80-62-6	Methyl Methacrylate	ug/m3	100.117	20.50	U		2.05	U	2.05	U	20.50	U
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8	53.30	U		5.33	U	5.33	U	53.30	U
95-47-6	O-XYLENE	ug/m3	106.2	4.34	J		2.17	U	2.17	U	4.34	J
95-49-8	2-Chlorotoluene	ug/m3	126.58	25.90	U		2.59	U	2.59	U	25.90	U
95-50-1	1,2-DICHLOROETHENE	ug/m3	147	30.10	U		3.01	U	3.01	U	30.10	U
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	24.60	U		2.46	U	2.46	U	24.60	U

Notes:

- U - undefined ug/m3 - micrograms per cubic meter
- SV - Soil Vapor J - estimated
- DP - Direct Pust ID - Identification
- N - presumptive evidence of a compound



**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	Sample Date	Boring Location	130043N-DP03-SV08	130043N-DP03-SV25	130043N-DP03-SV45	130043N-DP04-SD45	130043N-DP04-SV08			
				03/25/2008	03/25/2008	03/25/2008	03/25/2008	03/25/2008	03/25/2008					
				N-DP03	N-DP03	N-DP03	N-DP04	N-DP04	N-DP04	N-DP04	N-DP04			
100-41-4	Ethylbenzene	ug/m3	106.2	11.30	J		13.90	J	6.95	J	12.20	J	7.38	J
100-42-5	Styrene	ug/m3	104.1	21.30	U		21.30	U	21.30	U	21.30	U	21.30	U
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	22.70	U		22.70	U	22.70	U	22.70	U	22.70	U
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	22.70	U		22.70	U	22.70	U	22.70	U	22.70	U
106-46-7	1,4-Dichlorobenzene	ug/m3	147	30.10	U		30.10	U	30.10	U	30.10	U	30.10	U
106-93-4	1,2-Dibromoethane	ug/m3	187.9	38.40	U		38.40	U	38.40	U	38.40	U	38.40	U
106-99-0	1,3-Butadiene	ug/m3	54.09	11.10	U		11.10	U	11.10	U	11.10	U	11.10	U
107-05-1	Allyl Chloride	ug/m3	76.53	15.70	U		15.70	U	15.70	U	15.70	U	15.70	U
107-06-2	1,2-Dichloroethane	ug/m3	98.96	20.20	U		20.20	U	20.20	U	20.20	U	20.20	U
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	20.50	U		20.50	U	20.50	U	20.50	U	20.50	U
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	6.39	J		24.60	U	24.60	U	24.60	U	24.60	U
108-88-3	Toluene	ug/m3	92.14	52.80	U		67.80	U	41.50	U	52.80	U	36.90	U
108-90-7	Chlorobenzene	ug/m3	112.6	23.00	U		23.00	U	23.00	U	23.00	U	23.00	U
109-99-9	Tetrahydrofuran	ug/m3	154	23.90	J		36.50	U	58.60	U	31.50	J	7.56	J
110-54-3	Hexane	ug/m3	86.17	17.60	U		17.60	U	17.60	U	17.60	U	17.60	U
110-82-7	CYCLOHEXANE	ug/m3	84.16	17.20	U		17.20	U	17.20	U	17.20	U	17.20	U
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	37.10	U		37.10	U	37.10	U	37.10	U	37.10	U
123-91-1	1,4-Dioxane	ug/m3	133	27.20	U		27.20	U	27.20	U	27.20	U	27.20	U
124-48-1	Dibromochloromethane	ug/m3	208.3	42.60	U		42.60	U	42.60	U	42.60	U	42.60	U
126777-61-2	m/p-Xylene	ug/m3	106.2	36.90	U		47.80	U	23.00	U	42.60	U	21.70	J
127-18-4	Tetrachloroethene	ug/m3	165.8	190.00	U		136.00	U	149.00	U	746.00	U	475.00	U
142-82-5	n-Heptane	ug/m3	100.2	14.80	J		13.90	J	13.90	J	14.80	J	9.02	J
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U		19.80	U	19.80	U	19.80	U	19.80	U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U		19.80	U	19.80	U	19.80	U	19.80	U
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	18.00	U		18.00	U	18.00	U	18.00	U	18.00	U
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	23.40	U		2.34	J	23.40	U	23.40	U	23.40	U
541-73-1	1,3-DICHLOROBENZENE	ug/m3	147	30.10	U		30.10	U	30.10	U	30.10	U	30.10	U
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	2.52	U		2.52	U	2.52	U	2.52	U	2.52	U
593-60-2	Bromoethene	ug/m3	106.9	21.90	U		21.90	U	21.90	U	21.90	U	21.90	U
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	24.60	U		24.60	U	24.60	U	24.60	U	24.60	U
67-64-1	ACETONE	ug/m3	58.08	176.00	B		138.00	B	154.00	B	200.00	B	143.00	B
67-66-3	CHLOROFORM	ug/m3	119.4	24.40	U		24.40	U	24.40	U	24.40	U	24.40	U
71-43-2	BENZENE	ug/m3	78.11	10.90	J		9.58	J	7.99	J	8.63	J	8.31	J
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	2840.00	D		655.00	D	2350.00	D	175.00	D	60.00	D
74-83-9	BROMOMETHANE	ug/m3	94.94	19.40	U		19.40	U	19.40	U	19.40	U	19.40	U
74-87-3	CHLOROMETHANE	ug/m3	50.49	10.30	U		10.30	U	10.30	U	10.30	U	10.30	U
75-00-3	CHLOROETHANE	ug/m3	64.52	13.20	U		13.20	U	13.20	U	13.20	U	13.20	U
75-01-4	VINYL CHLORIDE	ug/m3	62.5	12.80	U		12.80	U	12.80	U	12.80	U	12.80	U
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	10.80	J		12.50	J	13.90	J	11.80	J	24.70	J
75-15-0	CARBON DISULFIDE	ug/m3	76.14	15.60	U		15.60	U	15.60	U	15.60	U	15.60	U
75-25-2	BROMOFORM	ug/m3	252.8	51.70	U		51.70	U	51.70	U	51.70	U	51.70	U
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	33.50	U		33.50	U	33.50	U	33.50	U	33.50	U
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	8.90	J		34.80	J	13.80	J	20.20	U	20.20	U
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	4.36	J		7.53	J	19.00	J	19.80	U	19.80	U
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	15.20	U		15.20	U	15.20	U	15.20	U	15.20	U
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4	28.10	U		28.10	U	28.10	U	28.10	U	28.10	U
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	24.70	U		24.70	U	24.70	U	24.70	U	24.70	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4	38.30	U		38.30	U	11.50	J	38.30	U	38.30	U
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9	34.90	U		34.90	U	34.90	U	34.90	U	34.90	U
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	23.10	U		23.10	U	23.10	U	23.10	U	23.10	U
78-93-3	2-BUTANONE	ug/m3	72.11	442.00	D		383.00	D	531.00	D	354.00	D	413.00	D
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	27.30	U		27.30	U	27.30	U	27.30	U	27.30	U
79-01-6	TRICHLOROETHENE	ug/m3	131.4	45.70	U		27.90	U	51.60	U	10.20	U	17.70	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	34.30	U		34.30	U	34.30	U	34.30	U	34.30	U
80-62-6	Methyl Methacrylate	ug/m3	100.117	20.50	U		20.50	U	20.50	U	20.50	U	20.50	U
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8	53.30	U		53.30	U	53.30	U	53.30	U	53.30	U
95-47-6	O-XYLENE	ug/m3	106.2	11.70	J		11.30	J	5.21	J	10.40	J	5.21	J
95-49-8	2-Chlorotoluene	ug/m3	126.58	25.90	U		25.90	U	25.90	U	25.90	U	25.90	U
95-50-1	1,2-DICHLOROETHENE	ug/m3	147	30.10	U		30.10	U	30.10	U	30.10	U	30.10	U
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	24.60	U		24.60	U	24.60	U	24.60	U	24.60	U

Notes:  
U - undefined ug/m3 - micrograms per cubic meter  
SV - Soil Vapor J - estimated  
DP - Direct Push ID - Identification  
N - presumptive evidence of a compound

**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	Sample Date	Boring Location	130043N-DP04-SV25	130043N-DP04-SV45	130043N-DP05-AA	130043N-DP05-SV08	130043N-DP05-SV25				
				03/25/2008	03/25/2008	03/24/2008	03/24/2008	03/24/2008	N-DP04	N-DP04	N-DP05	N-DP05	N-DP05		
100-41-4	Ethylbenzene	ug/m3	106.2	21.70	U			12.20	J		10.40	11.70			
100-42-5	Styrene	ug/m3	104.1	21.30	U			21.30	U	0.26	U	2.64	2.64		
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	22.70	U			22.70	U	0.23	U	2.27	2.27		
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	22.70	U			22.70	U	0.26	U	2.59	2.59		
106-46-7	1,4-Dichlorobenzene	ug/m3	147	30.10	U			30.10	U	0.15	U	1.50	1.50		
106-93-4	1,2-Dibromoethane	ug/m3	187.9	38.40	U			38.40	U	1.00	U	9.99	9.99		
106-99-0	1,3-Butadiene	ug/m3	54.09	11.10	U			11.10	U	0.08	U	0.80	0.80		
107-05-1	Allyl Chloride	ug/m3	76.53	15.70	U			15.70	U	0.19	U	1.91	1.91		
107-06-2	1,2-Dichloroethane	ug/m3	98.96	20.20	U			20.20	U	0.20	U	2.02	2.02		
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	20.50	U			20.50	U	0.82	J	4.51	2.05		
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	24.60	U			24.60	U	0.17	U	1.72	1.72		
108-88-3	Toluene	ug/m3	92.14	15.10	J			52.80	U	1.88		41.80	42.20		
108-90-7	Chlorobenzene	ug/m3	112.6	23.00	U			23.00	U	0.12	U	1.20	1.20		
109-99-9	Tetrahydrofuran	ug/m3	154	18.30	J			29.60	J	2.52		5.29	5.29		
110-54-3	Hexane	ug/m3	86.17	17.60	U			17.60	U	0.09	U	0.92	0.92		
110-82-7	CYCLOHEXANE	ug/m3	84.16	17.20	U			17.20	U	0.04	U	0.41	0.41		
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	37.10	U			37.10	U	0.26	UJ	2.60	2.60		
123-91-1	1,4-Dioxane	ug/m3	133	27.20	U			27.20	U	0.25	UJ	2.50	2.50		
124-48-1	Dibromochloromethane	ug/m3	208.3	42.60	U			42.60	U	0.22	UJ	2.22	2.22		
126777-61-2	m/p-Xylene	ug/m3	106.2	12.60	J			42.60	U	0.87		38.20	40.80		
127-18-4	Tetrachloroethene	ug/m3	165.8	251.00				746.00		0.33	U	4100.00	EDJ	3280.00	D
142-82-5	n-Heptane	ug/m3	100.2	20.50	U			14.80	J	0.41		18.40	12.70		
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U			19.80	U	0.14	U	1.39	1.39		
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U			19.80	U	0.12	U	1.23	1.23		
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	18.00	U			18.00	U	0.06	U	0.61	0.61		
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	23.40	U			23.40	U	0.12	U	1.17	1.17		
541-73-1	1,3-DICHLOROBENZENE	ug/m3	147	30.10	U			30.10	U	0.10	U	1.02	1.02		
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	2.52	U			2.52	U	0.38		1.07	1.07		
593-60-2	Bromoethene	ug/m3	106.9	21.90	U			21.90	U	0.10	U	1.05	1.05		
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	24.60	U			24.60	U	0.13	U	1.28	1.28		
67-64-1	ACETONE	ug/m3	58.08	54.60	B			183.00	B	4.75	U	1070.00	DB	1250.00	EB
67-66-3	CHLOROFORM	ug/m3	119.4	24.40	U			24.40	U	0.15	U	1.51	1.51		
71-43-2	BENZENE	ug/m3	78.11	2.88	J			8.63	J	0.64		12.50	8.31		
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	104.00				175.00		0.12	U	80.70	435.00		
74-83-9	BROMOMETHANE	ug/m3	94.94	19.40	U			19.40	U	0.09	U	0.93	0.93		
74-87-3	CHLOROMETHANE	ug/m3	50.49	10.30	U			10.30	U	1.03		0.52	0.52		
75-00-3	CHLOROETHANE	ug/m3	64.52	13.20	U			13.20	U	0.04	U	0.45	0.45		
75-01-4	VINYL CHLORIDE	ug/m3	62.5	12.80	U			12.80	U	0.06	U	0.61	0.61		
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	16.30	J			12.90	J	16.70		6.25	0.52		
75-15-0	CARBON DISULFIDE	ug/m3	76.14	15.60	U			15.60	U	0.05	U	4.67	0.47		
75-25-2	BROMOFORM	ug/m3	252.8	51.70	U			51.70	U	0.16	U	1.55	1.55		
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	33.50	U			33.50	U	0.33	U	3.35	3.35		
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	20.20	U			20.20	U	0.10	U	0.97	0.97		
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	19.80	U			19.80	U	0.10	U	0.99	4.76		
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	15.20	U			15.20	U	0.24	UJ	4.85	2.39		
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4	28.10	U			28.10	U	1.12		1.57	1.57		
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	24.70	U			24.70	U	2.47	J	0.84	0.84		
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4	38.30	U			38.30	U	0.20	U	1.99	1.99		
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9	34.90	U			34.90	U	0.15	U	1.54	1.54		
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	23.10	U			23.10	U	0.22	U	2.22	2.22		
78-93-3	2-BUTANONE	ug/m3	72.11	189.00	J			324.00	D	0.88	U	17.40	21.50		
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	27.30	U			27.30	U	0.24	U	2.40	2.40		
79-01-6	TRICHLOROETHENE	ug/m3	131.4	9.14				10.20		0.22	U	127.00	127.00		
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	34.30	U			34.30	U	0.16	U	1.65	1.65		
80-62-6	Methyl Methacrylate	ug/m3	100.117	20.50	U			20.50	U	0.26	U	2.58	2.58		
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8	53.30	U			53.30	U	0.23	UJ	2.35	2.35		
95-47-6	O-XYLENE	ug/m3	106.2	21.70	U			9.99	J	0.10	U	10.90	10.90		
95-49-8	2-Chlorotoluene	ug/m3	126.58	25.90	U			25.90	U	0.20	U	1.97	1.97		
95-50-1	1,2-DICHLOROBENZENE	ug/m3	147	30.10	U			30.10	U	0.13	U	1.32	1.32		
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	24.60	U			24.60	U	0.49		1.18	9.34		

Notes:

- U - undefined ug/m3 - micrograms per cubic meter
- SV - Soil Vapor J - estimated
- DP - Direct Push ID - Identification
- N - presumptive evidence of a compound

**Table A-1  
Soil Vapor Analytical Results  
New Cassel Industrial Area  
North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	Sample Date	Boring Location	130043N-DP05-SV45	130043V-DP01-SV08	130043V-DP01-SV25	130043V-DP01-SV45	130043V-DP02-SD45
				N-DP05	03/24/2008	V-DP01	03/18/2008	V-DP01	03/18/2008	V-DP01	03/18/2008
100-41-4	Ethylbenzene	ug/m3	106.2				11.70	9.12 J	8.25 J	4.78 J	21.70 U
100-42-5	Styrene	ug/m3	104.1				2.64 U	21.30 U	21.30 U	21.30 U	21.30 UJ
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111				2.27 U	22.70 U	22.70 U	22.70 U	22.70 U
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111				2.59 U	22.70 U	22.70 U	22.70 U	22.70 U
106-46-7	1,4-Dichlorobenzene	ug/m3	147				1.50 U	30.10 U	30.10 U	30.10 U	30.10 U
106-93-4	1,2-Dibromoethane	ug/m3	187.9				9.99 U	38.40 U	38.40 U	38.40 U	38.40 U
106-99-0	1,3-Butadiene	ug/m3	54.09				0.80 U	11.10 U	11.10 U	11.10 U	11.10 U
107-05-1	Allyl Chloride	ug/m3	76.53				1.91 U	15.70 U	15.70 U	15.70 U	15.70 U
107-06-2	1,2-Dichloroethane	ug/m3	98.96				2.02 U	20.20 U	20.20 U	20.20 U	20.20 U
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2				5.33 J	20.50 U	20.50 U	20.50 U	20.50 U
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2				1.72 U	6.88 J	24.60 U	24.60 U	4.92 J
108-88-3	Toluene	ug/m3	92.14				46.70	71.60	45.20 J	18.50 J	13.90 J
108-90-7	Chlorobenzene	ug/m3	112.6				1.20 U	23.00 U	23.00 U	23.00 U	23.00 U
109-99-9	Tetrahydrofuran	ug/m3	154				5.29 U	13.20 J	16.40 J	26.50 J	31.50 U
110-54-3	Hexane	ug/m3	86.17				0.92 U	45.80	17.60 U	17.60 U	17.60 U
110-82-7	CYCLOHEXANE	ug/m3	84.16				0.41 U	17.20 U	6.54 J	17.20 U	17.20 U
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5				2.60 UJ	37.10 U	37.10 U	37.10 U	37.10 U
123-91-1	1,4-Dioxane	ug/m3	133				2.50 UJ	27.20 U	27.20 U	27.20 U	27.20 U
124-48-1	Dibromochloromethane	ug/m3	208.3				2.22 U	42.60 U	42.60 U	42.60 U	42.60 U
126777-61-2	m/p-Xylene	ug/m3	106.2				43.40	27.80	25.20 J	13.50 J	4.34 J
127-18-4	Tetrachloroethene	ug/m3	165.8				5500.00 D	38.00	33.90 J	57.60 J	38.00
142-82-5	n-Heptane	ug/m3	100.2				16.80	22.90	19.30 J	10.20 J	4.51 J
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94				1.39 U	19.80 U	19.80 U	19.80 U	19.80 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94				1.23 U	19.80 U	19.80 U	19.80 U	19.80 U
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15				0.61 U	18.00 U	18.00 U	18.00 U	18.00 U
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2				1.17 U	7.94 J	23.40 U	23.40 U	23.40 U
541-73-1	1,3-DICHLOROBENZENE	ug/m3	147				1.02 U	30.10 U	30.10 U	30.10 U	30.10 U
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8				1.07 U	2.52 U	2.52 U	2.52 U	2.52 U
593-60-2	Bromoethene	ug/m3	106.9				1.05 U	21.90 U	21.90 U	21.90 U	21.90 U
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2				1.28 U	24.60 U	24.60 U	24.60 U	24.60 U
67-64-1	ACETONE	ug/m3	58.08				1040.00 DB	68.90 B	159.00 B	230.00 B	85.50 B
67-66-3	CHLOROFORM	ug/m3	119.4				1.51 U	24.40 U	24.40 U	24.40 U	24.40 U
71-43-2	BENZENE	ug/m3	78.11				10.20	17.30	11.20 J	5.43 J	6.71 J
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4				451.00	27.30 U	32.70	65.50	33.30
74-83-9	BROMOMETHANE	ug/m3	94.94				0.93 U	19.40 U	19.40 U	19.40 U	19.40 U
74-87-3	CHLOROMETHANE	ug/m3	50.49				0.52 U	10.30 U	10.30 U	10.30 U	10.30 U
75-00-3	CHLOROETHANE	ug/m3	64.52				0.45 U	13.20 U	13.20 U	13.20 U	13.20 U
75-01-4	VINYL CHLORIDE	ug/m3	62.5				0.61 U	12.80 U	12.80 U	12.80 U	12.80 U
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94				4.52	16.70 J	4.86 J	5.56 J	11.50 J
75-15-0	CARBON DISULFIDE	ug/m3	76.14				0.47 U	15.60 U	15.60 U	15.60 U	15.60 U
75-25-2	BROMOFORM	ug/m3	252.8				1.55 U	51.70 U	51.70 U	51.70 U	51.70 U
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8				3.35 U	33.50 U	33.50 U	33.50 U	33.50 U
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96				0.97 U	20.20 U	20.20 U	4.05 J	14.20 J
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94				8.33	19.80 U	6.34 J	14.70 J	14.30 J
75-65-0	tert-Butyl Alcohol	ug/m3	74.12				2.39 UJ	15.20 U	15.20 U	15.20 U	15.20 U
75-69-4	TRICHLOROFUOROMETHANE	ug/m3	137.4				1.57 U	28.10 U	28.10 U	28.10 U	5.62 J
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9				0.84 U	24.70 U	24.70 U	24.70 U	24.70 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4				1.99 U	38.30 U	38.30 U	13.80 J	38.30 U
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9				1.54 U	34.90 U	34.90 U	34.90 U	34.90 U
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113				2.22 U	23.10 U	23.10 U	23.10 U	23.10 U
78-93-3	2-BUTANONE	ug/m3	72.11				31.00 U	70.80	85.50 J	156.00 J	44.20
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4				2.40 U	27.30 U	27.30 U	27.30 U	27.30 U
79-01-6	TRICHLOROETHENE	ug/m3	131.4				112.00	6.45	2.47 U	2.47 U	11.80
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9				1.65 U	34.30 U	34.30 U	34.30 U	34.30 U
80-62-6	Methyl Methacrylate	ug/m3	100.117				2.58 U	20.50 U	20.50 U	20.50 U	20.50 U
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8				2.35 UJ	53.30 U	53.30 U	53.30 U	53.30 U
95-47-6	O-XYLENE	ug/m3	106.2				10.90	9.99 J	7.38 J	21.70 U	21.70 U
95-49-8	2-Chlorotoluene	ug/m3	126.58				1.97 U	25.90 U	25.90 U	25.90 U	25.90 U
95-50-1	1,2-DICHLOROBENZENE	ug/m3	147				1.32 U	30.10 U	30.10 U	30.10 U	30.10 U
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2				10.80	23.60 J	7.37 J	5.41 J	24.60 U

Notes:

- U - undefined ug/m3 - micrograms per cubic meter
- SV - Soil Vapor J - estimated
- DP - Direct Pust ID - Identification
- N - presumptive evidence of a compound

**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	Sample Date	Boring Location	130043V-DP02-SV08	130043V-DP02-SV25	130043V-DP02-SV45	130043V-DP03-SV08	130043V-DP03-SV25	
				03/18/2008	03/18/2008	03/18/2008	03/18/2008	03/18/2008	03/18/2008	03/18/2008	03/18/2008	03/18/2008
				V-DP02	V-DP02	V-DP02	V-DP03	V-DP03	V-DP03	V-DP03	V-DP03	
100-41-4	Ethylbenzene	ug/m3	106.2	21.70	U		21.70	U	21.70	U	4.78	J
100-42-5	Styrene	ug/m3	104.1	21.30	UJ		21.30	UJ	21.30	UJ	21.30	UJ
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	22.70	U		22.70	U	22.70	U	22.70	U
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	22.70	U		22.70	U	22.70	U	22.70	U
106-46-7	1,4-Dichlorobenzene	ug/m3	147	30.10	U		30.10	U	30.10	U	30.10	U
106-93-4	1,2-Dibromoethane	ug/m3	187.9	38.40	U		38.40	U	38.40	U	38.40	U
106-99-0	1,3-Butadiene	ug/m3	54.09	11.10	U		11.10	U	11.10	U	11.10	U
107-05-1	Allyl Chloride	ug/m3	76.53	15.70	U		15.70	U	15.70	U	15.70	U
107-06-2	1,2-Dichloroethane	ug/m3	98.96	20.20	U		20.20	U	20.20	U	20.20	U
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	20.50	U		20.50	U	20.50	U	20.50	U
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	24.60	U		4.92	J	24.60	U	24.60	U
108-88-3	Toluene	ug/m3	92.14	10.90	J		17.70	J	7.54	J	10.60	J
108-90-7	Chlorobenzene	ug/m3	112.6	23.00	U		23.00	U	23.00	U	23.00	U
109-99-9	Tetrahydrofuran	ug/m3	154	8.19	J		13.90	J	31.50	U	31.50	U
110-54-3	Hexane	ug/m3	86.17	17.60	U		17.60	U	17.60	U	17.60	U
110-82-7	CYCLOHEXANE	ug/m3	84.16	17.20	U		17.20	U	17.20	U	17.20	U
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	37.10	U		37.10	U	37.10	U	37.10	U
123-91-1	1,4-Dioxane	ug/m3	133	27.20	U		27.20	U	27.20	U	27.20	U
124-48-1	Dibromochloromethane	ug/m3	208.3	42.60	U		42.60	U	42.60	U	42.60	U
126777-61-2	m/p-Xylene	ug/m3	106.2	21.70	U		7.38	J	21.70	U	6.08	J
127-18-4	Tetrachloroethene	ug/m3	165.8	21.70	J		38.00		19.70	J	23.10	J
142-82-5	n-Heptane	ug/m3	100.2	20.50	U		6.15	J	20.50	U	20.50	U
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U		19.80	U	19.80	U	19.80	U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U		19.80	U	19.80	U	19.80	U
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	18.00	U		18.00	U	18.00	U	18.00	U
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	23.40	U		23.40	U	23.40	U	23.40	U
541-73-1	1,3-DICHLOROETHENE	ug/m3	147	30.10	U		30.10	U	30.10	U	30.10	U
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	2.52	U		2.52	U	2.52	U	2.52	U
593-60-2	Bromoethene	ug/m3	106.9	21.90	U		21.90	U	21.90	U	21.90	U
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	24.60	U		24.60	U	24.60	U	24.60	U
67-64-1	ACETONE	ug/m3	58.08	28.50	U		90.30	B	33.30	U	78.40	B
67-66-3	CHLOROFORM	ug/m3	119.4	24.40	U		24.40	U	24.40	U	24.40	U
71-43-2	BENZENE	ug/m3	78.11	3.51	J		5.11	J	16.00	U	16.00	U
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	13.60	J		25.60	J	12.50	J	109.00	D
74-83-9	BROMOMETHANE	ug/m3	94.94	19.40	U		19.40	U	19.40	U	19.40	U
74-87-3	CHLOROMETHANE	ug/m3	50.49	10.30	U		10.30	U	10.30	U	10.30	U
75-00-3	CHLOROETHANE	ug/m3	64.52	13.20	U		13.20	U	13.20	U	13.20	U
75-01-4	VINYL CHLORIDE	ug/m3	62.5	12.80	U		12.80	U	12.80	U	12.80	U
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	4.17	J		17.40	U	17.40	U	17.40	U
75-15-0	CARBON DISULFIDE	ug/m3	76.14	15.60	U		15.60	U	15.60	U	15.60	U
75-25-2	BROMOFORM	ug/m3	252.8	51.70	U		51.70	U	51.70	U	51.70	U
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	33.50	U		33.50	U	33.50	U	33.50	U
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	6.07	J		20.20	U	6.48	J	18.20	J
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	5.55	J		19.80	U	6.34	J	19.80	U
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	15.20	U		15.20	U	15.20	U	15.20	U
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4	28.10	U		28.10	U	28.10	U	28.10	U
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	24.70	U		24.70	U	24.70	U	24.70	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroetha	ug/m3	187.4	38.30	U		38.30	U	38.30	U	38.30	U
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroeth	ug/m3	170.9	34.90	U		34.90	U	34.90	U	34.90	U
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	23.10	U		23.10	U	23.10	U	23.10	U
78-93-3	2-BUTANONE	ug/m3	72.11	41.30			115.00		50.10		166.00	
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	27.30	U		27.30	U	27.30	U	27.30	U
79-01-6	TRICHLOROETHENE	ug/m3	131.4	4.84			2.47		4.30		5.91	
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	34.30	U		34.30	U	34.30	U	34.30	U
80-62-6	Methyl Methacrylate	ug/m3	100.117	20.50	U		20.50	U	20.50	U	20.50	U
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8	53.30	U		53.30	U	53.30	U	53.30	U
95-47-6	O-XYLENE	ug/m3	106.2	21.70	U		21.70	U	21.70	U	21.70	U
95-49-8	2-Chlorotoluene	ug/m3	126.58	25.90	U		25.90	U	25.90	U	25.90	U
95-50-1	1,2-DICHLOROETHENE	ug/m3	147	30.10	U		30.10	U	30.10	U	30.10	U
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	24.60	U		24.60	U	24.60	U	24.60	U

Notes:

- U - undefined ug/m3 - micrograms per cubic meter
- SV - Soil Vapor J - estimated
- DP - Direct Pust ID - Identification
- N - presumptive evidence of a compound

**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	Sample Date	Boring Location	130043V-DP03-SV45	130043V-DP04-SV08	130043V-DP04-SV25	130043V-DP04-SV45	130043V-DP05-AA				
				03/18/2008	03/18/2008	03/18/2008	03/18/2008	03/17/2008							
				V-DP03	V-DP04	V-DP04	V-DP04	V-DP04	V-DP04	V-DP05					
100-41-4	Ethylbenzene	ug/m3	106.2	21.70	U			4.78	J	21.70	U	29.50	U	0.43	J
100-42-5	Styrene	ug/m3	104.1	21.30	UJ			21.30	U	21.30	UJ	21.30	UJ	2.13	U
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	22.70	U			22.70	U	22.70	U	22.70	U	2.27	U
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	22.70	U			22.70	U	22.70	U	22.70	U	2.27	U
106-46-7	1,4-Dichlorobenzene	ug/m3	147	30.10	U			30.10	U	30.10	U	30.10	U	3.01	U
106-93-4	1,2-Dibromoethane	ug/m3	187.9	38.40	U			38.40	U	38.40	U	38.40	U	3.84	U
106-99-0	1,3-Butadiene	ug/m3	54.09	11.10	U			11.10	U	11.10	U	11.10	U	1.11	U
107-05-1	Allyl Chloride	ug/m3	76.53	15.70	U			15.70	U	15.70	U	15.70	U	1.57	U
107-06-2	1,2-Dichloroethane	ug/m3	98.96	20.20	U			20.20	U	20.20	U	20.20	U	2.02	U
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	20.50	U			20.50	U	20.50	U	22.90	U	2.05	U
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	24.60	U			24.60	U	5.90	J	24.60	U	2.46	U
108-88-3	Toluene	ug/m3	92.14	26.00	U			14.70	J	20.30	U	490.00	U	15.50	U
108-90-7	Chlorobenzene	ug/m3	112.6	23.00	U			23.00	U	23.00	U	23.00	U	2.30	U
109-99-9	Tetrahydrofuran	ug/m3	154	10.70	J			31.50	U	16.40	J	11.30	J	1.26	J
110-54-3	Hexane	ug/m3	86.17	17.60	U			17.60	U	17.60	U	17.60	U	1.76	U
110-82-7	CYCLOHEXANE	ug/m3	84.16	17.20	U			17.20	U	17.20	U	17.20	U	1.72	U
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	37.10	U			37.10	U	37.10	U	37.10	U	3.71	U
123-91-1	1,4-Dioxane	ug/m3	133	27.20	U			27.20	U	27.20	U	27.20	U	2.72	U
124-48-1	Dibromochloromethane	ug/m3	208.3	42.60	U			42.60	U	42.60	U	42.60	U	4.26	U
126777-61-2	m/p-Xylene	ug/m3	106.2	4.78	J			15.60	J	6.52	J	91.20	U	1.30	J
127-18-4	Tetrachloroethene	ug/m3	165.8	10.80	J			237.00	J	502.00	U	19.70	J	29.80	U
142-82-5	n-Heptane	ug/m3	100.2	20.50	U			20.50	U	4.51	J	20.50	U	1.64	J
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U			143.00	U	476.00	U	19.80	U	1.98	U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U			4.36	J	5.55	J	19.80	U	1.98	U
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	18.00	U			18.00	U	18.00	U	18.00	U	1.80	U
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	23.40	U			23.40	U	23.40	U	23.40	U	2.34	U
541-73-1	1,3-DICHLOROETHENE	ug/m3	147	30.10	U			30.10	U	30.10	U	30.10	U	3.01	U
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	2.52	U			2.52	U	2.52	U	2.52	U	0.50	U
593-60-2	Bromoethene	ug/m3	106.9	21.90	U			21.90	U	21.90	U	21.90	U	2.19	U
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	24.60	U			24.60	U	24.60	U	24.60	U	2.46	U
67-64-1	ACETONE	ug/m3	58.08	119.00	B			97.40	B	87.90	B	173.00	B	9.26	U
67-66-3	CHLOROFORM	ug/m3	119.4	24.40	U			46.40	U	137.00	U	24.40	U	2.44	U
71-43-2	BENZENE	ug/m3	78.11	16.00	U			16.00	U	3.19	J	16.00	U	1.28	J
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	27.30	U			16900.00	D	98200.00	D	27.30	U	2.73	U
74-83-9	BROMOMETHANE	ug/m3	94.94	19.40	U			19.40	U	19.40	U	19.40	U	1.94	U
74-87-3	CHLOROMETHANE	ug/m3	50.49	10.30	U			10.30	U	10.30	U	10.30	U	1.24	U
75-00-3	CHLOROETHANE	ug/m3	64.52	13.20	U			13.20	U	4.22	J	13.20	U	1.32	U
75-01-4	VINYL CHLORIDE	ug/m3	62.5	12.80	U			12.80	U	12.80	U	12.80	U	1.28	U
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	5.56	J			17.40	U	7.99	J	6.25	J	2.43	U
75-15-0	CARBON DISULFIDE	ug/m3	76.14	15.60	U			15.60	U	15.60	U	15.60	U	1.56	U
75-25-2	BROMOFORM	ug/m3	252.8	51.70	U			51.70	U	51.70	U	51.70	U	5.17	U
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	33.50	U			33.50	U	33.50	U	33.50	U	3.35	U
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	20.20	U			8090.00	D	44500.00	D	20.20	U	2.02	U
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	19.80	U			139.00	U	365.00	U	19.80	U	1.98	U
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	3.64	J			15.20	U	15.20	U	15.20	U	1.52	U
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4	28.10	U			28.10	U	28.10	U	28.10	U	1.12	J
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	24.70	U			24.70	U	24.70	U	24.70	U	1.98	J
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4	38.30	U			38.30	U	38.30	U	38.30	U	3.83	U
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9	34.90	U			34.90	U	34.90	U	34.90	U	3.49	U
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	23.10	U			23.10	U	23.10	U	23.10	U	2.31	U
78-93-3	2-BUTANONE	ug/m3	72.11	295.00	D			168.00	J	354.00	U	133.00	U	3.24	U
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	27.30	U			27.30	U	27.30	U	27.30	U	2.73	U
79-01-6	TRICHLOROETHENE	ug/m3	131.4	2.47	U			376.00	J	1290.00	D	5.37	U	0.25	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	34.30	U			34.30	U	34.30	U	34.30	U	3.43	U
80-62-6	Methyl Methacrylate	ug/m3	100.117	20.50	U			20.50	U	20.50	U	20.50	U	2.05	U
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8	53.30	U			53.30	U	53.30	U	53.30	U	5.33	U
95-47-6	O-XYLENE	ug/m3	106.2	21.70	U			4.34	J	21.70	U	16.10	J	0.43	J
95-49-8	2-Chlorotoluene	ug/m3	126.58	25.90	U			25.90	U	25.90	U	25.90	U	2.59	U
95-50-1	1,2-DICHLOROETHENE	ug/m3	147	30.10	U			30.10	U	30.10	U	30.10	U	3.01	U
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	24.60	U			6.39	J	24.60	U	24.60	U	2.46	U

Notes:  
U - undefined ug/m3 - micrograms per cubic meter  
SV - Soil Vapor J - estimated  
DP - Direct Push ID - Identification  
N - presumptive evidence of a compound



**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	130043V-DP05-SV08	130043V-DP05-SV25	130043V-DP05-SV45		
				Sample Date	03/17/2008	03/17/2008	03/17/2008		
Boring Location				V-DP05	V-DP05	V-DP05	V-DP05		
100-41-4	Ethylbenzene	ug/m3	106.2	21.70	U	434.00	UJ	434.00	U
100-42-5	Styrene	ug/m3	104.1	21.30	U	426.00	UJ	426.00	U
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111	22.70	U	454.00	UJ	454.00	U
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111	22.70	U	454.00	UJ	454.00	U
106-46-7	1,4-Dichlorobenzene	ug/m3	147	30.10	U	601.00	UJ	601.00	U
106-93-4	1,2-Dibromoethane	ug/m3	187.9	38.40	U	769.00	UJ	769.00	U
106-99-0	1,3-Butadiene	ug/m3	54.09	11.10	U	221.00	U	221.00	U
107-05-1	Allyl Chloride	ug/m3	76.53	15.70	U	313.00	U	313.00	U
107-06-2	1,2-Dichloroethane	ug/m3	98.96	20.20	U	405.00	UJ	405.00	U
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2	11.10	J	410.00	UJ	410.00	U
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2	24.60	U	590.00	J	492.00	U
108-88-3	Toluene	ug/m3	92.14	13.60	J	377.00	UJ	377.00	U
108-90-7	Chlorobenzene	ug/m3	112.6	23.00	U	461.00	UJ	461.00	U
109-99-9	Tetrahydrofuran	ug/m3	154	11.30	J	630.00	UJ	630.00	U
110-54-3	Hexane	ug/m3	86.17	17.60	U	352.00	U	352.00	U
110-82-7	CYCLOHEXANE	ug/m3	84.16	17.20	U	344.00	U	344.00	U
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5	37.10	U	742.00	UJ	742.00	U
123-91-1	1,4-Dioxane	ug/m3	133	27.20	U	544.00	UJ	544.00	U
124-48-1	Dibromochloromethane	ug/m3	208.3	42.60	U	852.00	UJ	852.00	U
126777-61-2	m/p-Xylene	ug/m3	106.2	6.52	J	434.00	UJ	434.00	U
127-18-4	Tetrachloroethene	ug/m3	165.8	108.00		5760.00	J	1970.00	
142-82-5	n-Heptane	ug/m3	100.2	4.10	J	410.00	U	410.00	U
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94	11.90	J	1670.00		436.00	
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94	19.80	U	396.00		396.00	U
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15	18.00	U	361.00	U	361.00	U
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2	23.40	U	467.00	UJ	467.00	U
541-73-1	1,3-DICHLOROBENZENE	ug/m3	147	30.10	U	601.00	UJ	601.00	U
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8	2.52	U	50.30	UJ	50.30	U
593-60-2	Bromoethene	ug/m3	106.9	21.90	U	437.00	U	437.00	U
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2	24.60	U	492.00	UJ	492.00	U
67-64-1	ACETONE	ug/m3	58.08	126.00	U	1020.00	B	546.00	U
67-66-3	CHLOROFORM	ug/m3	119.4	6.35	J	430.00	J	156.00	J
71-43-2	BENZENE	ug/m3	78.11	16.00	U	319.00	UJ	319.00	U
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4	1640.00	D	147000.00	EDJ	51300.00	D
74-83-9	BROMOMETHANE	ug/m3	94.94	19.40	U	388.00	U	388.00	U
74-87-3	CHLOROMETHANE	ug/m3	50.49	10.30	U	207.00	U	207.00	U
75-00-3	CHLOROETHANE	ug/m3	64.52	13.20	U	264.00	U	264.00	U
75-01-4	VINYL CHLORIDE	ug/m3	62.5	12.80	U	256.00	U	256.00	U
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94	12.50	J	188.00	J	90.30	J
75-15-0	CARBON DISULFIDE	ug/m3	76.14	5.29	J	311.00	U	311.00	U
75-25-2	BROMOFORM	ug/m3	252.8	51.70	U	1030.00	UJ	1030.00	U
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8	33.50	U	670.00	UJ	670.00	U
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96	1010.00	D	72900.00	EDJ	36000.00	D
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94	18.20	J	1630.00		357.00	J
75-65-0	tert-Butyl Alcohol	ug/m3	74.12	15.20	U	303.00	U	303.00	U
75-69-4	TRICHLOROFUOROMETHANE	ug/m3	137.4	28.10	U	562.00	U	562.00	U
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9	24.70	U	494.00	U	494.00	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4	8.43	J	766.00	U	766.00	U
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9	34.90	U	699.00	U	699.00	U
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113	23.10	U	462.00	UJ	462.00	U
78-93-3	2-BUTANONE	ug/m3	72.11	145.00	B	944.00	J	560.00	
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4	27.30	U	546.00	UJ	546.00	U
79-01-6	TRICHLOROETHENE	ug/m3	131.4	75.20		3920.00		1020.00	
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9	34.30	U	687.00	UJ	687.00	U
80-62-6	Methyl Methacrylate	ug/m3	100.117	20.50	U	409.00	UJ	409.00	U
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8	53.30	U	1070.00	UJ	1070.00	U
95-47-6	O-XYLENE	ug/m3	106.2	21.70	U	174.00	J	434.00	U
95-49-8	2-Chlorotoluene	ug/m3	126.58	25.90	U	518.00	UJ	518.00	U
95-50-1	1,2-DICHLOROBENZENE	ug/m3	147	30.10	U	601.00	UJ	601.00	U
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2	24.60	U	1380.00	J	492.00	U

Notes:  
U - undefined ug/m3 - micrograms per cubic meter  
SV - Soil Vapor J - estimated  
DP - Direct Push ID - Identification  
N - presumptive evidence of a compound

**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Molecular Weight	Sample ID	130043V-DP02-SD45	130043V-DP02-SV08	130043V-DP02-SV25	130043V-DP02-SV45	130043V-E
				Sample Date	03/18/2008	03/18/2008	03/18/2008	03/18/2008	03/18
Boring Location				V-DP02	V-DP02	V-DP02	V-DP02	V-DP02	V-D
100-41-4	Ethylbenzene	ug/m3	106.2		21.70 U	21.70 U	21.70 U	21.70 U	21.70
100-42-5	Styrene	ug/m3	104.1		21.30 UJ	21.30 UJ	21.30 UJ	21.30 UJ	21.30
10061-01-5	cis-1,3-Dichloropropene	ug/m3	111		22.70 U	22.70 U	22.70 U	22.70 U	22.70
10061-02-6	trans-1,3-Dichloropropene	ug/m3	111		22.70 U	22.70 U	22.70 U	22.70 U	22.70
106-46-7	1,4-Dichlorobenzene	ug/m3	147		30.10 U	30.10 U	30.10 U	30.10 U	30.10
106-93-4	1,2-Dibromoethane	ug/m3	187.9		38.40 U	38.40 U	38.40 U	38.40 U	38.40
106-99-0	1,3-Butadiene	ug/m3	54.09		11.10 U	11.10 U	11.10 U	11.10 U	11.10
107-05-1	Allyl Chloride	ug/m3	76.53		15.70 U	15.70 U	15.70 U	15.70 U	15.70
107-06-2	1,2-Dichloroethane	ug/m3	98.96		20.20 U	20.20 U	20.20 U	20.20 U	20.20
108-10-1	4-Methyl-2-Pentanone	ug/m3	100.2		20.50 U	20.50 U	20.50 U	20.50 U	20.50
108-67-8	1,3,5-Trimethylbenzene	ug/m3	120.2		4.92 J	24.60 U	4.92 J	24.60 U	24.60
108-88-3	Toluene	ug/m3	92.14		13.90 J	10.90 J	17.70 J	7.54 J	10.60
108-90-7	Chlorobenzene	ug/m3	112.6		23.00 U	23.00 U	23.00 U	23.00 U	23.00
109-99-9	Tetrahydrofuran	ug/m3	154		31.50 U	8.19 J	13.90 J	31.50 U	31.50
110-54-3	Hexane	ug/m3	86.17		17.60 U	17.60 U	17.60 U	17.60 U	17.60
110-82-7	CYCLOHEXANE	ug/m3	84.16		17.20 U	17.20 U	17.20 U	17.20 U	17.20
120-82-1	1,2,4-Trichlorobenzene	ug/m3	181.5		37.10 U	37.10 U	37.10 U	37.10 U	37.10
123-91-1	1,4-Dioxane	ug/m3	133		27.20 U	27.20 U	27.20 U	27.20 U	27.20
124-48-1	Dibromochloromethane	ug/m3	208.3		42.60 U	42.60 U	42.60 U	42.60 U	42.60
126777-61-2	m/p-Xylene	ug/m3	106.2		4.34 J	21.70 U	7.38 J	21.70 U	6.08
127-18-4	Tetrachloroethene	ug/m3	165.8		38.00 U	21.70 J	38.00 U	19.70 J	23.10
142-82-5	n-Heptane	ug/m3	100.2		4.51 J	20.50 U	6.15 J	20.50 U	20.50
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3	96.94		19.80 U	19.80 U	19.80 U	19.80 U	19.80
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3	96.94		19.80 U	19.80 U	19.80 U	19.80 U	19.80
1634-04-4	Methyl t-Butyl Ether	ug/m3	88.15		18.00 U	18.00 U	18.00 U	18.00 U	18.00
540-84-1	2,2,4-Trimethylpentane	ug/m3	114.2		23.40 U	23.40 U	23.40 U	23.40 U	23.40
541-73-1	1,3-DICHLOROETHANE	ug/m3	147		30.10 U	30.10 U	30.10 U	30.10 U	30.10
56-23-5	CARBON TETRACHLORIDE	ug/m3	153.8		2.52 U	2.52 U	2.52 U	2.52 U	2.52
593-60-2	Bromoethene	ug/m3	106.9		21.90 U	21.90 U	21.90 U	21.90 U	21.90
622-96-8	4-ETHYLTOLUENE	ug/m3	120.2		24.60 U	24.60 U	24.60 U	24.60 U	24.60
67-64-1	ACETONE	ug/m3	58.08		85.50 B	28.50 U	90.30 B	33.30 U	78.40
67-66-3	CHLOROFORM	ug/m3	119.4		24.40 U	24.40 U	24.40 U	24.40 U	24.40
71-43-2	BENZENE	ug/m3	78.11		6.71 J	3.51 J	5.11 J	16.00 U	16.00
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3	133.4		33.30 U	13.60 J	25.60 J	12.50 J	109.00
74-83-9	BROMOMETHANE	ug/m3	94.94		19.40 U	19.40 U	19.40 U	19.40 U	19.40
74-87-3	CHLOROMETHANE	ug/m3	50.49		10.30 U	10.30 U	10.30 U	10.30 U	10.30
75-00-3	CHLOROETHANE	ug/m3	64.52		13.20 U	13.20 U	13.20 U	13.20 U	13.20
75-01-4	VINYL CHLORIDE	ug/m3	62.5		12.80 U	12.80 U	12.80 U	12.80 U	12.80
75-09-2	METHYLENE CHLORIDE	ug/m3	84.94		11.50 J	4.17 J	17.40 U	17.40 U	17.40
75-15-0	CARBON DISULFIDE	ug/m3	76.14		15.60 U	15.60 U	15.60 U	15.60 U	15.60
75-25-2	BROMOFORM	ug/m3	252.8		51.70 U	51.70 U	51.70 U	51.70 U	51.70
75-27-4	BROMODICHLOROMETHANE	ug/m3	163.8		33.50 U	33.50 U	33.50 U	33.50 U	33.50
75-34-3	1,1-DICHLOROETHANE	ug/m3	98.96		14.20 J	6.07 J	20.20 U	6.48 J	18.20
75-35-4	1,1-DICHLOROETHENE	ug/m3	96.94		14.30 J	5.55 J	19.80 U	6.34 J	19.80
75-65-0	tert-Butyl Alcohol	ug/m3	74.12		15.20 U	15.20 U	15.20 U	15.20 U	15.20
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3	137.4		5.62 J	28.10 U	28.10 U	28.10 U	28.10
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3	120.9		24.70 U	24.70 U	24.70 U	24.70 U	24.70
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3	187.4		38.30 U	38.30 U	38.30 U	38.30 U	38.30
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3	170.9		34.90 U	34.90 U	34.90 U	34.90 U	34.90
78-87-5	1,2-DICHLOROPROPANE	ug/m3	113		23.10 U	23.10 U	23.10 U	23.10 U	23.10
78-93-3	2-BUTANONE	ug/m3	72.11		44.20 U	41.30 U	115.00 U	50.10 U	156.00
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3	133.4		27.30 U	27.30 U	27.30 U	27.30 U	27.30
79-01-6	TRICHLOROETHENE	ug/m3	131.4		11.80 U	4.84 U	2.47 U	4.30 U	5.91 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3	167.9		34.30 U	34.30 U	34.30 U	34.30 U	34.30
80-62-6	Methyl Methacrylate	ug/m3	100.117		20.50 U	20.50 U	20.50 U	20.50 U	20.50
87-68-3	HEXACHLOROBUTADIENE	ug/m3	260.8		53.30 U	53.30 U	53.30 U	53.30 U	53.30
95-47-6	O-XYLENE	ug/m3	106.2		21.70 U	21.70 U	21.70 U	21.70 U	21.70
95-49-8	2-Chlorotoluene	ug/m3	126.58		25.90 U	25.90 U	25.90 U	25.90 U	25.90
95-50-1	1,2-DICHLOROETHANE	ug/m3	147		30.10 U	30.10 U	30.10 U	30.10 U	30.10
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3	120.2		24.60 U	24.60 U	24.60 U	24.60 U	24.60

Notes:

- U - undefined ug/m3 - micrograms per cubic meter
- SV - Soil Vapor J - estimated
- DP - Direct Push ID - Identification
- N - presumptive evidence of a compound

**Table A-1**  
**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Sample ID	Sample Date	Boring Location	Molecular Weight		130043V-DP04-SV08		130043V-DP04-SV25	
			P03-SV08	2008	P03						
100-41-4	Ethylbenzene	ug/m3				106.2	U			4.78	J
100-42-5	Styrene	ug/m3				104.1	UJ			21.30	UJ
10061-01-5	cis-1,3-Dichloropropene	ug/m3				111	U			22.70	U
10061-02-6	trans-1,3-Dichloropropene	ug/m3				111	U			22.70	U
106-46-7	1,4-Dichlorobenzene	ug/m3				147	U			30.10	U
106-93-4	1,2-Dibromoethane	ug/m3				187.9	U			38.40	U
106-99-0	1,3-Butadiene	ug/m3				54.09	U			11.10	U
107-05-1	Allyl Chloride	ug/m3				76.53	U			15.70	U
107-06-2	1,2-Dichloroethane	ug/m3				98.96	U			20.20	U
108-10-1	4-Methyl-2-Pentanone	ug/m3				100.2	U			20.50	U
108-67-8	1,3,5-Trimethylbenzene	ug/m3				120.2	U			5.41	J
108-88-3	Toluene	ug/m3				92.14	J			26.00	
108-90-7	Chlorobenzene	ug/m3				112.6	U			23.00	U
109-99-9	Tetrahydrofuran	ug/m3				154	U			13.20	J
110-54-3	Hexane	ug/m3				86.17	U			17.60	U
110-82-7	CYCLOHEXANE	ug/m3				84.16	U			17.20	U
120-82-1	1,2,4-Trichlorobenzene	ug/m3				181.5	U			37.10	U
123-91-1	1,4-Dioxane	ug/m3				133	U			27.20	U
124-48-1	Dibromochloromethane	ug/m3				208.3	U			42.60	U
126777-61-2	m/p-Xylene	ug/m3				106.2	J			10.40	J
127-18-4	Tetrachloroethene	ug/m3				165.8	J			74.60	J
142-82-5	n-Heptane	ug/m3				100.2	U			4.51	J
156-59-2	CIS-1,2-DICHLOROETHENE	ug/m3				96.94	U			14.30	J
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/m3				96.94	U			19.80	U
1634-04-4	Methyl t-Butyl Ether	ug/m3				88.15	U			18.00	U
540-84-1	2,2,4-Trimethylpentane	ug/m3				114.2	U			23.40	U
541-73-1	1,3-DICHLOROBENZENE	ug/m3				147	U			30.10	U
56-23-5	CARBON TETRACHLORIDE	ug/m3				153.8	U			2.52	U
593-60-2	Bromoethene	ug/m3				106.9	U			21.90	U
622-96-8	4-ETHYLTOLUENE	ug/m3				120.2	U			24.60	U
67-64-1	ACETONE	ug/m3				58.08	B			90.30	B
67-66-3	CHLOROFORM	ug/m3				119.4	U			24.40	U
71-43-2	BENZENE	ug/m3				78.11	U			3.83	J
71-55-6	1,1,1-TRICHLOROETHANE	ug/m3				133.4	U			2460.00	D
74-83-9	BROMOMETHANE	ug/m3				94.94	U			19.40	U
74-87-3	CHLOROMETHANE	ug/m3				50.49	U			10.30	U
75-00-3	CHLOROETHANE	ug/m3				64.52	U			13.20	U
75-01-4	VINYL CHLORIDE	ug/m3				62.5	U			12.80	U
75-09-2	METHYLENE CHLORIDE	ug/m3				84.94	U			17.40	U
75-15-0	CARBON DISULFIDE	ug/m3				76.14	U			15.60	U
75-25-2	BROMOFORM	ug/m3				252.8	U			51.70	U
75-27-4	BROMODICHLOROMETHANE	ug/m3				163.8	U			33.50	U
75-34-3	1,1-DICHLOROETHANE	ug/m3				98.96	J			1210.00	D
75-35-4	1,1-DICHLOROETHENE	ug/m3				96.94	U			39.60	U
75-65-0	tert-Butyl Alcohol	ug/m3				74.12	U			15.20	U
75-69-4	TRICHLOROFLUOROMETHANE	ug/m3				137.4	U			28.10	U
75-71-8	DICHLORODIFLUOROMETHANE	ug/m3				120.9	U			24.70	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/m3				187.4	U			38.30	U
76-14-2	1,2-dichloro-1,1,2,2-tetrafluoroethane	ug/m3				170.9	U			34.90	U
78-87-5	1,2-DICHLOROPROPANE	ug/m3				113	U			23.10	U
78-93-3	2-BUTANONE	ug/m3				72.11	U			324.00	D
79-00-5	1,1,2-TRICHLOROETHANE	ug/m3				133.4	U			27.30	U
79-01-6	TRICHLOROETHENE	ug/m3				131.4	U			48.40	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/m3				167.9	U			34.30	U
80-62-6	Methyl Methacrylate	ug/m3				100.117	U			20.50	U
87-68-3	HEXACHLOROBUTADIENE	ug/m3				260.8	U			53.30	U
95-47-6	O-XYLENE	ug/m3				106.2	U			21.70	U
95-49-8	2-Chlorotoluene	ug/m3				126.58	U			25.90	U
95-50-1	1,2-DICHLOROBENZENE	ug/m3				147	U			30.10	U
95-63-6	1,2,4-TRIMETHYLBENZENE	ug/m3				120.2	U			24.60	U

Notes:

- U - undefined ug/m3 - micrograms per cubic meter
- SV - Soil Vapor J - estimated
- DP - Direct Push ID - Identification
- N - presumptive evidence of a compound



**Appendix A**  
**Table A-2 Groundwater Analytical Results**

**Table A-2  
Groundwater Analytical Results  
New Cassel Industrial Area  
North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Sample ID	130043A-DP01-GW55	130043A-DP02-GW55
			Sample Date	03/13/2008	03/13/2008
			Boring Location	A-DP01	A-DP02
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U	
100-42-5	Styrene	ug/l	0.5 U	0.5 U	
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U	
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U	
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U	
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U	
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U	
108-88-3	Toluene	ug/l	0.5 U	0.5 U	
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U	
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U	
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U	
124-48-1	Dibromochloromethane	ug/l	0.5 U	0.5 U	
127-18-4	Tetrachloroethene	ug/l	1	0.5 U	
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	
1634-04-4	Methyl t-Butyl Ether	ug/l	0.93	0.5 U	
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U	
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 U	0.5 U	
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U	
591-78-6	2-HEXANONE	ug/l	5 U	5 U	
67-64-1	ACETONE	ug/l	5 U	5 U	
67-66-3	CHLOROFORM	ug/l	0.5 U	0.5 U	
71-43-2	BENZENE	ug/l	0.5 U	0.5 U	
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.5 U	0.5 U	
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 U	
74-87-3	CHLOROMETHANE	ug/l	0.5 U	0.5 U	
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U	0.5 U	
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U	
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U	
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U	0.5 U	
75-15-0	CARBON DISULFIDE	ug/l	0.5 UJ	0.5 UJ	
75-25-2	BROMOFORM	ug/l	0.5 U	0.5 U	
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U	
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 U	0.5 U	
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	0.5 U	
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U	0.5 U	
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U	
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U	
78-93-3	2-BUTANONE	ug/l	5 U	5 U	
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U	
79-01-6	TRICHLOROETHENE	ug/l	0.5 U	0.5 U	
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U	
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U	0.5 U	
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U	
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U	
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 U	0.5 U	
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U	0.5 U	
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U	

Notes:  
 U - undefined      ug/l - micrograms per Liter  
 GW - Groundwater    J - estimated  
 DP - Direct Push    ID - Identification  
 N - presumptive evidence of a compound

**Table A-2**  
**Groundwater Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Sample ID Sample Date Boring Location Result Unit	130043A-DP03A-GW55	130043A-DP03-GW55	130043A-DP04-GW55
			03/13/2008 A-DP03A	03/12/2008 A-DP03	03/12/2008 A-DP04
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U	0.5 U
100-42-5	Styrene	ug/l	0.5 U	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U	0.5 U
108-88-3	Toluene	ug/l	0.5 U	0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 UJ	0.5 UJ	0.5 U
127-18-4	Tetrachloroethene	ug/l	5	1.9	6.9
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.65
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U	0.5 U	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U	0.5 U
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U	5 U	5 U
67-64-1	ACETONE	ug/l	5 U	5 U	5 U
67-66-3	CHLOROFORM	ug/l	9 J	1 J	0.98
71-43-2	BENZENE	ug/l	0.5 U	0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.5 U	1.1	1.5
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 U	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 UJ	0.5 UJ	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 UJ	0.5 UJ	0.5 UJ
75-25-2	BROMOFORM	ug/l	0.5 UJ	0.5 UJ	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 UJ	0.5 UJ	0.5 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U	5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	1.8	0.5 U	7.3 J
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 UJ	0.5 UJ	0.5 UJ
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U	0.5 U
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 UJ	0.5 UJ	0.5 UJ
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U	0.5 U

Notes:  
U - undefined      ug/l - micrograms per Liter  
GW - Groundwater    J - estimated  
DP - Direct Push    ID - Identification  
N - presumptive evidence of a compound



**Table A-2**  
**Groundwater Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Sample ID Sample Date Boring Location Result Unit	130043A-DP05-GW55	130043A-DP06-GW55	130043B-DP01-GW55
			03/12/2008 A-DP05	03/12/2008 A-DP04	03/10/2008 B-DP01
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U	0.5 U
100-42-5	Styrene	ug/l	0.5 U	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 UJ	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 UJ	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U	0.5 U
108-88-3	Toluene	ug/l	0.5 U	0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 U	0.5 U	0.5 U
127-18-4	Tetrachloroethene	ug/l	2	3.4	1.9
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U	0.5 U	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U	0.5 U
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U	5 U	5 U
67-64-1	ACETONE	ug/l	5 U	5 U	5 U
67-66-3	CHLOROFORM	ug/l	0.5 U	0.5 U	0.5 U
71-43-2	BENZENE	ug/l	0.5 U	0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.5 U	1.6	1.3
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 U	0.5 UJ
74-87-3	CHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 U	0.5 UJ	0.5 U
75-25-2	BROMOFORM	ug/l	0.5 U	0.5 U	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U	5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 UJ	0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	0.5 U	4.7 J	0.5 U
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U	0.5 U
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U	0.5 U	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U	0.5 U

Notes:  
U - undefined      ug/l - micrograms per Liter  
GW - Groundwater    J - estimated  
DP - Direct Push    ID - Identification  
N - presumptive evidence of a compound

**Table A-2  
Groundwater Analytical Results  
New Cassel Industrial Area  
North Hempstead, NY**

Case Number	Chemical Name	Sample ID Sample Date Boring Location Result Unit	130043B-DP02-GW55	130043B-DP03-GW55	130043B-DP04-GW55
			03/10/2008 B-DP02	03/10/2008 B-DP03	03/11/2008 B-DP04
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U	0.5 U
100-42-5	Styrene	ug/l	0.5 U	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 UJ	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 UJ	0.5 U	0.5 U
108-88-3	Toluene	ug/l	0.5 U	0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 UJ	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 UJ	0.5 U	0.5 U
127-18-4	Tetrachloroethene	ug/l	1.8	5.1	7.1
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U	0.84	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U	0.5 U
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U	5 UJ	5 U
67-64-1	ACETONE	ug/l	5 U	5 U	5 U
67-66-3	CHLOROFORM	ug/l	0.5 J	1.3	0.5 U
71-43-2	BENZENE	ug/l	0.5 U	0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.99	4.8	19 D
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 UJ	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 UJ	0.5 U	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 U	0.5 U	0.5 UJ
75-25-2	BROMOFORM	ug/l	0.5 UJ	0.5 U	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 UJ	0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 UJ	0.5 U	0.5 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	0.5 U	2.4
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 UJ	0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U	5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 UJ	0.5 U	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U	0.5 U
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 UJ	0.5 U	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U	0.5 U

Notes:  
U - undefined      ug/l - micrograms per Liter  
GW - Groundwater    J - estimated  
DP - Direct Push    ID - Identification  
N - presumptive evidence of a compound

**Table A-2  
Groundwater Analytical Results  
New Cassel Industrial Area  
North Hempstead, NY**

Case Number	Chemical Name	Sample ID Sample Date Boring Location	130043B-DP05-GW55	130043B-DP06-GW55	130043C-DP01-GW55
			03/10/2008	03/10/2008	03/21/2008
			B-DP05	B-DP01	C-DP01
Result Unit					
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U	0.5 U
100-42-5	Styrene	ug/l	0.5 U	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U	0.5 U
108-88-3	Toluene	ug/l	0.5 U	0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 U	0.5 U	0.5 U
127-18-4	Tetrachloroethene	ug/l	5.2	1.9	0.66
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.65	0.5 U	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U	0.5 U
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U	5 U	5 U
67-64-1	ACETONE	ug/l	5 U	5 U	8.4
67-66-3	CHLOROFORM	ug/l	0.5 U	0.5 U	0.5 U
71-43-2	BENZENE	ug/l	0.5 U	0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	1	1.4	0.5 U
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 U	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 U	0.5 U	0.5 U
75-25-2	BROMOFORM	ug/l	0.5 U	0.5 U	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U	5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	31 D	0.5 U	0.5 U
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U	0.5 U
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U	0.5 U	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U	0.5 U

Notes:

U - undefined      ug/l - micrograms per Liter  
 GW - Groundwater    J - estimated  
 DP - Direct Push    ID - Identification  
 N - presumptive evidence of a compound



**Table A-2**  
**Groundwater Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Sample ID Sample Date Boring Location Result Unit	130043C-DP02-GW55	130043C-DP03-GW55	130043C-DP04-GW55
			03/21/2008 C-DP02	03/21/2008 C-DP03	03/19/2008 C-DP04
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U	0.5 U
100-42-5	Styrene	ug/l	0.5 U	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U	0.5 U
108-88-3	Toluene	ug/l	0.5 U	0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 U	0.5 U	0.5 U
127-18-4	Tetrachloroethene	ug/l	1.3	1.8 J	1.3
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U	0.5 U	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U	0.5 U
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U	5 U	5 U
67-64-1	ACETONE	ug/l	10	5 U	5.1
67-66-3	CHLOROFORM	ug/l	0.5 U	0.5 U	0.5 U
71-43-2	BENZENE	ug/l	0.5 U	0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.53	0.74	0.71
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 U	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 UJ	0.5 UJ	0.5 UJ
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.8	0.5 U	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 UJ	0.5 UJ	0.5 UJ
75-25-2	BROMOFORM	ug/l	0.5 U	0.5 U	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U	5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	0.5 U	0.61 J	0.5 U
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U	0.5 U
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U	0.5 U	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U	0.5 U

Notes:  
U - undefined      ug/l - micrograms per Liter  
GW - Groundwater    J - estimated  
DP - Direct Push    ID - Identification  
N - presumptive evidence of a compound

**Table A-2  
Groundwater Analytical Results  
New Cassel Industrial Area  
North Hempstead, NY**

Case Number	Chemical Name	Sample ID Sample Date Boring Location Result Unit	130043C-DP05-GW55	130043C-DP06-GW55	130043F-DP01-GW55
			03/19/2008 C-DP05	03/19/2008 C-DP04	03/03/2008 F-DP01
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U	0.5 U
100-42-5	Styrene	ug/l	0.5 U	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U	0.5 U
108-88-3	Toluene	ug/l	0.5 U	0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 U	0.5 U	0.5 U
127-18-4	Tetrachloroethene	ug/l	1.9	1.7	1.9
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U	0.5 U	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U	0.5 U
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U	5 U	5 U
67-64-1	ACETONE	ug/l	5 U	5.6	5 U
67-66-3	CHLOROFORM	ug/l	0.5 U	0.5 U	0.5 U
71-43-2	BENZENE	ug/l	0.5 U	0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	2.3	0.96	0.5 U
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 U	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 UJ	0.5 UJ	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 UJ	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 UJ	0.5 UJ	0.5 J
75-25-2	BROMOFORM	ug/l	0.5 U	0.5 U	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.92	0.5 U	0.5 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 UJ	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U	5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 J
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U	0.5 U
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U	0.5 U	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U	0.5 U

Notes:  
U - undefined      ug/l - micrograms per Liter  
GW - Groundwater    J - estimated  
DP - Direct Push    ID - Identification  
N - presumptive evidence of a compound

**Table A-2  
Groundwater Analytical Results  
New Cassel Industrial Area  
North Hempstead, NY**

Case Number	Chemical Name	Sample ID Sample Date Boring Location	130043F-DP02-GW55	130043F-DP03-GW55	130043F-DP04-GW55
			03/03/2008 F-DP02	03/06/2008 F-DP03	03/06/2008 F-DP04
		Result Unit			
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U	0.5 U
100-42-5	Styrene	ug/l	0.5 U	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U	0.5 U
108-88-3	Toluene	ug/l	0.5 U	0.58 U	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 U	0.5 U	0.5 U
127-18-4	Tetrachloroethene	ug/l	11 JB	9.1	2
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U	0.5 U	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.54 J	0.57	0.5 U
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U	5 U	5 U
67-64-1	ACETONE	ug/l	5 U	5 U	9.2
67-66-3	CHLOROFORM	ug/l	0.5 U	0.5 U	0.53
71-43-2	BENZENE	ug/l	0.5 U	0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 U	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 U	0.5 U	0.5 U
75-25-2	BROMOFORM	ug/l	0.5 U	0.5 U	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U	0.59	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U	5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	1 J	2.9	0.55
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U	0.5 U
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U	0.5 U	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U	0.5 U

Notes:  
U - undefined      ug/l - micrograms per Liter  
GW - Groundwater    J - estimated  
DP - Direct Push    ID - Identification  
N - presumptive evidence of a compound



**Table A-2  
Groundwater Analytical Results  
New Cassel Industrial Area  
North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Sample ID	130043F-DP05-GW55	130043F-DP06-GW55	130043K-DP01-GW55
			Sample Date	03/06/2008	03/03/2008	03/03/2008
			Boring Location	F-DP05	F-DP01	K-DP01
100-41-4	Ethylbenzene	ug/l	10 U	0.5 U	0.5 U	
100-42-5	Styrene	ug/l	10 U	0.5 U	0.5 U	
10061-01-5	cis-1,3-Dichloropropene	ug/l	10 U	0.5 U	0.5 U	
10061-02-6	trans-1,3-Dichloropropene	ug/l	10 U	0.5 U	0.5 U	
106-46-7	1,4-Dichlorobenzene	ug/l	10 U	0.5 U	0.5 U	
106-93-4	1,2-Dibromoethane	ug/l	10 U	0.5 U	0.5 U	
107-06-2	1,2-Dichloroethane	ug/l	10 U	0.5 U	0.5 U	
108-10-1	4-Methyl-2-Pentanone	ug/l	100 U	5 U	5 U	
108-87-2	Methylcyclohexane	ug/l	10 U	0.5 U	0.5 U	
108-88-3	Toluene	ug/l	10 U	0.5 U	0.5 U	
108-90-7	Chlorobenzene	ug/l	10 U	0.5 U	0.5 U	
110-82-7	CYCLOHEXANE	ug/l	10 U	0.5 U	0.5 U	
120-82-1	1,2,4-Trichlorobenzene	ug/l	10 U	0.5 U	0.5 U	
124-48-1	Dibromochloromethane	ug/l	10 U	0.5 U	0.5 U	
127-18-4	Tetrachloroethene	ug/l	53	2.7	1.3	
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	32	0.5 U	0.5 U	
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	10 U	0.5 U	0.5 U	
1634-04-4	Methyl t-Butyl Ether	ug/l	110	0.5 U	2.7	
179601-23-1	m,p-Xylene	ug/l	10 U	0.5 U	0.5 U	
541-73-1	1,3-DICHLOROENZENE	ug/l	10 U	0.5 U	0.5 U	
56-23-5	CARBON TETRACHLORIDE	ug/l	10 U	0.5 U	0.5 U	
591-78-6	2-HEXANONE	ug/l	100 U	5 U	5 U	
67-64-1	ACETONE	ug/l	100 U	5 U	5 U	
67-66-3	CHLOROFORM	ug/l	10 U	0.5 U	1.4	
71-43-2	BENZENE	ug/l	10 U	0.5 U	0.5 U	
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	10 U	0.5 U	0.5 U	
74-83-9	BROMOMETHANE	ug/l	10 U	0.5 U	0.5 U	
74-87-3	CHLOROMETHANE	ug/l	10 U	0.5 U	0.5 U	
74-97-5	BROMOCHLOROMETHANE	ug/l	10 U	0.5 U	0.5 U	
75-00-3	CHLOROETHANE	ug/l	10 U	0.5 U	0.5 U	
75-01-4	VINYL CHLORIDE	ug/l	10 U	0.5 U	0.5 U	
75-09-2	METHYLENE CHLORIDE	ug/l	10 U	0.5 U	0.5 U	
75-15-0	CARBON DISULFIDE	ug/l	10 U	0.5 U	0.5 U	
75-25-2	BROMOFORM	ug/l	10 U	0.5 UJ	0.5 UJ	
75-27-4	BROMODICHLOROMETHANE	ug/l	10 U	0.5 U	0.5 U	
75-34-3	1,1-DICHLOROETHANE	ug/l	10 U	0.5 U	0.5 U	
75-35-4	1,1-DICHLOROETHENE	ug/l	10 U	0.5 U	0.5 U	
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	10 U	0.5 U	0.5 U	
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	10 U	0.5 U	0.5 U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	10 U	0.5 U	0.5 U	
78-87-5	1,2-DICHLOROPROPANE	ug/l	10 U	0.5 U	0.5 U	
78-93-3	2-BUTANONE	ug/l	100 U	5 U	5 U	
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	10 U	0.5 U	0.5 U	
79-01-6	TRICHLOROETHENE	ug/l	47	0.5 U	0.71	
79-20-9	Methyl Acetate	ug/l	10 U	0.5 U	0.5 U	
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	10 U	0.5 U	0.5 UJ	
87-61-6	1,2,3-Trichlorobenzene	ug/l	10 U	0.5 U	0.5 U	
95-47-6	O-XYLENE	ug/l	10 U	0.5 U	0.5 U	
95-50-1	1,2-DICHLOROENZENE	ug/l	10 U	0.5 U	0.5 U	
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	10 U	0.5 U	0.5 UJ	
98-82-8	ISOPROPYLBENZENE	ug/l	10 U	0.5 U	0.5 U	

Notes:  
 U - undefined      ug/l - micrograms per Liter  
 GW - Groundwater    J - estimated  
 DP - Direct Push    ID - Identification  
 N - presumptive evidence of a compound

**Table A-2**  
**Groundwater Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Sample ID Sample Date Boring Location Result Unit	130043K-DP02-GW55	130043K-DP03-GW55	130043K-DP04-GW55
			03/04/2008 K-DP02	03/04/2008 K-DP03	03/05/2008 K-DP04
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U	0.5 U
100-42-5	Styrene	ug/l	0.5 U	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U	0.88
108-88-3	Toluene	ug/l	0.57 J	0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 U	0.5 U	0.5 U
127-18-4	Tetrachloroethene	ug/l	1.4 J	1.8 J	2.9
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U	1.6 J	0.5 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	8.6 J	6.8 J	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U	0.5 U
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U	5 U	5 U
67-64-1	ACETONE	ug/l	5 U	5 U	5 U
67-66-3	CHLOROFORM	ug/l	1 J	0.93 J	0.57
71-43-2	BENZENE	ug/l	0.5 U	0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 U	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 U	0.5 U	0.5 U
75-25-2	BROMOFORM	ug/l	0.5 U	0.5 U	0.5 UJ
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 U	0.5 J	0.94
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U	5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	1.2 J	2 J	0.8
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 UJ	0.5 U	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U	0.5 U
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 UJ	0.5 U	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U	0.5 U

Notes:  
U - undefined      ug/l - micrograms per Liter  
GW - Groundwater    J - estimated  
DP - Direct Push    ID - Identification  
N - presumptive evidence of a compound

**Table A-2  
Groundwater Analytical Results  
New Cassel Industrial Area  
North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Sample ID	130043K-DP05-GW55	130043K-DP06-GW55	130043N-DP01-GW55
			Sample Date	03/05/2008	03/03/2008	03/25/2008
		Boring Location	K-DP05	K-DP01	N-DP01	
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U	0.5 U	
100-42-5	Styrene	ug/l	0.5 U	0.5 U	0.5 U	
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U	
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U	
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U	
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U	0.5 U	
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U	0.5 U	
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U	5 U	
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U	0.5 U	
108-88-3	Toluene	ug/l	0.5 U	0.54	0.5 U	
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U	0.5 U	
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U	0.5 U	
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U	
124-48-1	Dibromochloromethane	ug/l	0.5 U	0.5 U	0.5 U	
127-18-4	Tetrachloroethene	ug/l	2.6	0.96	0.5 U	
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	1.2	0.5 U	0.5 U	
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U	
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U	2.8	0.5 U	
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U	0.5 U	
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U	
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U	0.5 U	
591-78-6	2-HEXANONE	ug/l	5 U	5 U	5 U	
67-64-1	ACETONE	ug/l	5 U	5 U	5 U	
67-66-3	CHLOROFORM	ug/l	0.5 U	1.3	0.5 U	
71-43-2	BENZENE	ug/l	0.5 U	0.5 U	0.5 U	
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.81	0.5 U	0.56	
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 U	0.5 U	
74-87-3	CHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U	
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U	
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U	
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U	
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U	
75-15-0	CARBON DISULFIDE	ug/l	0.5 U	0.5 U	0.5 UJ	
75-25-2	BROMOFORM	ug/l	0.5 U	0.5 UJ	0.5 U	
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U	
75-34-3	1,1-DICHLOROETHANE	ug/l	4.6	0.5 U	0.5 U	
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U	
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U	
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U	
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U	0.5 U	
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U	0.5 U	
78-93-3	2-BUTANONE	ug/l	5 U	5 U	5 U	
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U	
79-01-6	TRICHLOROETHENE	ug/l	0.82	0.74	0.5 U	
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U	0.5 U	
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U	0.5 UJ	0.5 U	
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U	
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U	0.5 U	
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U	
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U	0.5 UJ	0.5 U	
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U	0.5 U	

Notes:  
 U - undefined ug/l - micrograms per Liter  
 GW - Groundwater J - estimated  
 DP - Direct Push ID - Identification  
 N - presumptive evidence of a compound



**Table A-2  
Groundwater Analytical Results  
New Cassel Industrial Area  
North Hempstead, NY**

Case Number	Chemical Name	Sample ID Sample Date Boring Location Result Unit	130043N-DP02-GW55	130043N-DP03-GW55	130043N-DP04-GW55
			03/25/2008 N-DP02	03/24/2008 N-DP03	03/24/2008 N-DP04
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U	0.5 U
100-42-5	Styrene	ug/l	0.5 U	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U	0.5 U
108-88-3	Toluene	ug/l	0.5 U	0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 U	0.5 U	0.5 U
127-18-4	Tetrachloroethene	ug/l	0.5 U	1.5 J	1.9
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U	0.5 U	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U	0.5 U
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U	5 U	5 U
67-64-1	ACETONE	ug/l	7.6	5.1 J	5 U
67-66-3	CHLOROFORM	ug/l	0.5 U	0.5 U	0.5 U
71-43-2	BENZENE	ug/l	0.5 U	0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	4	14 J	0.5 U
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 U	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 UJ	0.5 UJ	0.5 UJ
75-25-2	BROMOFORM	ug/l	0.5 U	0.5 U	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U	5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	0.5 U	1.4 J	0.5 U
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U	0.5 U
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U	0.5 U	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U	0.5 U

Notes:

U - undefined      ug/l - micrograms per Liter  
 GW - Groundwater    J - estimated  
 DP - Direct Push    ID - Identification  
 N - presumptive evidence of a compound

**Table A-2  
Groundwater Analytical Results  
New Cassel Industrial Area  
North Hempstead, NY**

Case Number	Chemical Name	Sample ID Sample Date Boring Location	130043N-DP05-GW55	130043N-DP06-GW55	130043V-DP01-GW55
			03/24/2008 N-DP05	03/24/2008 N-DP04	03/18/2000 V-DP01
		Result Unit			
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U	0.5 U
100-42-5	Styrene	ug/l	0.5 U	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U	0.5 U
108-88-3	Toluene	ug/l	0.5 U	0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 U	0.5 U	0.5 U
127-18-4	Tetrachloroethene	ug/l	27 EJ	2 J	3
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	3.4 J
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U	0.5 U	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U	0.5 U
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U	5 U	5 U
67-64-1	ACETONE	ug/l	17 J	5 U	5 U
67-66-3	CHLOROFORM	ug/l	0.5 U	0.5 U	0.53
71-43-2	BENZENE	ug/l	0.5 U	0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.5 U	0.5 U	43 D
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 U	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 UJ	0.5 UJ	0.5 UJ
75-25-2	BROMOFORM	ug/l	0.5 U	0.5 U	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 U	0.5 U	30 D
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	0.5 U	20 D
75-69-4	TRICHLOROFUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U	5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	0.5 U	0.5 U	10
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U	0.5 U
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U	0.5 U	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U	0.5 U

Notes:  
 U - undefined      ug/l - micrograms per Liter  
 GW - Groundwater    J - estimated  
 DP - Direct Push    ID - Identification  
 N - presumptive evidence of a compound

**Table A-2**  
**Groundwater Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Sample ID Sample Date Boring Location Result Unit	130043V-DP02-GW55	130043V-DP03-GW55	130043V-DP04-GW55
			03/17/2008 V-DP02	03/17/2008 V-DP03	03/17/2008 V-DP04
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U	0.5 U
100-42-5	Styrene	ug/l	0.5 U	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U	0.5 U
108-88-3	Toluene	ug/l	0.5 U	0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 U	0.5 UJ	0.5 U
127-18-4	Tetrachloroethene	ug/l	7.3	4.1	3.4
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	3 J	12	1.4 J
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U	0.5 U	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U	0.5 U
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U	5 U	5 U
67-64-1	ACETONE	ug/l	5 U	5 U	5 U
67-66-3	CHLOROFORM	ug/l	1	1.7 J	0.5 U
71-43-2	BENZENE	ug/l	0.5 U	0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	58 D	22 D	70 D
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 U	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U	0.5 UJ	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U	0.5 U	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 UJ	0.5 UJ	0.5 UJ
75-25-2	BROMOFORM	ug/l	0.5 U	0.5 UJ	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	40 D	25 D	45 D
75-35-4	1,1-DICHLOROETHENE	ug/l	53 D	10	21 D
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U	5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	38 D	9.8	3.3
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U	0.5 UJ	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U	0.5 U
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 U	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U	0.5 UJ	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U	0.5 U

Notes:

U - undefined      ug/l - micrograms per Liter  
 GW - Groundwater    J - estimated  
 DP - Direct Push    ID - Identification  
 N - presumptive evidence of a compound



**Table A-2  
Groundwater Analytical Results  
New Cassel Industrial Area  
North Hempstead, NY**

Case Number	Chemical Name	Sample ID Sample Date Boring Location Result Unit	130043V-DP05-GW55	130043V-DP06-GW55
			03/17/2008 V-DP05	03/17/2008 V-DP04
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U
100-42-5	Styrene	ug/l	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U
108-88-3	Toluene	ug/l	0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 U	0.5 U
127-18-4	Tetrachloroethene	ug/l	1	3.4
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	1.3	1.5 J
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U
541-73-1	1,3-DICHLOROBENZENE	ug/l	0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U	5 U
67-64-1	ACETONE	ug/l	5 U	5 U
67-66-3	CHLOROFORM	ug/l	0.5 U	0.52
71-43-2	BENZENE	ug/l	0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	23 D	66 D
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 U	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 UJ	0.5 UJ
75-25-2	BROMOFORM	ug/l	0.5 U	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	37 D	44 D
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	19
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	1.4	3.5
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U
95-50-1	1,2-DICHLOROBENZENE	ug/l	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U

Notes:  
 U - undefined      ug/l - micrograms per Liter  
 GW - Groundwater    J - estimated  
 DP - Direct Push    ID - Identification  
 N - presumptive evidence of a compound

**Appendix A**  
**Table A-3 Field Blank and Trip Blank Analytical**  
**Results**

**Table A-3**  
**Field Trip Blank Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Sample ID Sample Date	130043A-FB-Z1970	130043A-FB-Z2003
			03/05/2008	03/13/2008
		Result Unit		
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U
100-42-5	Styrene	ug/l	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U
108-88-3	Toluene	ug/l	0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 U	0.5 U
127-18-4	Tetrachloroethene	ug/l	0.5 U	0.5 U
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U	5 U
67-64-1	ACETONE	ug/l	5 U	5 U
67-66-3	CHLOROFORM	ug/l	0.5 U	0.5 U
71-43-2	BENZENE	ug/l	0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.5 U	0.5 U
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 U	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 UJ	0.5 UJ
75-25-2	BROMOFORM	ug/l	0.5 U	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 U	0.5 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	0.5 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	0.5 U	0.5 U
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U	0.5 U
98-82-8	ISOPROPYL BENZENE	ug/l	0.5 U	0.5 U
TIC	unknown19.52	ug/l		0.67 J
TIC000541-05-9	Cyclotrisiloxane, hexamethyl-	ug/l		
TIC000556-67-2	Cyclotetrasiloxane, octamethyl-	ug/l	0.54 J	
TIC018479-57-7	2-Octanol, 2,6-dimethyl-	ug/l		
TICE966796	Total Alkanes	ug/l	0	0

Notes:  
U - undefined            ug/l - micrograms per Liter  
FB - Field Blank        J - estimated  
TB - Trip Blank        ID - Identification  
N - presumptive evidence of a compound



**Table A-3**  
**Field Trip Blank Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Sample ID	130043A-TB-Z1970
		Sample Date	03/12/2008
		Result Unit	
100-41-4	Ethylbenzene	ug/l	0.5 U
100-42-5	Styrene	ug/l	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 U
108-88-3	Toluene	ug/l	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 U
127-18-4	Tetrachloroethene	ug/l	0.5 U
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U
67-64-1	ACETONE	ug/l	5 U
67-66-3	CHLOROFORM	ug/l	0.5 U
71-43-2	BENZENE	ug/l	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.5 U
74-83-9	BROMOMETHANE	ug/l	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 UJ
75-25-2	BROMOFORM	ug/l	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	0.5 U
79-20-9	Methyl Acetate	ug/l	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U
TIC	unknown19.52	ug/l	
TIC000541-05-9	Cyclotrisiloxane, hexamethyl-	ug/l	
TIC000556-67-2	Cyclotetrasiloxane, octamethyl-	ug/l	0.72 J
TIC018479-57-7	2-Octanol, 2,6-dimethyl-	ug/l	
TICE966796	Total Alkanes	ug/l	0

Notes:

U - undefined            ug/l - micrograms per Liter  
 FB - Field Blank        J - estimated  
 TB - Trip Blank         ID - Identification  
 N - presumptive evidence of a compound

**Table A-3**  
**Field Trip Blank Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Sample ID Sample Date Result Unit	130043A-TB-Z2003	130043B-FB-Z1907
			03/05/2008	03/10/2008
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U
100-42-5	Styrene	ug/l	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U
108-88-3	Toluene	ug/l	0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 U	0.5 U
127-18-4	Tetrachloroethene	ug/l	0.5 U	0.5 U
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U	5 U
67-64-1	ACETONE	ug/l	5 U	5 U
67-66-3	CHLOROFORM	ug/l	0.5 U	0.5 U
71-43-2	BENZENE	ug/l	0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.5 U	0.5 U
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 U	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 U	0.5 U
75-25-2	BROMOFORM	ug/l	0.5 U	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 U	0.5 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	0.5 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	0.5 U	0.5 U
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U
TIC	unknown19.52	ug/l	0.58 J	
TIC000541-05-9	Cyclotrisiloxane, hexamethyl-	ug/l		
TIC000556-67-2	Cyclotetrasiloxane, octamethyl-	ug/l	0.61 J	
TIC018479-57-7	2-Octanol, 2,6-dimethyl-	ug/l		
TICE966796	Total Alkanes	ug/l	0	0

Notes:  
U - undefined                      ug/l - micrograms per Liter  
FB - Field Blank                    J - estimated  
TB - Trip Blank                    ID - Identification  
N - presumptive evidence of a compound

**Table A-3**  
**Field Trip Blank Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Sample ID	130043B-FB-Z1963	130043B-TB-Z1907
		Sample Date	03/11/2008	03/05/2008
		Result Unit		
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U
100-42-5	Styrene	ug/l	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U
108-88-3	Toluene	ug/l	0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 U	0.5 U
127-18-4	Tetrachloroethene	ug/l	0.5 U	0.5 U
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U
541-73-1	1,3-DICHLOROBENZENE	ug/l	0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U	5 U
67-64-1	ACETONE	ug/l	5 U	5 U
67-66-3	CHLOROFORM	ug/l	0.5 U	0.5 U
71-43-2	BENZENE	ug/l	0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.5 U	0.5 U
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 UJ
74-87-3	CHLOROMETHANE	ug/l	0.5 U	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 UJ	0.5 U
75-25-2	BROMOFORM	ug/l	0.5 U	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 U	0.5 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	0.5 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	0.5 U	0.5 U
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U
95-50-1	1,2-DICHLOROBENZENE	ug/l	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U
TIC	unknown19.52	ug/l		0.81 JN
TIC000541-05-9	Cyclotrisiloxane, hexamethyl-	ug/l		0.53 JN
TIC000556-67-2	Cyclotetrasiloxane, octamethyl-	ug/l	0.76 J	1 JN
TIC018479-57-7	2-Octanol, 2,6-dimethyl-	ug/l		
TICE966796	Total Alkanes	ug/l	0 J	0

Notes:

U - undefined            ug/l - micrograms per Liter  
 FB - Field Blank        J - estimated  
 TB - Trip Blank        ID - Identification  
 N - presumptive evidence of a compound



**Table A-3**  
**Field Trip Blank Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Sample ID	130043B-TB-Z1963	130043C-FB-Z2052
		Sample Date	03/11/2008	03/19/2008
		Result Unit		
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U
100-42-5	Styrene	ug/l	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U
108-88-3	Toluene	ug/l	0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 U	0.5 U
127-18-4	Tetrachloroethene	ug/l	0.5 U	0.5 U
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U
541-73-1	1,3-DICHLOROBENZENE	ug/l	0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U	5 U
67-64-1	ACETONE	ug/l	5 U	5 U
67-66-3	CHLOROFORM	ug/l	0.5 U	0.5 U
71-43-2	BENZENE	ug/l	0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.5 U	0.5 U
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 U	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 U	0.5 U
75-25-2	BROMOFORM	ug/l	0.5 U	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 U	0.5 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	0.5 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	0.5 U	0.5 U
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U
95-50-1	1,2-DICHLOROBENZENE	ug/l	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U
TIC	unknown19.52	ug/l	0.63 J	
TIC000541-05-9	Cyclotrisiloxane, hexamethyl-	ug/l		
TIC000556-67-2	Cyclotetrasiloxane, octamethyl-	ug/l		
TIC018479-57-7	2-Octanol, 2,6-dimethyl-	ug/l		
TICE966796	Total Alkanes	ug/l	0 J	0

Notes:

U - undefined                      ug/l - micrograms per Liter  
 FB - Field Blank                    J - estimated  
 TB - Trip Blank                    ID - Identification  
 N - presumptive evidence of a compound

**Table A-3**  
**Field Trip Blank Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Sample ID	130043C-FB-Z2087		130043C-TB-Z2052	
		Sample Date	03/21/2008		03/13/2008	
		Result Unit				
100-41-4	Ethylbenzene	ug/l	0.5	U	0.5	U
100-42-5	Styrene	ug/l	0.5	U	0.5	U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5	U	0.5	U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5	U	0.5	U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5	U	0.5	U
106-93-4	1,2-Dibromoethane	ug/l	0.5	U	0.5	U
107-06-2	1,2-Dichloroethane	ug/l	0.5	U	0.5	U
108-10-1	4-Methyl-2-Pentanone	ug/l	5	U	5	U
108-87-2	Methylcyclohexane	ug/l	0.5	U	0.5	U
108-88-3	Toluene	ug/l	0.5	U	0.5	U
108-90-7	Chlorobenzene	ug/l	0.5	U	0.5	U
110-82-7	CYCLOHEXANE	ug/l	0.5	U	0.5	U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5	U	0.5	U
124-48-1	Dibromochloromethane	ug/l	0.5	U	0.5	U
127-18-4	Tetrachloroethene	ug/l	0.5	U	0.5	U
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5	U	0.5	U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5	U	0.5	U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5	U	0.5	U
179601-23-1	m,p-Xylene	ug/l	0.5	U	0.5	U
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5	U	0.5	U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5	U	0.5	U
591-78-6	2-HEXANONE	ug/l	5	U	5	U
67-64-1	ACETONE	ug/l	5	U	5	U
67-66-3	CHLOROFORM	ug/l	0.5	U	0.5	U
71-43-2	BENZENE	ug/l	0.5	U	0.5	U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.5	U	0.5	U
74-83-9	BROMOMETHANE	ug/l	0.5	U	0.5	U
74-87-3	CHLOROMETHANE	ug/l	0.5	UJ	0.5	UJ
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5	U	0.5	U
75-00-3	CHLOROETHANE	ug/l	0.5	U	0.5	U
75-01-4	VINYL CHLORIDE	ug/l	0.5	U	0.5	U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5	U	0.5	U
75-15-0	CARBON DISULFIDE	ug/l	0.5	UJ	0.5	UJ
75-25-2	BROMOFORM	ug/l	0.5	U	0.5	U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5	U	0.5	U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5	U	0.5	U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5	U	0.5	U
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5	U	0.5	U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5	U	0.5	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5	U	0.5	U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5	U	0.5	U
78-93-3	2-BUTANONE	ug/l	5	U	5	U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5	U	0.5	U
79-01-6	TRICHLOROETHENE	ug/l	0.5	U	0.5	U
79-20-9	Methyl Acetate	ug/l	0.5	U	0.5	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5	U	0.5	U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5	U	0.5	U
95-47-6	O-XYLENE	ug/l	0.5	U	0.5	U
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5	U	0.5	U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5	U	0.5	U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5	U	0.5	U
TIC	unknown19.52	ug/l				
TIC000541-05-9	Cyclotrisiloxane, hexamethyl-	ug/l				
TIC000556-67-2	Cyclotetrasiloxane, octamethyl-	ug/l				
TIC018479-57-7	2-Octanol, 2,6-dimethyl-	ug/l				
TICE966796	Total Alkanes	ug/l	0		0	

Notes:

U - undefined            ug/l - micrograms per Liter  
FB - Field Blank        J - estimated  
TB - Trip Blank        ID - Identification  
N - presumptive evidence of a compound

**Table A-3  
Field Trip Blank Analytical Results  
New Cassel Industrial Area  
North Hempstead, NY**

Case Number	Chemical Name	Sample ID	130043C-TB-Z2087	130043F-FB-Z1794
		Sample Date	03/03/2008	03/03/2008
		Result Unit		
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U
100-42-5	Styrene	ug/l	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U
108-88-3	Toluene	ug/l	0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 U	0.5 U
127-18-4	Tetrachloroethene	ug/l	0.5 U	0.5 U
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U	5 U
67-64-1	ACETONE	ug/l	5 U	5 U
67-66-3	CHLOROFORM	ug/l	0.5 U	0.5 U
71-43-2	BENZENE	ug/l	0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.5 U	0.5 U
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 U	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 U	0.5 U
75-25-2	BROMOFORM	ug/l	0.5 U	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 U	0.5 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	0.5 U
75-69-4	TRICHLOROFUOROMETHANE	ug/l	0.5 U	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	0.5 U	0.5 U
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U
TIC	unknown19.52	ug/l		
TIC000541-05-9	Cyclotrisiloxane, hexamethyl-	ug/l		
TIC000556-67-2	Cyclotetrasiloxane, octamethyl-	ug/l		
TIC018479-57-7	2-Octanol, 2,6-dimethyl-	ug/l	0.66 J	
TICE966796	Total Alkanes	ug/l	0	0

Notes:

U - undefined            ug/l - micrograms per Liter  
 FB - Field Blank        J - estimated  
 TB - Trip Blank        ID - Identification  
 N - presumptive evidence of a compound

**Table A-3**  
**Field Trip Blank Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Sample ID	130043F-FB-Z1857	130043F-TB-Z1794
		Sample Date	03/06/2008	02/28/2008
		Result Unit		
100-41-4	Ethylbenzene	ug/l	0.5 UJ	0.5 U
100-42-5	Styrene	ug/l	0.5 UJ	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 UJ	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 UJ	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 UJ	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 UJ	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 UJ	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 UJ	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 UJ	0.5 U
108-88-3	Toluene	ug/l	0.5 UJ	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 UJ	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 UJ	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 UJ	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 UJ	0.5 U
127-18-4	Tetrachloroethene	ug/l	0.5 UJ	0.5 U
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 UJ	0.5 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 UJ	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 UJ	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 UJ	0.5 U
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 UJ	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 UJ	0.5 U
591-78-6	2-HEXANONE	ug/l	5 UJ	5 U
67-64-1	ACETONE	ug/l	5 UJ	5 U
67-66-3	CHLOROFORM	ug/l	0.5 UJ	0.5 U
71-43-2	BENZENE	ug/l	0.5 UJ	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.5 UJ	0.5 U
74-83-9	BROMOMETHANE	ug/l	0.5 UJ	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 UJ	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 UJ	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 UJ	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 UJ	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 UJ	0.5 J
75-15-0	CARBON DISULFIDE	ug/l	0.5 UJ	0.5 U
75-25-2	BROMOFORM	ug/l	0.5 UJ	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 UJ	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 UJ	0.5 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 UJ	0.5 U
75-69-4	TRICHLOROFUOROMETHANE	ug/l	0.5 UJ	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 UJ	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 UJ	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 UJ	0.5 U
78-93-3	2-BUTANONE	ug/l	5 UJ	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 UJ	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	0.5 UJ	0.5 U
79-20-9	Methyl Acetate	ug/l	0.5 UJ	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 UJ	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 UJ	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 UJ	0.5 U
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 UJ	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 UJ	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 UJ	0.5 U
TIC	unknown19.52	ug/l		
TIC000541-05-9	Cyclotrisiloxane, hexamethyl-	ug/l		
TIC000556-67-2	Cyclotetrasiloxane, octamethyl-	ug/l		
TIC018479-57-7	2-Octanol, 2,6-dimethyl-	ug/l		
TICE966796	Total Alkanes	ug/l	0	0

Notes:

U - undefined            ug/l - micrograms per Liter  
 FB - Field Blank        J - estimated  
 TB - Trip Blank        ID - Identification  
 N - presumptive evidence of a compound



**Table A-3  
Field Trip Blank Analytical Results  
New Cassel Industrial Area  
North Hempstead, NY**

Case Number	Chemical Name	Sample ID Sample Date Result Unit	130043F-TB-Z1812 02/28/2008		130043K-FB-Z1812 03/04/2008	
100-41-4	Ethylbenzene	ug/l	0.5	U	0.5	U
100-42-5	Styrene	ug/l	0.5	U	0.5	U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5	U	0.5	U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5	U	0.5	U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5	U	0.5	U
106-93-4	1,2-Dibromoethane	ug/l	0.5	U	0.5	U
107-06-2	1,2-Dichloroethane	ug/l	0.5	U	0.5	U
108-10-1	4-Methyl-2-Pentanone	ug/l	5	U	5	U
108-87-2	Methylcyclohexane	ug/l	0.5	U	0.5	U
108-88-3	Toluene	ug/l	0.5	U	0.5	U
108-90-7	Chlorobenzene	ug/l	0.5	U	0.5	U
110-82-7	CYCLOHEXANE	ug/l	0.5	U	0.5	U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5	U	0.5	U
124-48-1	Dibromochloromethane	ug/l	0.5	U	0.5	U
127-18-4	Tetrachloroethene	ug/l	0.5	U	0.5	U
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5	U	0.5	U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5	U	0.5	U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5	U	0.5	U
179601-23-1	m,p-Xylene	ug/l	0.5	U	0.5	U
541-73-1	1,3-DICHLOROETHENE	ug/l	0.5	U	0.5	U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5	U	0.5	U
591-78-6	2-HEXANONE	ug/l	5	U	5	U
67-64-1	ACETONE	ug/l	5	U	5	U
67-66-3	CHLOROFORM	ug/l	0.5	U	0.5	U
71-43-2	BENZENE	ug/l	0.5	U	0.5	U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.5	U	0.5	U
74-83-9	BROMOMETHANE	ug/l	0.5	U	0.5	U
74-87-3	CHLOROMETHANE	ug/l	0.5	U	0.5	U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5	U	0.5	U
75-00-3	CHLOROETHANE	ug/l	0.5	U	0.5	U
75-01-4	VINYL CHLORIDE	ug/l	0.5	U	0.5	U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5	U	0.5	U
75-15-0	CARBON DISULFIDE	ug/l	0.5	U	0.5	U
75-25-2	BROMOFORM	ug/l	0.5	U	0.5	U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5	U	0.5	U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5	U	0.5	U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5	U	0.5	U
75-69-4	TRICHLOROFUOROMETHANE	ug/l	0.5	U	0.5	U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5	U	0.5	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5	U	0.5	U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5	U	0.5	U
78-93-3	2-BUTANONE	ug/l	5	U	5	U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5	U	0.5	U
79-01-6	TRICHLOROETHENE	ug/l	0.5	U	0.5	U
79-20-9	Methyl Acetate	ug/l	0.5	U	0.5	U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5	U	0.5	U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5	U	0.5	U
95-47-6	O-XYLENE	ug/l	0.5	U	0.5	U
95-50-1	1,2-DICHLOROETHENE	ug/l	0.5	U	0.5	U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5	U	0.5	U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5	U	0.5	U
TIC	unknown19.52	ug/l				
TIC000541-05-9	Cyclotrisiloxane, hexamethyl-	ug/l				
TIC000556-67-2	Cyclotetrasiloxane, octamethyl-	ug/l				
TIC018479-57-7	2-Octanol, 2,6-dimethyl-	ug/l				
TICE966796	Total Alkanes	ug/l	0	J	0	J

Notes:  
 U - undefined            ug/l - micrograms per Liter  
 FB - Field Blank        J - estimated  
 TB - Trip Blank        ID - Identification  
 N - presumptive evidence of a compound

**Table A-3  
Field Trip Blank Analytical Results  
New Cassel Industrial Area  
North Hempstead, NY**

Case Number	Chemical Name	Sample ID	130043K-FB-Z1835	130043K-TB-Z1835
		Sample Date	03/05/2008	02/29/2008
		Result Unit		
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U
100-42-5	Styrene	ug/l	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U
108-88-3	Toluene	ug/l	0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 U	0.5 U
127-18-4	Tetrachloroethene	ug/l	0.5 U	0.5 U
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U
541-73-1	1,3-DICHLOROBENZENE	ug/l	0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U	5 U
67-64-1	ACETONE	ug/l	5 U	5 U
67-66-3	CHLOROFORM	ug/l	0.5 U	0.5 U
71-43-2	BENZENE	ug/l	0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.5 U	0.5 U
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 U	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.58	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 U	0.5 U
75-25-2	BROMOFORM	ug/l	0.5 U	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 U	0.5 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	0.5 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	0.5 U	0.5 U
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U
95-50-1	1,2-DICHLOROBENZENE	ug/l	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U
TIC	unknown19.52	ug/l		
TIC000541-05-9	Cyclotrisiloxane, hexamethyl-	ug/l		
TIC000556-67-2	Cyclotetrasiloxane, octamethyl-	ug/l		
TIC018479-57-7	2-Octanol, 2,6-dimethyl-	ug/l		
TICE966796	Total Alkanes	ug/l		

Notes:

U - undefined                      ug/l - micrograms per Liter  
 FB - Field Blank                    J - estimated  
 TB - Trip Blank                      ID - Identification  
 N - presumptive evidence of a compound

**Table A-3**  
**Field Trip Blank Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Result Unit	Sample ID	130043K-TB-Z1857	130043N-FB-Z2105
			Sample Date	02/28/2008	03/24/2008
100-41-4	Ethylbenzene	ug/l		0.5 U	0.5 U
100-42-5	Styrene	ug/l		0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l		0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l		0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l		0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l		0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l		0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l		5 U	5 U
108-87-2	Methylcyclohexane	ug/l		0.5 U	0.5 U
108-88-3	Toluene	ug/l		0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/l		0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l		0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l		0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l		0.5 U	0.5 U
127-18-4	Tetrachloroethene	ug/l		0.5 U	0.5 U
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l		0.5 U	0.5 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l		0.5 U	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l		0.5 U	0.5 U
179601-23-1	m,p-Xylene	ug/l		0.5 U	0.5 U
541-73-1	1,3-DICHLOROENZENE	ug/l		0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l		0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l		5 U	5 U
67-64-1	ACETONE	ug/l		5 U	5 U
67-66-3	CHLOROFORM	ug/l		0.5 U	0.5 U
71-43-2	BENZENE	ug/l		0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l		0.5 U	0.5 U
74-83-9	BROMOMETHANE	ug/l		0.5 U	0.5 U
74-87-3	CHLOROMETHANE	ug/l		0.5 U	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l		0.5 U	0.5 U
75-00-3	CHLOROETHANE	ug/l		0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l		0.5 U	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l		0.5 U	0.5 U
75-15-0	CARBON DISULFIDE	ug/l		0.5 U	0.5 UJ
75-25-2	BROMOFORM	ug/l		0.5 U	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l		0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l		0.5 U	0.5 U
75-35-4	1,1-DICHLOROETHENE	ug/l		0.5 U	0.5 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/l		0.5 U	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l		0.5 U	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l		0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l		0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l		5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l		0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l		0.5 U	0.5 U
79-20-9	Methyl Acetate	ug/l		0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l		0.5 U	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l		0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l		0.5 U	0.5 U
95-50-1	1,2-DICHLOROENZENE	ug/l		0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l		0.5 U	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l		0.5 U	0.5 U
TIC	unknown19.52	ug/l			
TIC000541-05-9	Cyclotrisiloxane, hexamethyl-	ug/l			
TIC000556-67-2	Cyclotetrasiloxane, octamethyl-	ug/l			
TIC018479-57-7	2-Octanol, 2,6-dimethyl-	ug/l			
TICE966796	Total Alkanes	ug/l		0	0 J

Notes:  
U - undefined            ug/l - micrograms per Liter  
FB - Field Blank        J - estimated  
TB - Trip Blank        ID - Identification  
N - presumptive evidence of a compound

**Table A-3  
Field Trip Blank Analytical Results  
New Cassel Industrial Area  
North Hempstead, NY**

Case Number	Chemical Name	Sample ID	130043N-FB-Z2130	130043N-TB-Z2105
		Sample Date	03/25/2008	03/19/2008
		Result Unit		
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U
100-42-5	Styrene	ug/l	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U
108-88-3	Toluene	ug/l	0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 U	0.5 U
127-18-4	Tetrachloroethene	ug/l	0.5 U	0.5 U
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U	5 U
67-64-1	ACETONE	ug/l	5 U	5 U
67-66-3	CHLOROFORM	ug/l	0.5 U	0.5 U
71-43-2	BENZENE	ug/l	0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.5 U	0.5 U
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 U	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 UJ	0.5 UJ
75-25-2	BROMOFORM	ug/l	0.5 U	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 U	0.5 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	0.5 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	0.5 U	0.5 U
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U
TIC	unknown19.52	ug/l		0.6 JN
TIC000541-05-9	Cyclotrisiloxane, hexamethyl-	ug/l		
TIC000556-67-2	Cyclotetrasiloxane, octamethyl-	ug/l		
TIC018479-57-7	2-Octanol, 2,6-dimethyl-	ug/l		
TICE966796	Total Alkanes	ug/l	0	0 J

Notes:

U - undefined            ug/l - micrograms per Liter  
 FB - Field Blank        J - estimated  
 TB - Trip Blank        ID - Identification  
 N - presumptive evidence of a compound



**Table A-3  
Field Trip Blank Analytical Results  
New Cassel Industrial Area  
North Hempstead, NY**

Case Number	Chemical Name	Sample ID Sample Date Result Unit	130043N-TB-Z2130	130043V-FB-Z2022
			03/19/2008	03/17/2008
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U
100-42-5	Styrene	ug/l	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U
108-88-3	Toluene	ug/l	0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 U	0.5 U
127-18-4	Tetrachloroethene	ug/l	0.5 U	0.5 U
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U	5 U
67-64-1	ACETONE	ug/l	5 U	5 U
67-66-3	CHLOROFORM	ug/l	0.5 U	0.5 U
71-43-2	BENZENE	ug/l	0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.5 U	0.5 U
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 U	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 UJ	0.5 UJ
75-25-2	BROMOFORM	ug/l	0.5 U	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 U	0.5 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	0.5 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	0.5 U	0.5 U
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U
TIC	unknown19.52	ug/l		
TIC000541-05-9	Cyclotrisiloxane, hexamethyl-	ug/l		
TIC000556-67-2	Cyclotetrasiloxane, octamethyl-	ug/l		
TIC018479-57-7	2-Octanol, 2,6-dimethyl-	ug/l		
TICE966796	Total Alkanes	ug/l	0	0

Notes:  
 U - undefined            ug/l - micrograms per Liter  
 FB - Field Blank        J - estimated  
 TB - Trip Blank        ID - Identification  
 N - presumptive evidence of a compound

**Table A-3**  
**Field Trip Blank Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

Case Number	Chemical Name	Sample ID	130043V-FB-Z2042	130043V-TB-Z2022
		Sample Date	03/18/2008	03/13/2008
		Result Unit		
100-41-4	Ethylbenzene	ug/l	0.5 U	0.5 U
100-42-5	Styrene	ug/l	0.5 U	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U	5 U
108-87-2	Methylcyclohexane	ug/l	0.5 U	0.5 U
108-88-3	Toluene	ug/l	0.5 U	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 U	0.5 U
127-18-4	Tetrachloroethene	ug/l	0.5 U	0.5 U
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 UJ
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U	0.5 UJ
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U	0.5 U
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 U	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U	5 U
67-64-1	ACETONE	ug/l	5 U	5 U
67-66-3	CHLOROFORM	ug/l	0.5 U	0.5 U
71-43-2	BENZENE	ug/l	0.5 U	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.5 U	0.5 U
74-83-9	BROMOMETHANE	ug/l	0.5 U	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 U	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	0.5 UJ	0.5 UJ
75-25-2	BROMOFORM	ug/l	0.5 U	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 U	0.5 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U	0.5 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	0.5 U	0.5 U
79-20-9	Methyl Acetate	ug/l	0.5 U	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U	0.5 U
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 U	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U	0.5 U
TIC	unknown19.52	ug/l		
TIC000541-05-9	Cyclotrisiloxane, hexamethyl-	ug/l		
TIC000556-67-2	Cyclotetrasiloxane, octamethyl-	ug/l		
TIC018479-57-7	2-Octanol, 2,6-dimethyl-	ug/l		
TICE966796	Total Alkanes	ug/l	0	0

Notes:

U - undefined            ug/l - micrograms per Liter  
 FB - Field Blank        J - estimated  
 TB - Trip Blank        ID - Identification  
 N - presumptive evidence of a compound

**Table A-3**  
**Field Trip Blank Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

		Sample ID	130043V-TB-Z2042
		Sample Date	03/13/2008
Case Number	Chemical Name	Result Unit	
100-41-4	Ethylbenzene	ug/l	0.5 U
100-42-5	Styrene	ug/l	0.5 U
10061-01-5	cis-1,3-Dichloropropene	ug/l	0.5 U
10061-02-6	trans-1,3-Dichloropropene	ug/l	0.5 U
106-46-7	1,4-Dichlorobenzene	ug/l	0.5 U
106-93-4	1,2-Dibromoethane	ug/l	0.5 U
107-06-2	1,2-Dichloroethane	ug/l	0.5 U
108-10-1	4-Methyl-2-Pentanone	ug/l	5 U
108-87-2	Metylcyclohexane	ug/l	0.5 U
108-88-3	Toluene	ug/l	0.5 U
108-90-7	Chlorobenzene	ug/l	0.5 U
110-82-7	CYCLOHEXANE	ug/l	0.5 U
120-82-1	1,2,4-Trichlorobenzene	ug/l	0.5 U
124-48-1	Dibromochloromethane	ug/l	0.5 U
127-18-4	Tetrachloroethene	ug/l	0.5 U
156-59-2	CIS-1,2-DICHLOROETHENE	ug/l	0.5 U
156-60-5	TRANS-1,2-DICHLOROETHENE	ug/l	0.5 U
1634-04-4	Methyl t-Butyl Ether	ug/l	0.5 U
179601-23-1	m,p-Xylene	ug/l	0.5 U
541-73-1	1,3-DICHLOROENZENE	ug/l	0.5 U
56-23-5	CARBON TETRACHLORIDE	ug/l	0.5 U
591-78-6	2-HEXANONE	ug/l	5 U
67-64-1	ACETONE	ug/l	5 U
67-66-3	CHLOROFORM	ug/l	0.5 U
71-43-2	BENZENE	ug/l	0.5 U
71-55-6	1,1,1-TRICHLOROETHANE	ug/l	0.5 U
74-83-9	BROMOMETHANE	ug/l	0.5 U
74-87-3	CHLOROMETHANE	ug/l	0.5 U
74-97-5	BROMOCHLOROMETHANE	ug/l	0.5 U
75-00-3	CHLOROETHANE	ug/l	0.5 U
75-01-4	VINYL CHLORIDE	ug/l	0.5 U
75-09-2	METHYLENE CHLORIDE	ug/l	0.5 U
75-15-0	CARBON DISULFIDE	ug/l	1.2 J
75-25-2	BROMOFORM	ug/l	0.5 U
75-27-4	BROMODICHLOROMETHANE	ug/l	0.5 U
75-34-3	1,1-DICHLOROETHANE	ug/l	0.5 U
75-35-4	1,1-DICHLOROETHENE	ug/l	0.5 U
75-69-4	TRICHLOROFLUOROMETHANE	ug/l	0.5 U
75-71-8	DICHLORODIFLUOROMETHANE	ug/l	0.5 U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	ug/l	0.5 U
78-87-5	1,2-DICHLOROPROPANE	ug/l	0.5 U
78-93-3	2-BUTANONE	ug/l	5 U
79-00-5	1,1,2-TRICHLOROETHANE	ug/l	0.5 U
79-01-6	TRICHLOROETHENE	ug/l	0.5 U
79-20-9	Methyl Acetate	ug/l	0.5 U
79-34-5	1,1,2,2-TETRACHLOROETHANE	ug/l	0.5 U
87-61-6	1,2,3-Trichlorobenzene	ug/l	0.5 U
95-47-6	O-XYLENE	ug/l	0.5 U
95-50-1	1,2-DICHLOROENZENE	ug/l	0.5 U
96-12-8	1,2-Dibromo-3-chloropropane	ug/l	0.5 U
98-82-8	ISOPROPYLBENZENE	ug/l	0.5 U
TIC	unknown19.52	ug/l	
TIC000541-05-9	Cyclotrisiloxane, hexamethyl-	ug/l	
TIC000556-67-2	Cyclotetrasiloxane, octamethyl-	ug/l	
TIC018479-57-7	2-Octanol, 2,6-dimethyl-	ug/l	
TICE966796	Total Alkanes	ug/l	0

Notes:

U - undefined                      ug/l - micrograms per Liter  
 FB - Field Blank                    J - estimated  
 TB - Trip Blank                    ID - Identification  
 N - presumptive evidence of a compound

**Appendix B**  
**Field Log Book**





MON 3/3/08

0645- F. Robinson on site at  
618 / Ginkbe St.  
0650- Spoke w/ the owner of  
property, showed him location and  
what has to be moved. He said that  
someone called left a message he  
called back but no one said when  
we would be here.  
0735- Zebra on site. Even + Jose  
0755- Opened a NW by 62 Kinkbe  
DTW ~ 48' 02' SE  
0800- Setting up at D1-9T by Kinkbe St.  
1300 43F-DPOT 02 GN 02  
0805- Starting down at DPOT 9F  
0820- Calibrated Hikon U-22 see  
Cal sheets for details  
0825- Down to 55' will collect water  
sample. The set SV limit. 6W ~ 50'  
0835- Sampled D1-9T 02 DPOT  
for UOC EPA OLC03.2  
Hikon Measurements: pH: 5.46 Cond: 0.582  
DO: 6.21 Temp = 11.00°C ORF: 70 Turb: 625

*John E. ...*

10 Mon 3/3/68

0850 - Collected <sup>field</sup> blank from checkmate used to calibrate DP01 sample

130043F-FB

0900 - Setting Deep Soil Vapor Point at 45" Sand I had a breeze screen after

beats it all the way to the top

0910 - Starting DP01 to 25"

0930 DP-01 25" <sup>finish of</sup>

0940 - DP-01 8' SV Point finally DP-01

1005 - Moving to DP01 location

1020 - Down to 55'

1030 - Sampled DP01

130043F-DP01-6W55

1035 Sampled DP06 duplicate of DP01

130043F-DP06-6W55

1038 - Did not sample (see dry sample) happened will pull out, install DP01-SV 45' here the dry again to take a wet sample

1110 - Down to 55' "same" DP-01

1115 - Went Dry again

*Frank*

Mon 3/3/68

1120 - Sampled DP-01

130043F-DP-01-6W55 and

1125 - Spud duplicate of DP-01

130043F-DP-06-6W55

1130 - April U-22 Ready

pH = 5.61 Cond = 0.339 Turb = 720

DO = 6.53 Temp = 12.57 ORP = 88

1135 - DP01 25' SV Point installed

1150 - DP01 8' SV Point installed

1200 - will be moving down the

Street to #62 Kinkle St.

130043K Start at DP01

1300 - 130043K DP01 Down to 55'

1320 - Sampled DP01 for sk

130043K-DP01-6W55 end

1325 Duplicate of DP01

130043K-DP06-6W55

1330 - Horizon water quality for DP01

pH = 5.82 Cond = 0.304 DO = 7.83

Temp = 12.84 ORP = 83 Turb = 622.8

1345 - SB01 - SV 45' installed

1405 - SB01 SV 25' installed

1425 - SB01 SV 8' installed

1430 - Zebra cleanup

*Frank*

12 MON 3/2/08

1505 - Dropped Cosh off @ FedEx

AB#: 861929654324

Summary of Samples Shipped:

130043 - TB

130043F-DP02-6W55

130043 F-FB

130043F-DP-01-6W55

130043F-DP06-6W55 Dup of DP01

130043K-DP07-6W55

130043K-DP06-6W55 Dup of DP-07

~~Frank~~

Tue 3/4/08

0625 F Robinson on site  
 Weather: Mostly Cloudy 51°  
 0645: Mult. - Plus Plus Calibrated OK  
 See Cal sheets for details  
 0700 He test on 130043F-DP02-SV25  
 No He detected VOC = 0 PPM  
 0710 He test on 130043F-DP02-SV08  
 No He detected VOC = 1.3 PPM  
 0715 He test on 130043F-DP01-SV08  
 No He detected VOC = 1.0 PPM  
 0725 He test on 130043K-DP01-SV08  
 Passed test VOC: 0.4 PPM  
 0735 Zebeu on site - Evelyn & Jesse  
 0800 - 130043F-DP02-SV45 Purged 15 mins  
 Start sample w/ 60 Summer Counter  
 0802 - 130043F-DP02-SV25 Purged 8 mins  
 Start sample  
 0805 - 130043F-DP02-SV08 Purged 4 mins  
 Start Sampling  
 0810 - Setup ambient air summer  
 between DP02 & DP02 (130043F)  
 130043F-AA  
 0810 - Starting at 130043K-DP02

Frank



Tues 3/4/68

- 0901 - Purged 130043K-0901-SU08 for <sup>25</sup>✓  
 15 min and started sample
- 0905 - Purged 130043K-0901-SU08 for <sup>25</sup>✓  
 15 min and started to sample
- 0912 - Purged 130043K-0901-SU08 for <sup>25</sup>✓  
 4 min and started to sample
- 0920 - Sampled 130043K-0902-GW55  
 960 MS/MSD
- 0925 - Haha wet Quality for 0902-GW55  
 pH = 6.06 Cond = 0.302 turb > 1000  
 Temp = 14.89 ORP = 31
- 0943 - 130043K-0902-SU45 off (-3.5) ✓
- 0947 - 130043K-0902-SU25 off (-3.5) ✓
- 0951 - 130043K-0902-SU08 off (-3.5) ✓
- 0957 - 130043K-AA off (-3.5) ✓
- 1016 - Start 130043K-0901-SU20 (-27.5) ✓  
 Purge for 9 minutes
- 1020 - Start 130043K-0901-SU45 (-22.5) ✓  
 after purge of 15 minutes
- 1030 - Start 130043K-0901-SU08 (-27.5) ✓  
 end 130043K-0901-SU08 (-27.5) Duplicated ✓
- 1032 End 130043K-0901-SU45 (-4.0) ✓
- 1035 End 130043K-0901-SU08 20 (-3.5) ✓
- 1040 End 130043K-0901-SU08 (-2.0) ✓

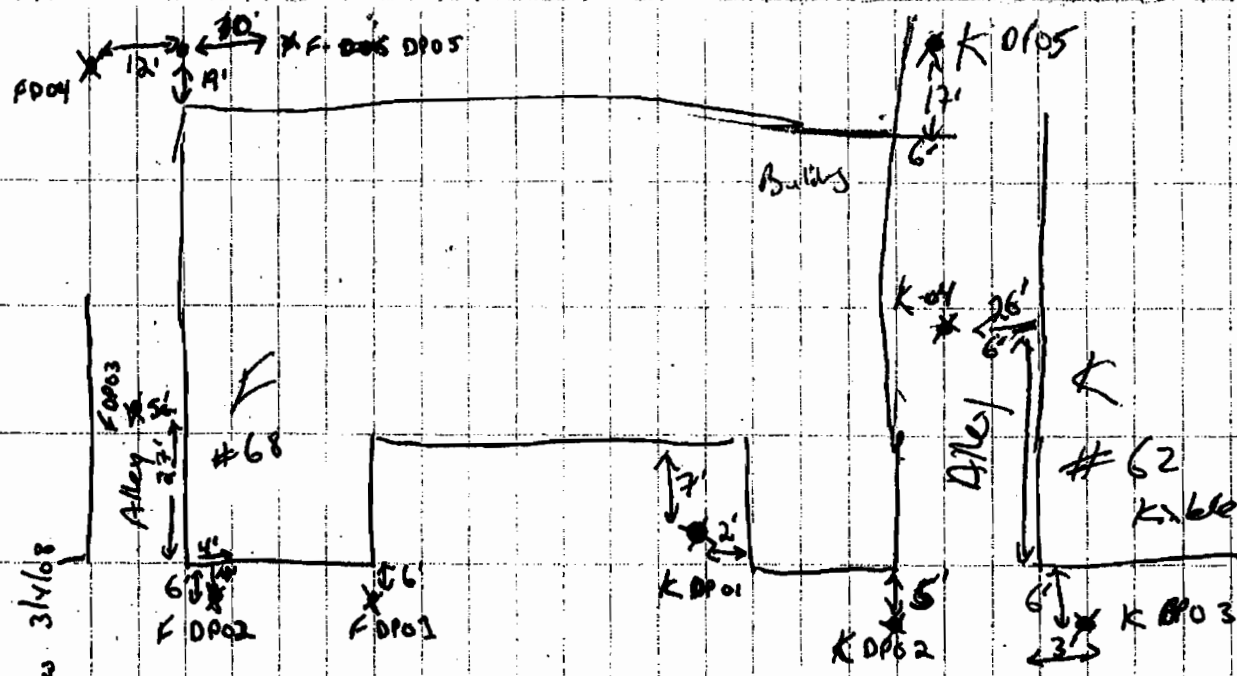
Franklin

Tues 3/4/68

- 1045 - finished:
- 120043K-0902-SU45
- 120043K-0902-SU25
- 130043K-0902-SU08
- 1100 - A+ 130043K-0903-refuel
- @ 45', will set SU @ 45' and  
 try again
- 1110 - 6 still 130043K-0903-SU25
- 1125 - finished 130043K-0903-SU08
- 1135 - Try's again to set down to 55'
- 1150 130043K-0901-SU25 off (-3.5)
- 1200 130043K-0901-SU08 off (-3.0)
- 1202 130043K-0901-SU08 off (-3.5)
- Duplicate of SU08
- 1207 130043K-0901-SU45 off (-4.5)
- 1220 - Sampled 130043K-0903-GW55
- Water Quality Data: pH = 5.57
- Cond = 0.299 ORP = 9.11 Temp = 18.20
- ORP = 157 Turb = > 1000
- 1255 - Red out the ground
- 1320 - Zebra chug up. Starting to rain  
 leaving the site

Franklin

Tues 3/4/68



F. M.

Tues 3/4/68

1348- At Fedex office dropping off  
 1 cooler + 3 boxes w/ summer car stereo  
 484x: 8619 2965 4346  
 8619 2865 4368  
 8719 2965 4357  
 8719 2965 4379

1415- At Woodbury office picking up  
 XFE 3 boxes of summer car stereo

F. M.

Wed 3/5/08

0645- F Robinson on site  
 weather - Showers ~ 50°  
 0735- Zeborn on site Even + drive  
 0750- Pump truck in rly by 62 k. table  
 won't start, need to move it for access  
 0755- Sean O'Hara (KIM) on site  
 0810- Minilube Plus calibrated see Gil  
 Sheets for details  
 0825- He test on 130043K-DP02-SU08  
 No leakage VOC = 0.4 PPM  
 0835- He test on 130043K-DP03-SU08 ✓  
 No leakage VOC = 0.2 PPM  
 0840- Trade need setting up  
 on K DP05  
 0855- Start Supply 130043K-DP02-SU25 ✓  
 (>30) 0.2 PPM  
 0902- Start supply 130043K-DP02-SU45 ✓  
 (-29.0) 0.4 PPM  
 0910- Start Supply 130043K-DP02-SU08 ✓  
 (-29.5) 0.2 PPM  
 0915- At Rebutal @ 45' on K-DP05-SU45  
 will try to set temporary well point later  
 0925- 130043K-DP05-SU25 Instilling  
 1015- Showers returned for ~30 min while supply  
 finished

Wed 3/5/08

1030 Sampled 130043K-DP05-6WSS  
 Water Quality Data: pH 5.86  
 Cond = 0.125 turb > 1000  
 DO = 8.34 Temp = 14.08° ORP = 114  
 1040 Collected Field blank of  
 check value. 130043K-FB  
 1055- End Sampling 130043K-DP02-SU25  
 (-5.0)  
 1102- End Sampling 130043K-DP02-SU45  
 (-3.5)  
 1110- End Supply 130043K-DP02-SU08  
 1127 Start supply 130043K-DP03-SU25 ✓  
 (-29.0)  
 1135- Start supply 130043K-DP03-SU08 ✓  
 (-27.5)  
 1140 Setup Ambient + Air sample  
 in front of 62 k. table street + by  
 003 Sample. 130043K-AA Start  
 1150- Sampled 130043K-DP04-6WSS  
 Water Quality Data: pH = 6.04 Cond = 0.212  
 DO = 7.81 T = 13.76°C ORP = 105  
 turb > 1000  
 1130- Start Supply 130043K-DP03-SU45 ✓  
 (-29.5)  
 Trade

Wed 3/5/08

- 1205 - Installed 130043k - DP04-SU45
- 1225 - Installed 130043k - DP04-SU25
- 1240 - Installed 130043k - DP04-SU08
- 1315 - Final Supply 130043k - DP03-SU45 (-4.0)

- 1327 Final Supply 130043k - DP03-SU25 (-4.0)
- 1340 - Final Supply 130043k - DP03-SU25 - AA

for Ambient Air.

1355 - Leaned the site

1410 - AA Kebab progress off I cooler and 2 jobs w/ 7 Summa Camista

A/B # 8619 2965 4335

Doing the day I called:

Site B 567 near St. - Mr. Alfaro said

is OK to work there next week

Site V: 29 NY Ave: Karen Letour said

HS OK to work at site next week

Site A: 570 Man St: Called Andres

Moss Seaved times did not call back

Sel-T-Swim 631-580-2825

*Frankie M*

Thurs 3/6/08

0635 - Reborn on site

Wesley: Chew 35°

0700 - Jean on site

0725 - Calibrated Multi-Range Flow Sk

See cal sheets for details

0730 - Calibrated Horiba U-22 - OK

see cal sheets for details

0754 - Start Supply 130043k - DP04-SU25

(-26.5) 0.6 ppm

0800 Start Supply 130043k - DP04-SU45

(>30.0) 1.0 ppm

0817 Start Supply 130043k - DP04-SU08

(-32.0) 0.4 ppm

0818 Start Supply 130043k - DP05-SU25

(230.0) 0.7 ppm

0825 Start Supply 130043k - DP05-SU45

(730.0) 1.3 ppm

0836 Start Supply 130043k - DP05-SU08

(-26.5) 0.7 ppm

0837 Start Supply 130043k - AA

Ambient Air by DP05

0850 - Sampled 130043k - DP04-SU25

Gas Quality: pH: 6.26 Cond: 0.324 DO: 7.61

Temp: 11.58°C Olf: 82 Turb 7.650

*Frankie M*



22 Thurs 3/6/68

0910 - Collected Field Blank Sample

of Check tube: 130043 F- SV08

0920 - Installed: 130043 F- DP04-SV45

0925 Installed 130043 F- DP04-SV25

0931 Stopped Sampling 130043 F- DP04-SV08

(-2.5)

0933 Stopped Sampling 130043 F- DP04-SV25

(-4.0)

0937 Stopped Sampling 130043 F- AA ambient

envir (-1.5)

0940 - Installed 130043 F- DP04-SV08

1000 Stopped Sampling 130043 F- DP04-SV45

(-4.0)

1002 Stopped Sampling 130043 F- DP05-SV08

(-3.5)

1005 Stopped Sampling 130043 F- DP05-SV25

(-3.5)

1025 Sampled 130043 F- DP05-SV45

Gas Quality: pH = 6.52 Cond = 0.291 DO = 0.49

Temp = 12.84°C ORP = -320 Turb > 1000

1025 - Finished Sampling 130043 F- DP05-SV45

(-4.5)

1035 - Installed 130043 F- DP-05-SV45 25 45

1045

*Franklin*

Thurs 3/6/68

1100 Installed 130043 F- DP05-SV25

and 130043 F- DP05-SV08

1210 Sampled 130043 F- DP03-SV45

Gas Quality: pH = 6.34 Cond = 0.425

DO = 1.16 T = 16.16°C ORP = -8

turbid: > 1000

1300 - Installed:

130043 F- DP03-SV25

130043 F- DP03-SV08

1030 Sen will be dropping off 1 center

+ 2 bases of ammonia concn. b

Fedex Office: Addr: 8596-4243-1670

*Franklin*

FRI 3/7/08

0635- F Abbinen onsite  
 Working Clear 35°  
 0655- Calibrated miniker Plus noticeably see  
 Cal sheet for details.  
 0705- Standard Helium test on 130043F-0P03-SU08  
 well passed, no leakage  
 0710- Standard Helium test on 130048F-0P04-SU08  
 0730 Starty to Sample 130043F-0P03-SU25  
 (-28.5) 0.2 ppm  
 0735- Starty to sample 130043F-0P03-SU45  
 (-29.5) 0.2 ppm  
 0737 Starty 130043F-0P03-SU68 + SD08  
 (Duplicate) SD08 - 29.5 SU08 - 28.5 1.2 ppm  
 0752 Start Sample 130043F-0P04-SU25  
 (-28.5) 0.2 ppm  
 0756 Start sample 130043F-0P04-SU08  
 (-28.0) 0.7 ppm  
 0812- Start sample 130043F-0P05-SU25  
 (-30.0) 0.0 ppm  
 0817- Both duplicate samples same as  
 but after only 40min.  
 130043F-0P03-SU08 (-3.5)  
 130043F-0P03-SD08 (-0.5)  
 0827 Setting up and starting ambient air  
 Fresh Air

0827- 130043F-AA between  
 DP-04 and DP05 locations  
 0846- Resampling 130043F-0P03-SU08 + SU08  
 Short time on last 2  
 SU08 (-26.5)  
 SU08 (-25.0)  
 0854- Resampling 130043F-0P04-SU08  
 due to short time (-30.0)  
 0910 Stopped Sampling 130043F-0P03-SU25  
 (-4.5)  
 0922 Stopped sample 130043F-0P04-SU25  
 (-4.0)  
 0925 Stopped sample 130043F-0P05-SU45  
 (-4.0)  
 0931 Stopped Sample 130043F-0P04-SU45  
 (-4.5)  
 0938- Stopped sampled 2nd Duplicate  
 130043F-0P03-SU08 (-9.5)  
 130043F-0P03-SU08 (-4.0)  
 0947- Stopped sample 130043F-0P05-SU25  
 0918 Stopped Sample 130043F-0P05-SU08  
 (-5.0)  
 1021 Stopped sampling 130043F-0P04-SU08  
 Resample (-4.5)  
 Fresh Air

FRI 3/2/08

1028 - Ambient Air - stopped sampling  
 by 130043F-AA (25.0)  
 Stays regular CHR?  
 1100 - Finished piling up boxes,  
 Debra patched the holes and resealed  
 the tubing + DP-03, 04 and 05.  
 1140 Dropped off 4 boxes @ Kedyx  
 Add. 8596 9243 1680

*Frank*

MON 3/10/08

0645 - FR bins on site cut  
 567 Main St. A/c: 130043B  
 Weather: Clear 30°  
 0705 - marked out 5 DP locations  
 DPOY had to be moved due to  
 HI location is on another property  
 moved to the corner of the building  
 0710 - Calculated Humidity OK see Cal  
 Sheet for details  
 0745 - Debra on site: Evin + Jose  
 0800 - Settling up on 130043B-DPOS  
 0815 - Dawn to 55  
 0835 - Sampled 130043B-DPOS-6055  
 plus MS/MSD  
 Water Quality: pH = 5.69 cond = 0.619  
 DO = 7.60 Temp = 10.07°C  
 ORP = 152 Turb = > 1000  
 0845 Collected field blank at Clark water  
 130043B-FB  
 0850 - Installed 130043B-DPOS-SU8545  
 0900 - Installed 130043B-DPOS-SV25  
 0910 - Installed 130043B-DPOS-SU08  
 Settling up on 130043B-DPO1  
 0930 - Dawn to 55

*Frank*

28 Mon 3/10/68

0940-Sampled 1300438-DP01-6W55 and Duplicate Sample 1300438-0P06-6W55  
Gw Quality: pH = 5.72 Cond = 0.440  
DO = 5.01 Temp = 10.25°C

ORP = 74 Turb > 1000  
0955- Installed 1300438-DP01-SV45  
1010 Installed 1300438-DP01-SU25  
1020 Installed 1300438-DP01-SU08  
1025. Set up on 1300438-DP02  
1055 Down to 55'

1115- No vent pull out  
1220-Sampled 1300438-DP02-6W55  
Gw Quality: pH = 6.00 Cond = 0.397  
DO = 4.75 Temp = 12.28°C

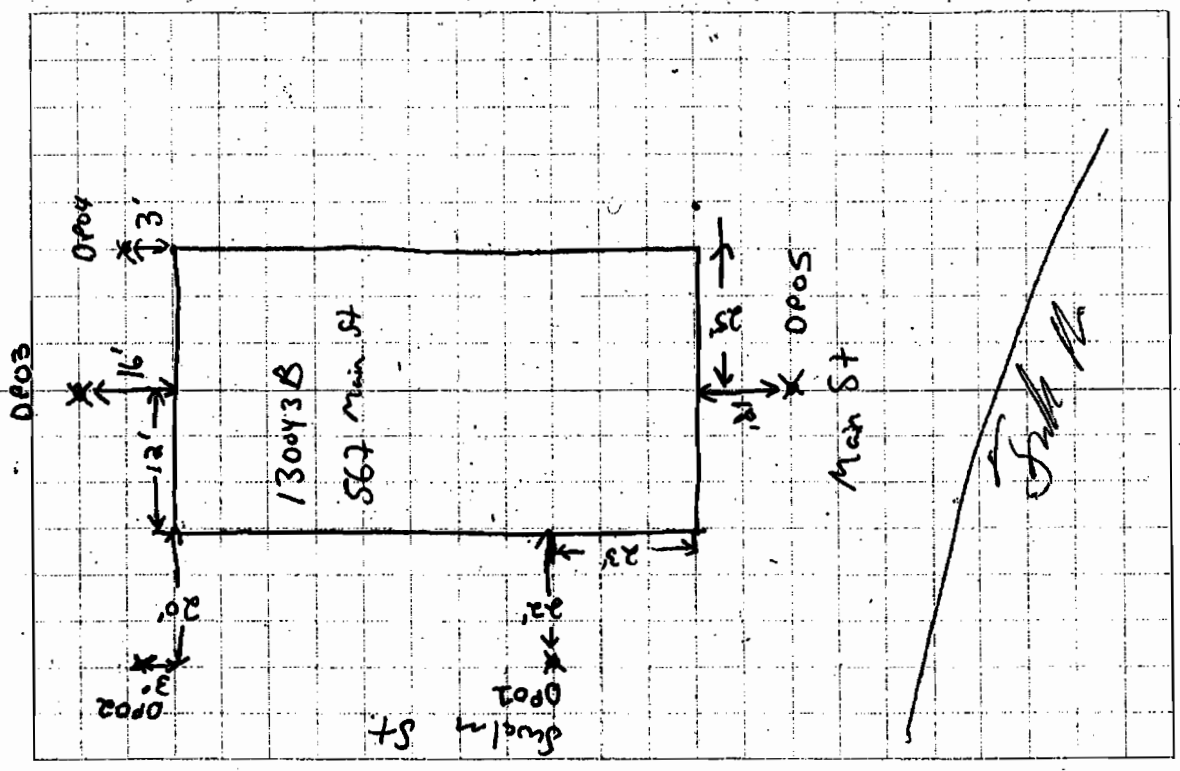
02P = 83 Turb > 1000  
1230- Helium leak test on 1300438-SU08  
Passed - No leaks, No He detected

1235- Installed 1300438-DP02-SV45 and 1300438-DP02-SU25  
1240. Helium leak test on 1300438-DP01-SU08  
Passed - No He detected

1245- Installed 1300438-DP02-SU08  
1320-Sampled 1300438-DP03-6W55  
Gw Quality: pH = 6.07 Cond = 0.342 DO = 5.75  
Temp = 11.82°C ORP = 71 Turb > 1000

*Frank Mc*

Mon 3/10/68





MON 3/10/08

1330 - Spoke to Mr. B's Supervisor (Castle Collision) → Site A. Did not get the NYSDOC Letter, I gave him my copy and will speak to his partner about doing the work.

1335 - Installed 130043B-DP03-SU45

1345 - Installed 130043B-DP03-SU25

1355 - Installed 130043B-DP03-SU08

1415 - Zebra Cleaning sp. 509 to Fedex

1420 - Dropped off 1 color @ Fedex

Ab #: 8596 4243 / 669

1440 - At Woodbury office picking up 5 boxes (20) Simms Counter

~~Fade Me~~

Tues 3/11/08

0625 - F. Reborn on site  
Weather: Partly Cloudy 37°

0645 - Call installed Multi Zone PWS and Harbor U-22 successfully - Jee  
Call sheets for details

0707 - Start Supply 130043B-DP05-SU25 (-28.0) 4.0 ppm

0712 - Start Supply 130043B-DP05-SU45 (-25.0) 7.1 ppm

0719 - Start Supply 130043B-DP05-SU08 (-29.7) 1.4 ppm

0738 - Start Supply 130043B-DP07-SU25 (-28.5) 9.6 ppm

0745 - Start Supply 130043B-DP07-SU45 (-29.5) 5.8 ppm

0749 - Start Supply 130043B-DP07-SU08

0800 - Zebra Outside - only 5 min

0828 - Dropped Supply 130043B-DP05-SU25 (-4.5)

0835 - Start Supply 130043B-DP02-SU25 (-25.5) 0.8 ppm and duplicate sample

130043B-DP02-SU25 (-29.0) 0.8 ppm

0835 - Start Supply 130043B-DP02-SU45 (-27.5) 1.1 ppm

Fade Me

Tues 3/1/68

0843 - Sampled 1300438-DP02-SU08  
 (-27.7) 0.5 ppm  
 0845 - Start Sample Ambient Air Sample  
 located at DP02  
 1300438-AA (-30.0)  
 0848 - Stopped Sampling 1300438-DP05-SU08  
 (-4.0)  
 0855 - Stopped Sampling 1300438-DP05-SU45  
 (-4.0)  
 0905 - Stopped Sampling 1300438-DP01-SU25  
 (-4.5)  
 0920 - Sampled 1300438-DP04-GW55  
 GW Quality: pH = 5.98 Cond = 0.600  
 DO = 4.45 Temp = 9.91°C ORP = 108  
 Turb = >1000  
 0925 - Stopped Sampling 1300438-DP01-SU45  
 (-5.0)  
 0940 - Collected <sup>PH</sup> Field Blank sample &  
 Check valve 1300438-FB  
 0945 - Stopped Sampling 1300438-DP01-SU08  
 (-4.5)  
 0950 - Installed 1300438-DP04-SU45  
 1005 - Installed 1300438-DP04-SU25  
 1008 - Stopped Sampling 1300438-DP02-SU45  
 (-4.0)

Frank

Tues 3/1/68

1012 - Stopped Sampling  
 1300438-DP02-SU25 (-5.0)  
 1200438 - DP02-SU25 (Duplicate) -5.5  
 1018 - Start Sample 1300438-DP03-SU25  
 (-28.5) 0.9 ppm  
 1021 - Start Sample 1300438-DP03-SU45  
 (-30.0) 0.6 ppm  
 1025 - Start Sample 1300438-DP03-SU08  
 (-30.0) 1.6 ppm  
 1027 - Stopped Sampling 1300438-DP AA  
 Ambient Air Sample  
 1034 - Stopped Sampling 1300438-DP02-SU08  
 (-4.0)  
 1035 - Installed 1300438-DP04-SU08  
 1138 - Stopped Sampling 1300438-DP03-SU25  
 (-5.0)  
 1200 - Finished Sampling 1300438-DP03-SU45  
 (-4.5)  
 1220 - Finished Sampling 1300438-DP03-SU08  
 (-5.0)  
 1240 - Muted at location at 1300438 A site  
 w/ Gun (Zebray)  
 1325 - Drugged off 5 bus c. before  
 AB# 8619 2965 4313

Frank

Wed 3/12/08

0630 - Robinson on site  
 Weather: Overcast 45°  
 0650 - Calibrated Multikce Plus and  
 Horiba U-22 - both passed for Cal  
 sheets for details  
 0700 Show M (DM) on site  
 0723 - Start Supply 130043B-DPO4-SU25 ✓  
 (-30) 2.3 ppm  
 0725 Start Supply 130043B-DPO4-SU25 ✓  
 (-29.5) 2.6 ppm  
 0732 - Start Supply 130043A-DPO4-SU08 ✓  
 (-29.0) 3.2 ppm  
 0734 - Start Supply 130043B-AA Ambient  
 Air set up airtight to DPO4  
 0730 Zebra on site (Even only again)  
 0745 - Start on 130043A-DPO5  
 0708 - Stopped Supply 130043B-DPO4-SU25  
 (-4.5) East Regulator  
 0815 - Sampled 130043A-DPO5-6WSS + res/mso  
 Gas Quantity: 5.96 Cond= 0.666 DO= 3.80  
 Temp= 11.27°C ORP= 69 torb = >1000  
 0830 - Sampled Field Blank at Check Valve  
 130043A-FB  
 0840 Installed 130043A-DPO5-SU45

F. J. M.

Wed 3/12/08

0855 - Stopped Supply  
 130043B-AA (-4.5)  
 0900 - Stopped Supply 130043B-DPO4-SU08  
 (-4.5)  
 0905 - Installed: 130043A-DPO5-SU25 and  
 130043A-DPO5-SU08  
 0913 - Stopped Supply 130043B-DPO4-SU45  
 (-5.0)  
 0935 - Start at 130043A-DPO4  
 1000 - Sampled 130043A-DPO4-6WSS and  
 Dipbrite Spc 130043A-DPO4-6WSS  
 Gas Quantity: pH= 6.28 Cond= 0.427  
 DO= 0.17 Temp= 11.44°C ORP= 2  
 torb = >1000  
 1020 - Installed 130043A-DPO4-SU45  
 1050 - Installed 130043A-DPO4-SU25  
 1100 - Installed 130043A-DPO4-SU08  
 1125 At 130043A-DPO3 local  
 1220 - Sampled 130043A-DPO3-6WSS  
 Gas Quantity: pH= 6.36 Cond= 0.597  
 DO= 1.15 Temp= 14.66°C ORP= -15  
 torb >1000  
 1240 - Helium test on 130043A-DPO5-SU08  
 OK - No He detected

F. J. M.



Wed  
Fors 3/12/08

1250 Helium test on 130043A-DPO4-SU08

OK - No He detected

1300 - Installed - 130043A-DPO3-SU47

130043A-DPO3-SU27

130043A-DPO3-SU08

1340 - At Feder dropped off 26028

AS#: 8619 2965 4107

~~End of~~

Thurs 3/13/08

0625 - F866ma on site

Weather: Cloudy 35

0645 - Calibrated multi (see P15) and

Arbitr U-22 OK See cal sheet

for details, Sharma (OPM) on site

0700 - 130043A-DPO3 was put in the

wrong location, Alex' designation will

be 130043A-DPO3A

0724 Start Supply 130043A-DPO3-SU27 ✓

(-28.5) 16.8 ppm

0730 Start Supply 130043A-DPO5-SV45 ✓

(-26.5) and 130043A-DPO5-SDFJ (Duplicate) ✓

(-28.5) 50.3 ppm

0734 Start Supply 130043A-DPO5-SU08 ✓

(-30) 0.8 ppm

0730 Zebra on site {un + Luke

0752 Start Supply 130043A-DPO4-SU27 ✓

(-30.0) 50.2 ppm

0803 Start Supply 130043A-DPO4-SU08

(-26.0) 1.4 ppm

0805 Start Supply 130043A-AA ✓

Ambient Ar located near

DPO4

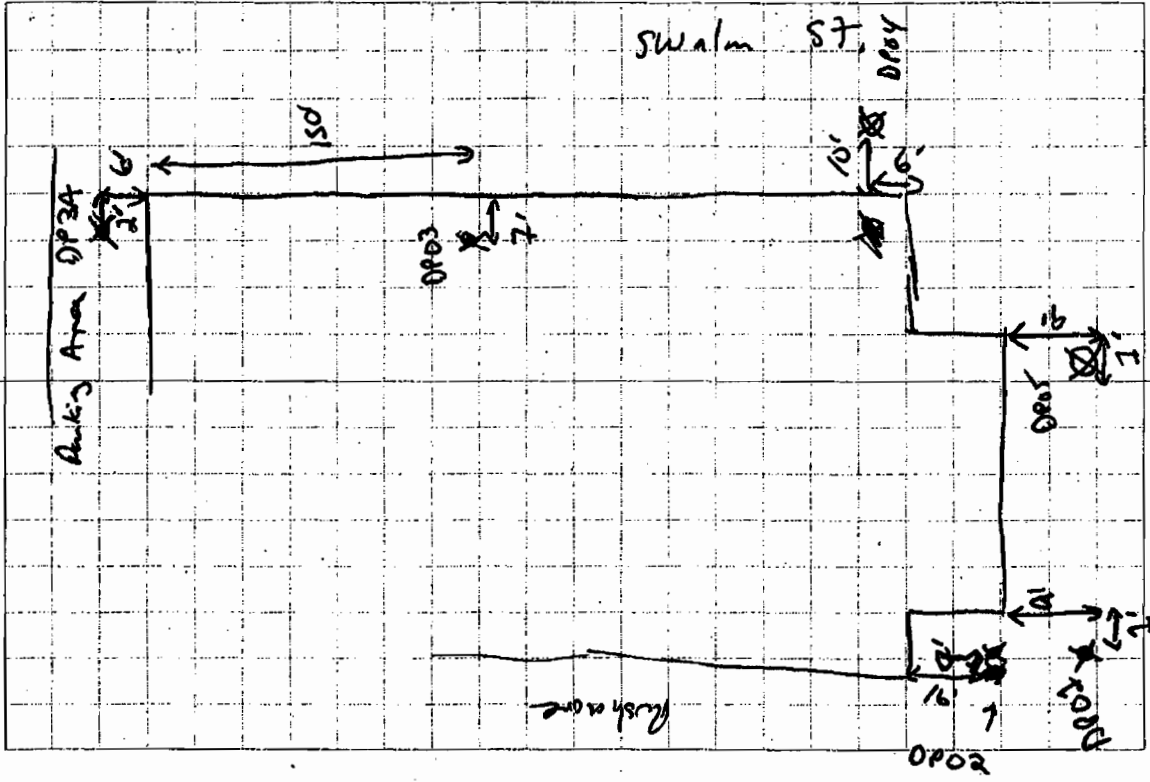
Feder



Thurs 3/13/68

0868 Start Sampling 130043A-DP04-SU45 ✓  
 (-23.0) 562 ppm  
 0811- Stop Sampling 130043A-DP05-SU45  
 (-9.0) Fast Regulator and 130043A-DP05-SU45  
 (-17.5) Duplicate of 1040  
 0830 Sampled 130043-DP01-GWSS  
 Gas Quality: pH= 5.86 Cond= 0.513  
 DO= 2.99 Temp= 12.02°C ORP= 69  
 Turb > 1000  
 0840 Collected Field blank sample of check  
 Value 130043A-FB  
 0845 Installed 130043A-DP01-SU45  
 0855 Installed 130043A-DP01-SU25  
 0900 Installed 130043A-DP01-SU08  
 0907 Stop Sampling 130043A-DP05-SU25  
 (-5.0)  
 0927 Start Sampling 130043A-DP04-SU45  
 (-5.0)  
 0940 Resample of 130043A-DP04-SU08V  
 due to slow regulator on original  
 (-26.5)  
 0943 Stop Sampling 130043A-DP05-AA  
 (-5.0) Ambient Air  
 Fresh Air

Thurs 3/13/68



Main ST

Thurs 3/13/08

0950- Sampled 130043A-0P02-6W55  
 GW Quality: pH: 5.90 Cond: 1.15  
 DO: 4.19 Temp: 11.36°C ORP: 68  
 turb > 1000

0958- Stopped Sampling 130043A-0P04-SU25  
 (-5.5)

1005- Installed 130043A-0P02-SU45  
 1020- Installed 130043A-0P02-SU25  
 1035 Installed 130043A-0P02-SU08  
 1105 Stopped Sampling 130043A-0P04-SU08  
 (-4.5)

1125 Sampled 130043A-0P03A-6W55  
 GW Quality: pH: 6.40 Cond: 0.729  
 DO: 2.61 Temp: 13.65°C ORP: -23  
 turb > 1000

1145- 130043A-0P03A-SU45 Installed  
 1205- 130043A-0P03A-SU25 Installed  
 130043A-0P03A-SU08 Installed

1245- Drugged off 4 boxes @ Kitchen  
 AB# 8669 2965 4302  
 Shower at site w/ Zebra cleaning up and  
 rolling SU tubing  
 1300- At Woodbury office picking up Cooler +  
 Summer Cartridges.

John Mc

FRI 3/14/08

0625- F Nelson on site  
 Weather Cloudy 41°  
 0700 Shower on site  
 0721- Start Sampling 130043A-0P01-SU25 ✓  
 (-30.0) 0.0 ppm  
 0725- Start Sampling 130043A-0P01-SU08 ✓  
 (-29.5) 0.2 ppm  
 0728- Start Sampling 130043A-0P01-SU45 ✓  
 (-30.0) 1.1 ppm  
 0730- Start Sampling 130043A-AA ✓  
 Ambient Air Sample (-28.5)  
 Leak by 130043A-0P01-  
 0745- Start Sampling 130043A-0P02-SU25 ✓  
 (-29.5) 0.4 ppm  
 0749- Start Sampling 130043A-0P02-SU08 ✓  
 (-29.0) 0.2 ppm  
 0752- Start Sampling 130043A-0P02-SU45 ✓  
 (-30.0) 1.4 ppm  
 0816- Start Sampling 130043A-0P03A-SU45  
 (-28.0) 2.7 ppm  
 0822- Start Sampling 130043A-0P03A-SU08 ✓  
 (-29.5) 1.6 ppm  
 0824- Start Sampling 130043A-0P03A-SU45 ✓  
 7-30.0 3.0 ppm

John Mc

FRI 3/14/08

0850 Stopped Supply 130043A-DP03A-SU25

FAST Regular

0852 Started + Sample 130043A-DP03A-SU25 ✓  
(-29.5) 2.777 gm. 2nd Run.

0900 Stopped Supply 130043A-DP01-SU08

(-4.5)

0903 Stopped Supply 130043A-DP01-SU25

(-4.0)

0921 Stopped Supply 130043A-DP01-SU45

(-4.5)

0923 Stopped Supply 130043A-DP02-SU45

(-4.0)

0925 Stopped Supply 130043A-DP02-SU25

02.9a

(-4.5)

0936 - Stopped Supply 130043A-DP02-SU68 (-4.5)

1006 Stopped Supply 130043A-DP03A-SU68

(-5.0)

1022 Stopped Supply 130043A-DP03A-SU25 (-5.0)

1024 Stopped Supply 130043A-DP03A-SU45 (-5.5)

(essentially 2 hrs!!) Last sample - finished

w/ site A.

Mfr. Zebra (Eaton + Jore) on site C0700, pulling out SV  
hoes and fixing up grass area that was disturbed  
by Geoprobe Mfg. Use's top soil.

Frank M.

FRI 3/14/08

1055 Stopped off at sites V+C  
to scope out location

1145 At Federex drop-off 3 boxes

AB#: 8619 2965 4298

Frank M.



Mon 3/17/68

0650 F. B. Smith on site 130043V  
 Weather: Clear 33  
 0635 - Pumping comm at SV locality. Spoke to Jim, building director/maintenance person, told US. Sean O'Brien (CDM) arrived @ the fire.  
 0730. Calibrated Moist. Res. Res. and Humidity U-22 → CC See cal sheet for details  
 0750 - Zehn on site. Eun + Luke Site 130083V  
 0835 - Setting up on DPOS  
 0910 - Sampled 130043V-DPOS-6W55  
 Gas Quality: pH = 5.65 cond = 0.127 Turb = 8.37  
 Temp = 14.02°C OLP = 129 Turb > 1000  
 0920 - Collected - Field blank of Chick Utka  
 10043V - FB  
 0925 - Installed 130043V-DPOS-SV45  
 0940 - Installed 130043V-9065-SU25  
 0945 - Installed 130043V-9065-SU08  
 1035 - Sampled 130043V-DPOS-6W55 and Duplicate  
 130043V-9066-6W55  
 Gas Quality: pH = 5.97 cond = 0.176 Turb = 7.76  
 Temp = 16.25°C OLP = 91 Turb = > 1000  
 1050 - Installed 130043V-DPOS-SV45

Frank M.

Tues Mon 3/17/68

1105 - Installed 130043V-DPOS-SV25  
 1110 - Installed 130043V-DPOS-SV08  
 1150 - Sampled 130043V-DPOS-6W55  
 Gas Quality: pH = 6.37 Cond = 0.841  
 DO = 7.50 Temp = 15.51°C OLP = 63  
 Turb > 1000 (test OK)  
 1200 - He test on 130043V-DPOS-SV08  
 1215 - Start Sampling 130043V-DPOS-SV25 ✓  
 (-29.5) 3.5 ppm  
 1221 - Start Sampling 130043V-DPOS-SV08 ✓  
 (-23.0) 0.2 ppm  
 1222 - Start Sampling 130043V-DPOS-SV45 ✓  
 (-29.0) 0.9 ppm  
 1224 - Start Sampling 130043V-DPOS-AA ✓  
 Ambient Air Sample near to DPOS  
 1225 - Installed 130043V-DPOS-SV45  
 130043V-DPOS-SV25  
 130043V-DPOS-SV08  
 135 - Heburn test of 130043V-DPOS-SV08  
 OK. No He test detected  
 1341 - Stopped Sampling 130043V-DPOS-SV08 (-4.7)  
 1347 - Stopped Sampling 130043V-DPOS-SV45 (-5.0)  
 1400 - Stopped Sampling 130043V-DPOS-SV25 (-5.0)  
 1405 - Stopped Sampling 130043V-DPOS-AA (-5.0)

Frank M.



Mon 3/17/08

1430 Sampled 130043U-D102-GWST

GW Quality: pH: 5.99 Cond: 0.993

DO = 7.21 Temp = 15.48°C OCF: 94

Turbidity > 1000

MST- Installed 130043U-D102-SU45

1450- Installed 130043U-D102-SU25

1500- Installed 130043U-D102-SU08

1510- Leaving the site: Saw dripping off

1 cooler + 1 bin w/amine canister @ Fedex

AB#:

2030- Checktech delivers 3 boxes (12 cond

at) Saw at his Hotel

~~Frank M.~~

Tues 3/18/08

0625- F Redman on site

Weather: Partly Cloudy 37°

0705- Calibrated Multi Rec and

blinds v-22 successfully. See csl sheets for details

0718- Started supply 130043U-D104-SU25 (12-30)

0722 Starty Supply 130043U-D104-SU08 ✓

(-29.5) 0.8 ppm

0724- Started supply 130043U-D104-SU08 ✓

(-30.0) 0.5 ppm DR3 JC

0738- Started 6 Sample 130043U-D104-SU25 ✓

(-30.0) 0.7 ppm

0740- Started 6 Sample 130043U-D103-SU08 ✓

(-30.0) 0.4 ppm

0742- Started 6 Sample 130043U-D103-SU45 ✓

0800- Zebm on site

0759- Started Supply 130043U-D102-SU25 ✓

(-29.0) 0.5 ppm

0801- Started Supply 130043U-D102-SU45 ✓

(-28.0) and Duplicate 130043U-D102-SD45 ✓

(-29.0) 0.4 ppm

0806- Started 6 Sample 130043U-D102-SU08 ✓

(-27.0) 0.1 ppm

0835- Started Supply 130043U-D104-SU25 (-5.0

Frank M.

Tues 3/19/68

0846 Stopped Sampling 130043V-DP02-SV4T and  
 130043V-DP02-SD4T (Depth) (-11.5)  
 SV4T had first regulation  
 0855-Sampled 130043V-DP01-6055  
 600 Quality: pH=5.53 Cond=0.870  
 DO=5.91 Temp=12.88C ORP=127  
 Turb P100

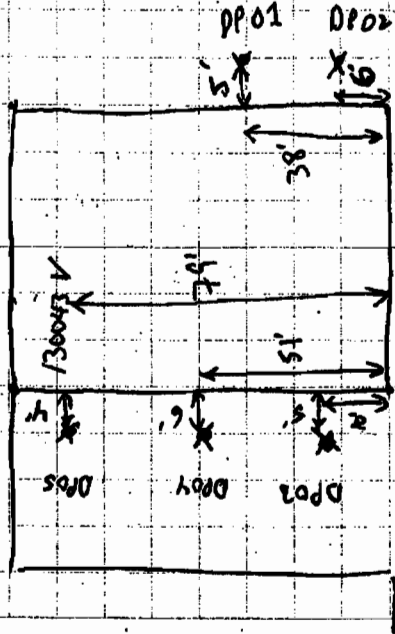
0918 Stopped Sampling 130043V-DP04-SV45 (-5.0)  
 0920 Stopped Sampling 130043V-DP04-SV08 (-5.0)  
 0926 Stopped Sampling 130043V-DP02-SV08 (-5.0)  
 0930 Instilled: 130043V-DP01-SV08  
 130043V-DP01-SV25  
 130043V-DP01-SV45

0934 Stopped Sampling 130043V-DP03-SV45 (-5.0)  
 0936 Stopped Sampling 130043V-DP01-SV25 (-5.0)  
 0940 Stopped Sampling 130043V-DP03-SV08 (-6.0)  
 0944 Stopped Sampling 130043V-DP02-SV25 (-4.5)  
 1135 Start Sampling 130043V-DP01-SV25 ✓  
 (-30.0) 0.4 ppm

1140 Start Sampling 130043V-DP01-SV08 ✓  
 (-30.0) 0.4 ppm  
 1143 Start Sampling 130043V-DP01-SV45 ✓  
 (-29.5) 0.4 ppm

Sub:

Tues 3/18/68



New York Ave

Tues 2/18/08

1415. No ambient air sample was collected  
 today. Charttech sheet US 1 Samms  
 Canister.  
 1240. Stopped supply 130043V-DP01-SU08 (-5.0)  
 1305. Stopped supply 130043V-DP01-SU25 (-5.0)  
 1315. Stopped supply 130043V-DP01-SU45 (-5.0)  
 1345. See guy going to FedEx w/ 4 boxes of canisters  
 + 1 cooler A.S.#: 3619 2965 4118

Wed 3/19/08

0630. F. Robinson on site  
 Weather: Rain 43°  
 0725. See (Cm) on site  
 0740. Behave on site  
 A: Site 130043C  
 1225. State Street.  
 0840. At 130043C-DP05  
 returned at 46' (Ni water)  
 setting SU45  
 0920. Installed 130043C-DP05-SU45  
 had to go down again with real  
 hole collapsed  
 0950. Installed 130043C-DP05-SU27  
 1000. Installed 130043C-DP05-SU03  
 1030. Calculated Abnals 0.22 OK  
 See Col sheets at abnals.  
 1100. Sampled 130043C-DP05-GWST  
 + MS/MSD  
 0600 Quality: pH = 6.20 and = 0.156  
 DO = 4.33 Temp = 12.68°C O.K.P. = 62  
 Turb > 1000  
 1120. Collected Field Blank sample of  
 Check-overline 130043C-FB  
 —————  
 Parker



Wed 3/26/08

1200 - Sample 130043C-DP04-GWST  
 and duplicate sample 130043C-DP06-GWST  
 GW Quality, pH = 5.58 Cond = 0.08Y  
 ORP = 4.34 Temp = 12.46°C ORP = 136  
 starting > 6000

1205 - Installed 130043C-DP04-SU45  
 1315 - Installed 130043C-DP04-SU25 →  
 130043C-DP04-SU08  
 1330 - Raining heavy, 56 ppm, water for  
 today  
 1400 - leaving site: Seen SW to FedEx  
 to drop off code: FedEx A6#  
 8619 2965

*Fudge*

Thu 3/27/08

0625 - ~~L. Rubin~~ on site  
 Weather: Breeze 48  
 0630 - Dave (Zelnr) called: Delay  
 due to axle breaky on Geomik  
 trailer while driving. Will call  
 later with an update  
 0700 Sean (Cms) on site  
 0730 Cal started Multi-Rec Plus - OK  
 See Cal sheets for details  
 0745 - Conducted Helium leak test on  
 130043C-DP05-SU08 - OK, no  
 He detected  
 0813 - Start Supply 130043C-DP05-SU25 ✓  
 (-29.5) 2.5 ppm  
 0816 - Start Supply 130043C-DP05-SU08 ✓  
 (-30.6) 3.5 ppm  
 0821 - Start Supply 130043C-DP05-SU07 ✓  
 (-27.5) 3.3 ppm  
 0824 - Start Supply 130043C-AA ✓  
 (-28.5) Ambient Air Sample next to  
 130043C-DP05  
 0840 - Start Supply 130043C-DP04-SU25 ✓  
 (-29.5) 1.9 ppm

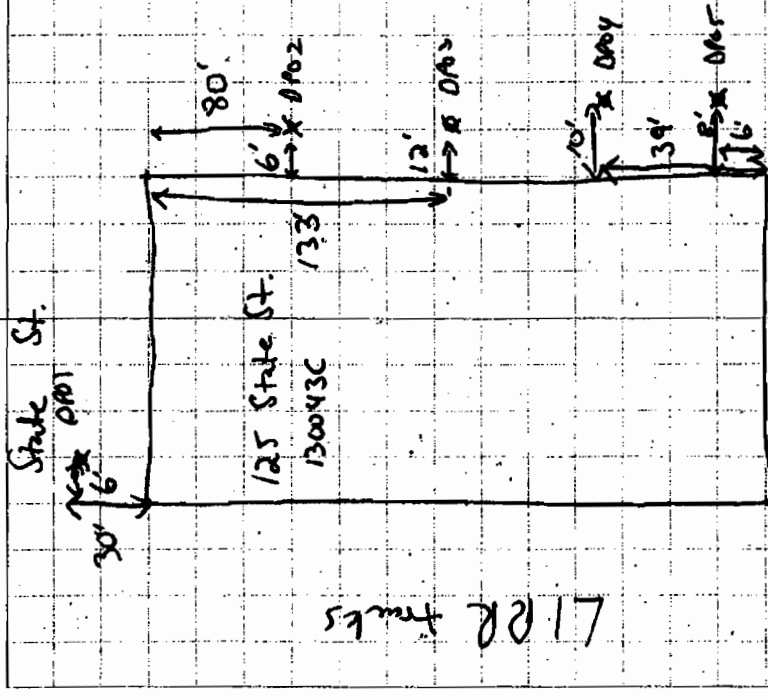
*Fudge*



Thurs 3/20/08

- 0845 Start Supply 130043C-D104-SU08 ✓  
(-300) 2.9 ppm and Apprx of SU08
- 130043C-D104-SD08 (-29.5) 2.9 ppm
- 0849 Start Supply 130043C-D104-SU4F  
(-200) 1.7 ppm
- 0908 Stopped Supply 130043C-D104-SU08  
(-40) Fast Register
- 0915 Dave (Zebrin) called: Drillers will not  
be on site today, leak is totally shut and  
Drill rigs and drills were undamaged  
Will be here tomorrow 1st thing.
- 10045 Stopped Supply 130043C-D104-SU4T  
(-4.0)
- 0947 Stopped Supply 130043C-A1A (-5.0)  
Ambient Air Sample
- 1000 Stopped Supply 130043C-D104-SU2T (-5.0)
- 1026 Stopped Supply: 130043C-D104-SU08 (-4.0)  
and 130043C-D104-SU08 (-5.0) Disphate  
of SU08
- 1030 Stopped Supply 130043C-D104-SU2T (-4.5)
- 1100 Measure all Locations D104-D105
- 1110 Sam dagan 2 bbs of Gamma Counter  
@ Greiner A1617: 85916 42.43 16.88

Thurs 3/20/08



LIR tracks

FRI 3/20/08

0630 - F Brown on site  
Weather: Clear, Windy 37°  
0700 - Jess on site

0730 - Zeban on site (Sun + Juice)

0745 - Calibrated Multi Line + Hanks U22

OK - See Cal sheets for details

0750 - Start of 130043C-DP03

0755 - Installed 130043C-DP03-SU08

0805 - Installed 130043C-DP03-SU17

0815 - Sampled 130043C-DP03-GU05

GW Quality: pH = 5.77 Cond = 0.094 DO = 3.78  
Temp = 11.94°C OLF = 95 Tork = >1000

0845 - Calibrated Field Blank Sample of

Check value 130043C-FB

0850 - Installed 130043C-DP03-SU45

0900 - Installed 130043C-DP02-SU08

0915 - Installed 130043C-DP02-SU25

0940 - Sampled 130043C-DP02-GU05

GW Quality: pH = 5.77 Cond = 0.088

DO = 8.575 Temp = 14.16°C OLF = 73

Turbidity = >1000

1000 - Installed 130043C-DP02-SU45

1005 - Overhead wires down low close to buildings

where DP01 shall be hung more 7'

*Judith*

FRI 3/21/08

Close to the street

1050 - Installed 130043C-DP01-SU08

1054 - Started Sampling 130043C-DP03-SU25 ✓

(-30.0) 0.6 ppm

1058 - Start 500

1051 - Starting sampling 130043C-AA (-27.5)

Handled Air moved to DP03

1058 - Started Sampling 130043C-DP03-SU08 ✓

(-29.0) 0.8 ppm

1101 - Started Sampling 130043C-DP03-SU05 ✓

(-30.0) 1.1 ppm

1105 - Installed 130043C-DP01-SU25

1130 - Sampled 130043C-DP01-GU05

GW Quality: pH = 5.81 Cond = 0.282

DO = 6.44 Temp = 13.15°C OLF = 94

Turbidity = >1000

1140 - Started Sampling 130043C-AA

Ambient Air (Post Regulator)

1145 - Installed 130043C-DP01-SU45 ✓

1204 - Started Sampling 130043C-DP02-SU25 ✓

(-30.0) 0.7 ppm

1208 - Started Sampling 130043C-DP02-SU08 ✓

(-30.0) 0.6 ppm

*Judith*

FRI 3/21/08

1211 - Started to sample 130043C-DP02-SU45 ✓

(2-30.0) 0.3 ppm

1241 - Stopped Sampling 130043C-DP03-SU08 (-4.5)

1244 Stopped Sampling 130043C-DP03-SU45 (-4.5)

1254 - Stopped Sampling 130043C-DP03-SU25 (-5.5)

(2 HRS)

~~1327~~ - Stopped Sampling 130043C-DP02-SU25 (-5.5)

1342 - Stopped Sampling 130043C-DP02-SU08 (-5.0)

1350 - Started Sampling 130043C-DP01-SU25 ✓

(-30.0) 0.5 ppm

1354 - Started Sampling 130043C-DP01-SU08 ✓

7-30.0 0.6 ppm

1356 - Started Sampling 130043C-DP01-SU45 ✓

7-30.0 0.6 ppm

1411 Finished Sampling 130043C-DP02-SU45 (-6.0)

(2 HRS)

1525 Finished Sampling 130043C-DP01-SU45 (-5.0)

1527 Finished Sampling 130043C-DP03-SU25 (-5.0)

1554 - Finished Sampling 130043C-DP01-SU08 (-7.0)

1615 - Dropped off 1 box of summer carrots

C index A#8: 8619 29654254 for set

Delivery. Sem prematurely dropped off 1 cask

and 3 boxes of carrots: A#8:

8647 USS1 4953

8619 2965 4265

F. M.

MON 3/24/08

0620 F. Remission on site

Clear 32°

0630 Monkey out location at

750 Sumner Ave SITE N

0745 Zebra on site (Even + Joint)

0750 - Calibrated Note - Race Pass out

Hunter U-12 - O/C See Cal sheet

for details

0815 - Zebra Vc track visit (Even + Race)

0845 - DP05 Hand cleaned with hand

cages down to 5

0835: 130043W-DP05-SU08 installed

0900 - DP04 Hand cleaned to 5' with hand

cages

0905 - installed 130043W-DP05-SU25

0955 Sampled 130043W-DP05-GUSS

Geo Quality: pH=5.89 cond=0.173

DO=10.96 Temp = 73.40°C OLF=135

turbidity &gt;1000

1000 - Collected field blank sample of

Creek water DP04SW-FB

1005 - installed 130043W-DP05-SU45

1020 - installed 130043W-DP04-SU08

1050 - installed 130043W-DP04-SU25

F. M.



Mon 3/24/08

1030. DP03. Cleared to 5' using a hand auger.

1140. DP02. Cleared to 5' using a hand auger.

1150 - installed 130043N-DP04-SU45

1207. Started Sampling 130043N-DP05-SU25 ✓

(-30.0) ~~1.3~~ ppm

1211. Started Suprs 130043N-DP05-SU08 ✓

(-29.0) 0.8 ppm

1214. Started Sample 130043N-DP05-SU45 ✓

(-27.0) 1.2 ppm

1215. Started Sample 130043N-DP05-AA ✓

Atmos Air at DP05 location

1230. Suppld 130043N-DP04-GU55 and Duplicate

130043N-DP06-GU55

Gas Quality: pH 6.03 Cond: 0.060

DO: 5.74 Temp: 14.92°C ORP: 60

Turb: >1000

\*At 1145 Conducted Helium test on

130043N-DP05-SU08 - OK, No leak, No He

detected in top sample tubing.

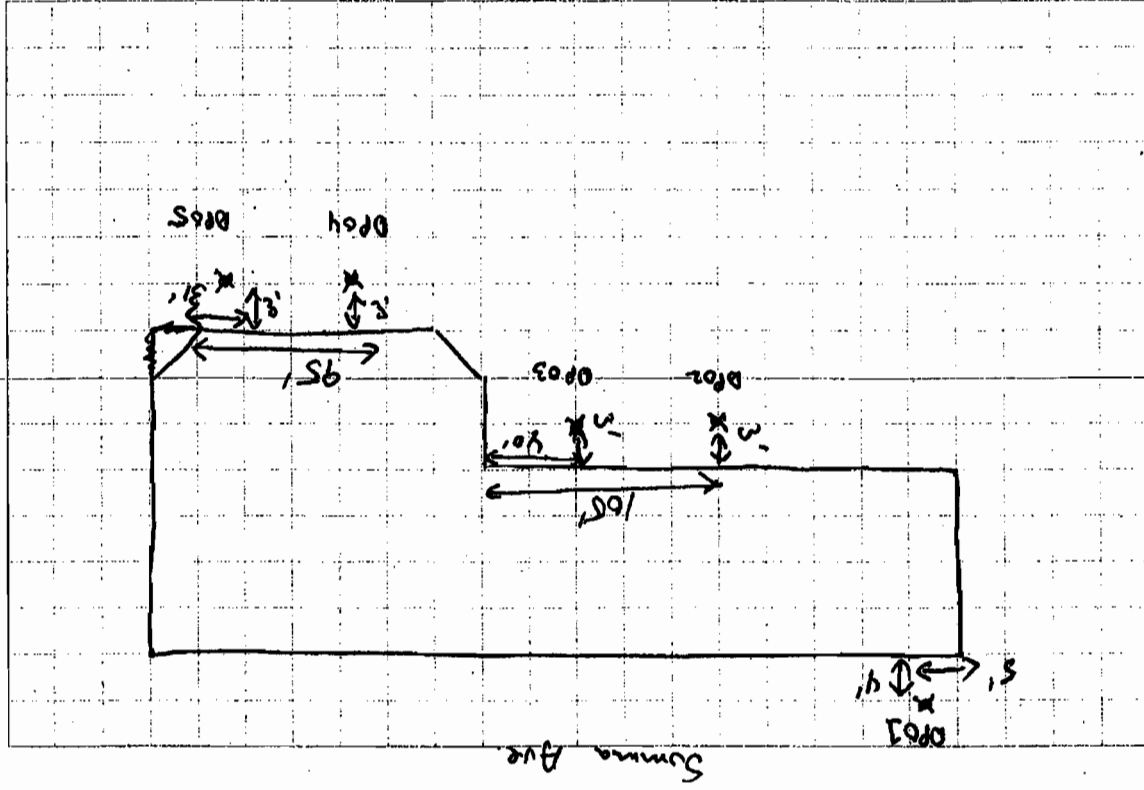
1310. Conducted Helium test on 130043N-DP04-SU08

OK, No leak, No He detected in SU tubing

1315. Install: 130043N-DP03-SU08

Frank M

Mon 3/24/08





Mon 3/24/08

1320. Dp01 Cleared to 5' dry based  
 auger + vac truck (mud ground)

1330. Installed 130043W-DP03-SU25

1330- Finished Supply 130043W-DP05-SU45

(-5.0)

1333- Finished Supply 130043W-DP05-SU25 (-5.0)

1355- Sanded 130043W-DP03-6W5T

6W Quality: pH = 5.81 cond = 0089

DO = 8.81 Temp = 15.22°C CRF = 1.26

Turbidity = 21000

1354- Finished Supply 130043W-DP05-SU08 (-5.0)

1400- Finished Supply 120043W-AA

Ambient Air (-5.0)

1440- Long de sk - Sew gong to Keder

w/ 1 canister + 1 box of Sennoc Cement

AB #'s: 8619 2965 4162 and

8617 2965 4140

*Frank*

Tues 3/25/08

0625 F 168mm on sk

Check 33'

0640- Collected No. 42e Au and Hk

U-22 successfully. See Oil Slacks for details

0727 Started Supply 130043W-DP04-SU25

(-30.0) 0.8 ppm

0731- Started Supply 130043W-DP04-SU08 ✓

(-30.0) 1.1 ppm

0734- Started Supply 130043W-DP04-SU45 ✓

(-30.0) 0.5 ppm and Replicate

130043W-DP04-SU45 (-30.0) 0.5 ppm

0735- Zehn on sk (Even + Jose)

0744- Started Supply 130043W-DP03-SU25 ✓

(-30.0) 0.4 ppm

0754- Started Supply 130043W-DP03-SU08 ✓

(-30.0) 1.6 ppm

0756- Started Supply 130043W-DP03-SU45 ✓

(-32.0) 0.6 ppm

0805- Installed 130043W-DP02-SU08

0812- Finished Supply 130043W-DP04-SU25

(-3.5) only 45 min. fast logbook

0815- Installed 130043W-DP02-SU25

0900- Finished Supply 130043W-DP04-SU08 (-5.0)

*Frank*

Tues 3/25/08

0905- Sampled 130043N-DP02-6W55

Gas Quality: pH= 6.30 Cond= 0.205

DO= 6.55 Temp= 11.36°C ORP= 90

turb = &gt;1000

0915- Collected field blank sample of check valve

130043N-FB

0916- Finished Supply 130043N-DP04-SU45 (-5.0)

and duplicate 130043N-DP04-SD45 (-5.0)

0920- Installed ~~130043N-DP02-SU25~~ <sup>130043N-DP02-SU45</sup> (-5.0)

130043N-DP02-SU45

0923- Finished Supply 130043N-DP03-SU25

0928- Finished Supply 130043N-DP03-SU08 (-5.0)

0941- Finished Supply 130043N-DP03-SU45 (-5.0)

0955- Installed 130043N-DP01-SU08

1010- Installed 130043N-DP07-SU25

1045- Sampled 130043N-DP07-6W55

Gas Quality: pH= 5.70 Cond= 0.055

DO= 9.65 Temp= 12.94°C ORP= 136

turb = 565

1100- Installed 130043N-DP01-SU45

1114- Started Supply 130043N-AA Ambient Air ✓

located by DP02

1120- Started Supply 130043N-DP02-SU25 ✓

(&gt; 30.0) 0.8 ppm

F. H. H.

Tues 3/25/08

1124- Started Supply 130043N-DP02-SU08

(-30.0) 0.4 ppm

1126- Started Supply 130043N-DP07-SU45

(-2.25) 0.7 ppm

1210- Stopped Supply 130043N-DP02-SU08 (-5.0)

Fast Regulate 45 minutes

1259- Start Supply 130043N-DP01-SU25 ✓

(-30.0) 0.8 ppm

1303- Start Supply 130043N-DP01-SU08 ✓

(&gt; 30.0) 0.4 ppm

1305- Start Supply 130043N-DP07-SU45 ✓

(-29.7) 1.8 ppm

1302- End Supply 130043N-AA Ambient Air

(-5.0)

1312- End Supply 130043N-DP02-SU45 (-5.0)

1320- End Supply 130043N-DP02-SU25 (-6.5)

1430- End Supply 130043N-DP01-SU45 (-4.5)

1432- End Supply 130043N-DP01-SU25 (-5.0)

1434- End Supply 130043N-DP01-SU08 (-5.0)

150- Sewer at Federex dropped off I center and

4 boxes of same container. AB #8.

8619 2965 3486 8619 2965 4151

8619 2965 4129 8619 2965 3497

8619 2965 4130

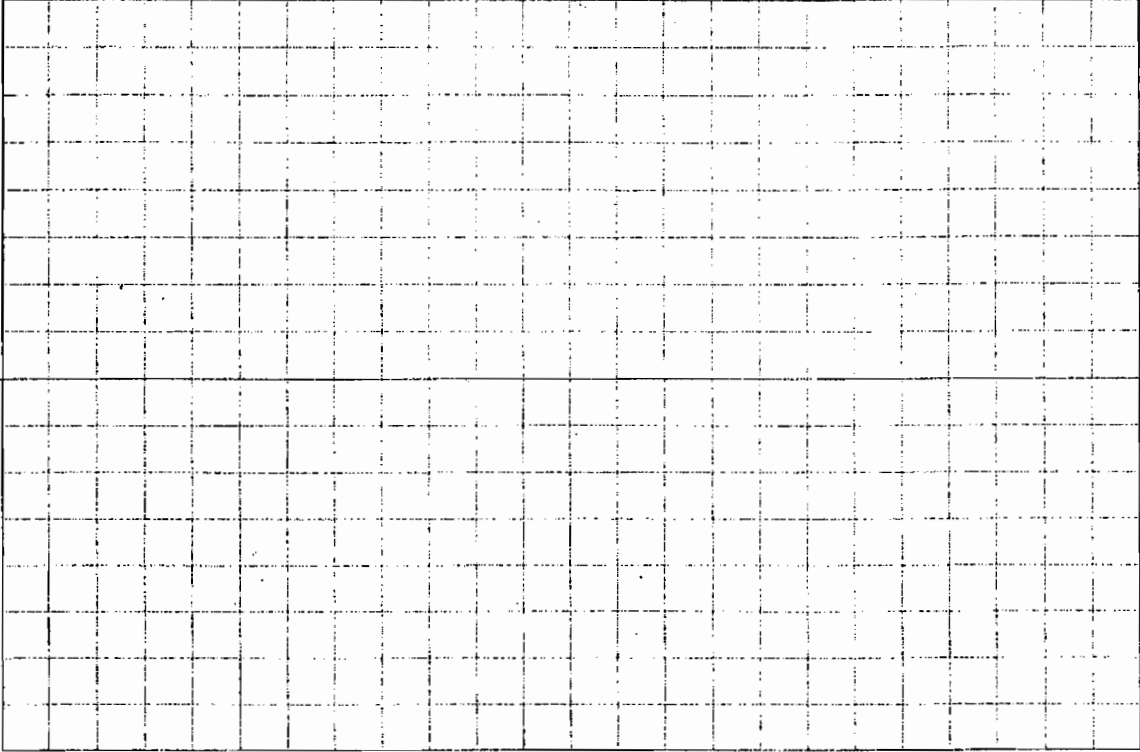
F. H. H.

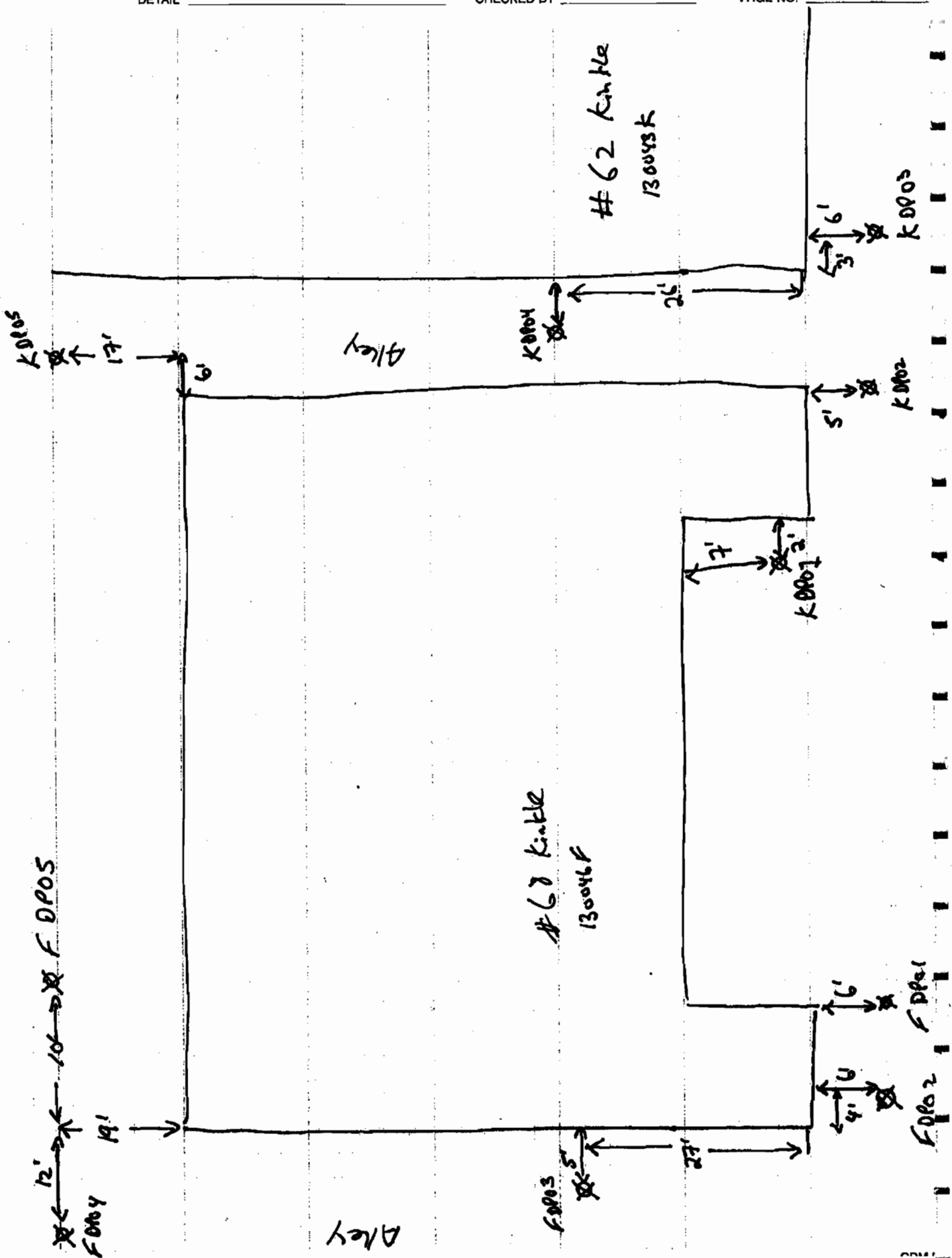
Mon 3/31/08

0650- At New Counsel Sikes to take  
Digital photos of sikes C, N, K, F, A  
and B.

0915- Finished taking photos of DP  
locations and going back to W 64 office.

~~John M~~







**Appendix C**  
**Site Photodocumentation**

## New Cassel Industrial Area Soil Vapor and Groundwater Investigation

Point DP-01 for soil vapor and groundwater on Site A



Point DP-02 for soil vapor and groundwater on Site A



# New Cassel Industrial Area Soil Vapor and Groundwater Investigation

Point DP-03A for soil vapor and groundwater on Site A



Point DP-03 for soil vapor and groundwater on Site A





# New Cassel Industrial Area Soil Vapor and Groundwater Investigation

Point DP-04 for soil vapor and groundwater on Site A



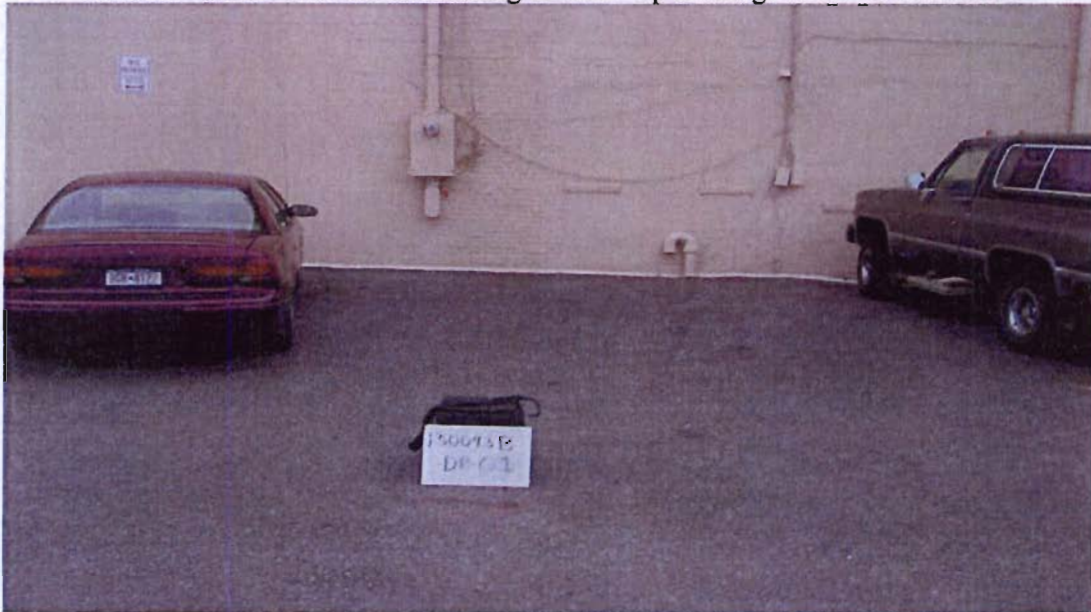
Across the road view of the parking lot where DP-04 will be installed





## New Cassel Industrial Area Soil Vapor and Groundwater Investigation

Point DP-01 at west side of building for soil vapor and groundwater on Site B



Point DP-02 at northwest part of building for soil vapor and groundwater on Site B



## New Cassel Industrial Area Soil Vapor and Groundwater Investigation

Point DP-03 at side of building for soil vapor and groundwater on Site B



Point DP-04 on northeast corner of building for soil vapor and groundwater on Site B





## **New Cassel Industrial Area Soil Vapor and Groundwater Investigation**

Point DP-05 in front (south side) of building for soil vapor and groundwater on Site B



Picture shows front side of building on Site B parallel to Main Street where point DP-05 is located



# New Cassel Industrial Area Soil Vapor and Groundwater Investigation

Display of front side of building



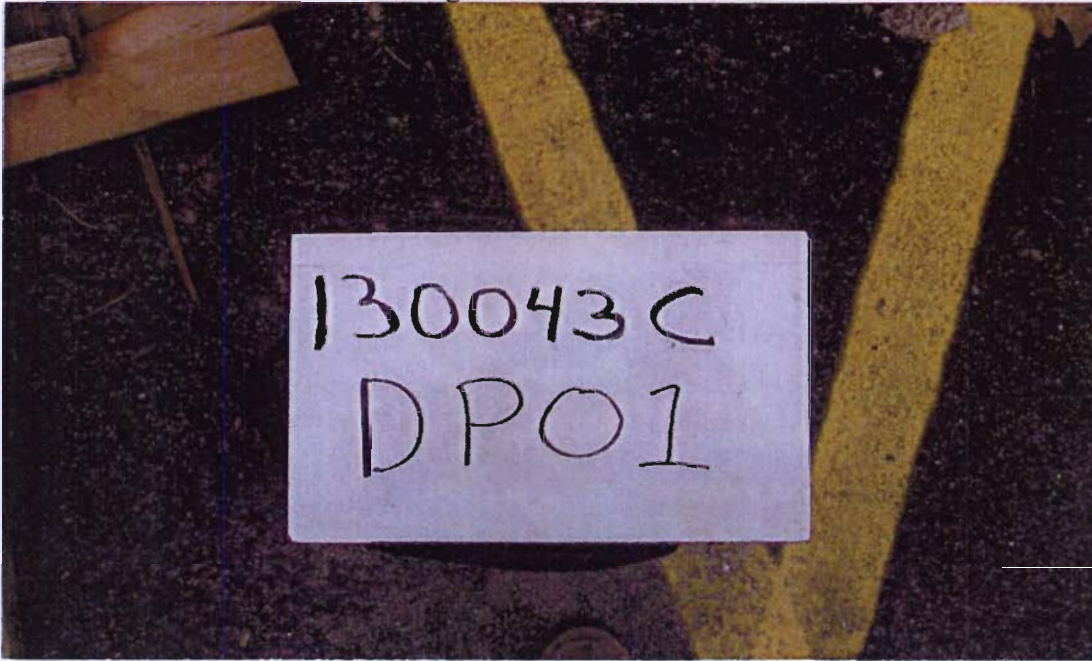
Display of south side of building





**New Cassel Industrial Area  
Soil Vapor and Groundwater Investigation**

Point DP01 for soil vapor and groundwater investigation on Site C located in front of building in the northeast corner



## New Cassel Industrial Area Soil Vapor and Groundwater Investigation

Display of front of Loni-Jo building on Site F



Display of driveway between Loni-Jo Scrap Metal and adjacent building where points DP-03, DP-04 and DP-05 were located. Drums and dumpsters had to be removed to install points!





## New Cassel Industrial Area Soil Vapor and Groundwater Investigation

Display of front of adjacent building on Site F



Point DP-01 in front of adjacent building for soil vapor and groundwater on Site F



**New Cassel Industrial Area**  
**Soil Vapor and Groundwater Investigation**

Point DP-02 in front of Building F near driveway for soil vapor and groundwater on Site

F



Point DP-03 for soil vapor and groundwater located on driveway between adjacent building and Loni-Jo Scrap Metal Building behind dumpster on Site F





## New Cassel Industrial Area Soil Vapor and Groundwater Investigation

Point DP-04 for soil vapor and groundwater located on far end of driveway between the Loni-Jo and adjacent building on Site F



Point DP-05 for soil vapor and groundwater located on far end of driveway slightly behind adjacent building on Site F





**New Cassel Industrial Area  
Soil Vapor and Groundwater Investigation**

Front of Parfuse Corp. Building on Site K and gated driveway where points DP-04 and DP-05 are located



The adjacent building next to Parfuse Corp. where Point DP-01 is located



## New Cassel Industrial Area Soil Vapor and Groundwater Investigation

Point DP-01 for soil vapor and groundwater on Site K



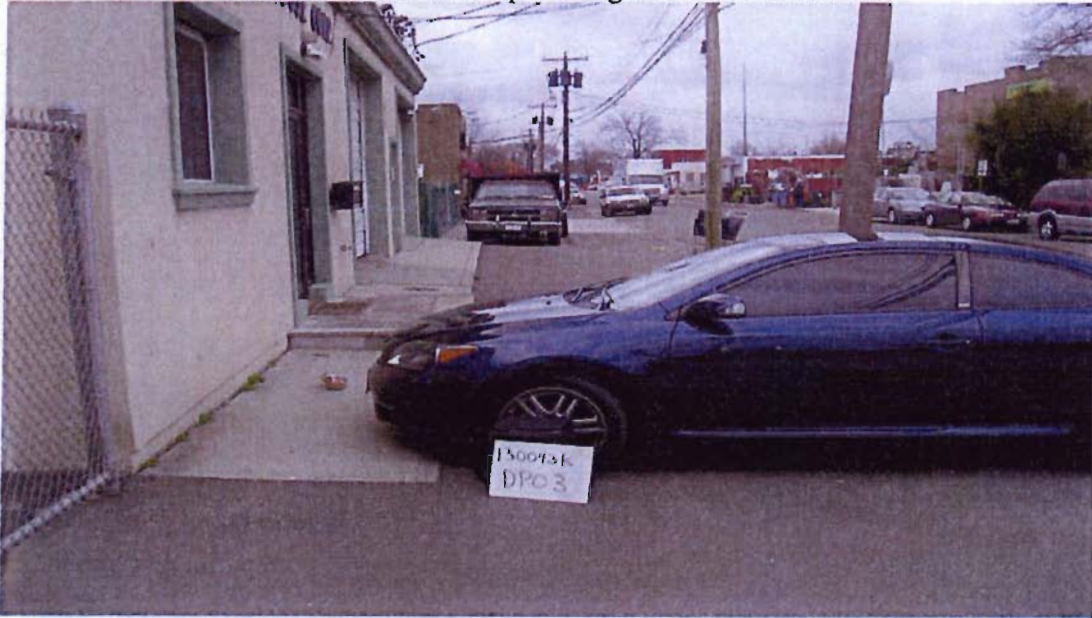
Point DP-02 for soil vapor and groundwater located on driveway between two buildings on Site K





## New Cassel Industrial Area Soil Vapor and Groundwater Investigation

Point DP-03 for soil vapor and groundwater on Site K



Point Dp-04 for soil vapor and groundwater located on front end of driveway at Site K





## New Cassel Industrial Area Soil Vapor and Groundwater Investigation

Point DP-05 for soil vapor and groundwater located on far end of driveway at Site K



## New Cassel Industrial Area Soil Vapor and Groundwater Investigation

Geoprobe Drill loaded in back of truck at Site N



Point DP-01 for soil vapor and groundwater located on front side of the building in the northwest corner at Site N





**New Cassel Industrial Area  
Soil Vapor and Groundwater Investigation**

Point DP-02 for soil vapor and groundwater located in back of building on southwest side  
at Site N



Point DP-03 for soil vapor and groundwater behind building on Site N





## **New Cassel Industrial Area Soil Vapor and Groundwater Investigation**

Back-side of the building where the cones on the far end mark out locations DP-04 and DP-05



Closest cone display shows point DP-04 for soil vapor and groundwater on Site N



## **New Cassel Industrial Area Soil Vapor and Groundwater Investigation**

Point DP-05 for soil vapor and groundwater on Site N



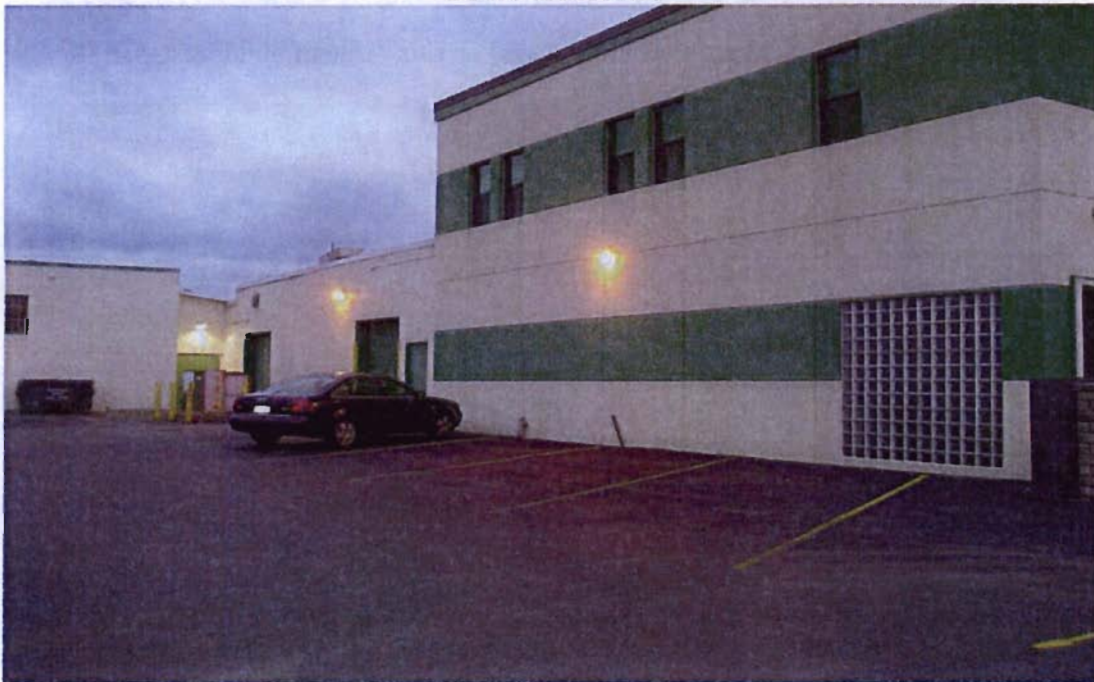


## **New Cassel Industrial Area Soil Vapor and Groundwater Investigation**

Main Building on Site V



Parking lot on south side of main building on Site V where points DP-03, DP-04 and DP-05 are located





**New Cassel Industrial Area  
Soil Vapor and Groundwater Investigation**

Point DP-01 for soil vapor and groundwater located on narrow driveway on opposite side of the south-side parking lot on Site V

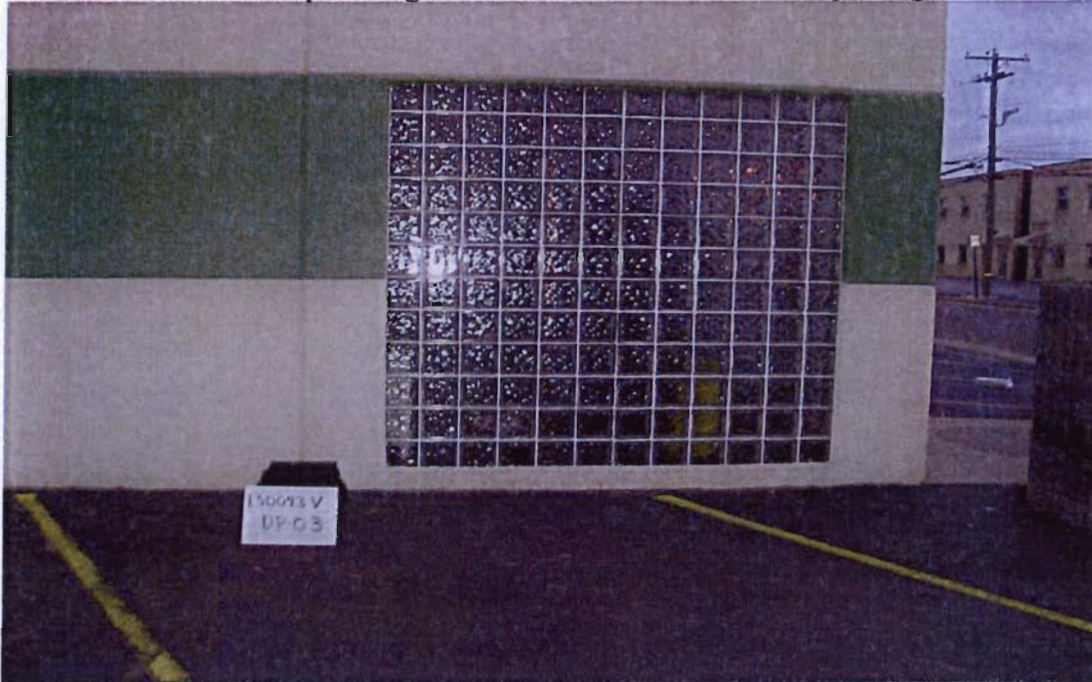


Point DP-02 for soil vapor and groundwater located on same side of building as DP-01 on Site V



## New Cassel Industrial Area Soil Vapor and Groundwater Investigation

Point DP-03 for soil vapor and groundwater located on south-side parking lot on Site V



Point DP-04 for soil vapor and groundwater located in south-side parking lot on Site V





## **New Cassel Industrial Area Soil Vapor and Groundwater Investigation**

Point DP-05 for soil vapor and groundwater located in south-side parking lot on Site V

