

**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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# Contents

|                                                                    |            |
|--------------------------------------------------------------------|------------|
| <b>Section 1 Introduction .....</b>                                | <b>1-1</b> |
| 1.1 Site Background and History .....                              | 1-3        |
| 1.1.1 Location.....                                                | 1-3        |
| 1.1.2 Operational and Remedial History .....                       | 1-3        |
| 1.1.2.1 Site A - 570 Main Street .....                             | 1-3        |
| 1.1.2.2 Site B - 567 Main Street.....                              | 1-4        |
| 1.1.2.3 Site C - 125 State Street.....                             | 1-4        |
| 1.1.2.4 Site F - 68 Kinkel Street.....                             | 1-4        |
| 1.1.2.5 Site K - 62 Kinkel Street .....                            | 1-5        |
| 1.1.2.6 Site N - 750 Summa Avenue .....                            | 1-5        |
| 1.1.2.7 Site V - 29 New York Avenue .....                          | 1-5        |
| 1.2 Project Objectives.....                                        | 1-6        |
| <b>Section 2 Physical Setting .....</b>                            | <b>2-1</b> |
| 2.1 Regional Geology.....                                          | 2-1        |
| 2.1.1 Basement.....                                                | 2-1        |
| 2.1.2 Cretaceous .....                                             | 2-1        |
| 2.1.3 Cenozoic-Quaternary .....                                    | 2-2        |
| 2.2 Regional Hydrogeology.....                                     | 2-2        |
| 2.2.1 Bedrock .....                                                | 2-3        |
| 2.2.2 Lloyd Aquifer.....                                           | 2-3        |
| 2.2.3 Raritan Clay.....                                            | 2-3        |
| 2.2.4 North Shore Aquifer.....                                     | 2-3        |
| 2.2.5 North Shore Confining Unit.....                              | 2-4        |
| 2.2.6 Upper Glacial Aquifer (UGA).....                             | 2-4        |
| 2.3 Site-Specific Geology and Hydrogeology .....                   | 2-4        |
| <b>Section 3 Site Investigation .....</b>                          | <b>3-1</b> |
| 3.1 Soil Vapor Intrusion Investigation .....                       | 3-1        |
| 3.1.1 Water Level Determination.....                               | 3-1        |
| 3.1.2 Soil Vapor Sample Collection .....                           | 3-1        |
| 3.1.3 Groundwater Sample Collection.....                           | 3-3        |
| 3.1.4 Outdoor (Ambient) Air Sample Collection.....                 | 3-3        |
| 3.1.5 Investigative Derived Waste .....                            | 3-4        |
| 3.1.6 Decontamination .....                                        | 3-4        |
| 3.1.7 Sample Location.....                                         | 3-4        |
| 3.2 Sample Identification, Laboratory Analysis and Validation..... | 3-4        |
| 3.3 Field Documentation and Reporting .....                        | 3-5        |
| <b>Section 4 Analytical Results .....</b>                          | <b>4-1</b> |
| 4.1 Soil Vapor Results.....                                        | 4-1        |
| 4.1.1 Site A - 570 Main Street .....                               | 4-1        |
| 4.1.2 Site B - 567 Main Street.....                                | 4-2        |
| 4.1.3 Site C - 125 State Street .....                              | 4-3        |
| 4.1.4 Site F - 68 Kinkel Street.....                               | 4-4        |
| 4.1.5 Site K - 62 Kinkel Street.....                               | 4-5        |

|                                                        |                                  |            |
|--------------------------------------------------------|----------------------------------|------------|
| 4.1.6                                                  | Site N – 750 Summa Avenue.....   | 4-6        |
| 4.1.7                                                  | Site V – 29 New York Avenue..... | 4-7        |
| 4.2                                                    | Groundwater Investigation.....   | 4-8        |
| 4.2.1                                                  | Site A – 570 Main Street.....    | 4-8        |
| 4.2.2                                                  | Site B – 567 Main Street.....    | 4-9        |
| 4.2.3                                                  | Site C – 125 State Street.....   | 4-9        |
| 4.2.4                                                  | Site F – 68 Kinkel Street.....   | 4-9        |
| 4.2.5                                                  | Site K – 62 Kinkel Street.....   | 4-9        |
| 4.2.6                                                  | Site N – 750 Summa Avenue.....   | 4-9        |
| 4.2.7                                                  | Site V – 29 New York Avenue..... | 4-9        |
| <b>Section 5 Conclusions and Recommendations .....</b> |                                  | <b>5-1</b> |
| 5.1                                                    | Conclusions .....                | 5-1        |
| 5.1.1                                                  | Site A – 570 Main Street.....    | 5-1        |
| 5.1.2                                                  | Site B – 567 Main Street.....    | 5-1        |
| 5.1.3                                                  | Site C – 125 State Street.....   | 5-2        |
| 5.1.4                                                  | Site F – 68 Kinkel Street.....   | 5-2        |
| 5.1.5                                                  | Site K – 62 Kinkel Street.....   | 5-2        |
| 5.1.6                                                  | Site N – 750 Summa Avenue.....   | 5-3        |
| 5.1.7                                                  | Site V – 29 New York Avenue..... | 5-3        |
| 5.2                                                    | Recommendations .....            | 5-4        |
| 5.2.1                                                  | Site A – 570 Main Street.....    | 5-4        |
| 5.2.2                                                  | Site B – 567 Main Street.....    | 5-4        |
| 5.2.3                                                  | Site C – 125 State Street.....   | 5-4        |
| 5.2.4                                                  | Site F – 68 Kinkel Street.....   | 5-4        |
| 5.2.5                                                  | Site K – 62 Kinkel Street.....   | 5-4        |
| 5.2.6                                                  | Site N – 750 Summa Avenue.....   | 5-5        |
| 5.2.7                                                  | Site V – 29 New York Avenue..... | 5-5        |
| 5.2.8                                                  | Additional Recommendation.....   | 5-5        |

#### List of Tables

|     |                                                |
|-----|------------------------------------------------|
| 3-1 | Soil Vapor Sample Parameters                   |
| 3-2 | Groundwater Sample Parameters                  |
| 3-3 | Groundwater Sampling Water Quality Parameters  |
| 4-1 | NYSDOH Air Guidelines                          |
| 4-2 | Site-Specific Groundwater Delineation Criteria |

#### List of Figures

|     |                                                             |
|-----|-------------------------------------------------------------|
| 1-1 | Site Location Map                                           |
| 2-1 | Generalized Regional Stratigraphy                           |
| 2-2 | Generalized North-South Cross Section through Nassau County |
| 3-1 | Site A Sample Location Map                                  |
| 3-2 | Site B Sample Location Map                                  |
| 3-3 | Site C Sample Location Map                                  |
| 3-4 | Site F Sample Location Map                                  |
| 3-5 | Site K Sample Location Map                                  |
| 3-6 | Site N Sample Location Map                                  |

|      |                                              |
|------|----------------------------------------------|
| 3-7  | Site V Sample Location Map                   |
| 4-1  | Site A Soil Vapor Chlorinated VOC Detections |
| 4-2  | Site B Soil Vapor Chlorinated VOC Detections |
| 4-3  | Site C Soil Vapor Chlorinated VOC Detections |
| 4-4  | Site F Soil Vapor Chlorinated VOC Detections |
| 4-5  | Site K Soil Vapor Chlorinated VOC Detections |
| 4-6  | Site N Soil Vapor Chlorinated VOC Detections |
| 4-7  | Site V Soil Vapor Chlorinated VOC Detections |
| 4-8  | Site A Groundwater VOC Exceedances           |
| 4-9  | Site B Groundwater VOC Exceedances           |
| 4-10 | Site C Groundwater VOC Exceedances           |
| 4-11 | Site F Groundwater VOC Exceedances           |
| 4-12 | Site K Groundwater VOC Exceedances           |
| 4-13 | Site N Groundwater VOC Exceedances           |
| 4-14 | Site V Groundwater VOC Exceedances           |

**List of Appendices**

|            |                                   |
|------------|-----------------------------------|
| Appendix A | Analytical Results Summary Tables |
| Appendix B | Field Log Book                    |
| Appendix C | Site Photodocumentation           |



## 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 Magnetism 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 1,1,1-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 to 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                        | 10:08          | -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             | Duplicate of 130043C-DP04-SV08 |
| 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<br>( $\mu\text{g}/\text{m}^3$ ) |
|-----------------------------------------------------------------|----------------------------------------------------|
| 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:**

$\mu\text{g}/\text{m}^3$  - 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 |
|-------------|-------------------------------------------|------|-----------------------------------------------|------|-----------------------------------------------------------------------------------|------|-----|-----------------------------------------------|------|-----|---------------------------------------------------------------|
|             |                                           |      | Value                                         | Note | Value                                                                             | Note | G/S | Value                                         | Note | G/S |                                                               |
| 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-Dichloroethene                        | 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:**

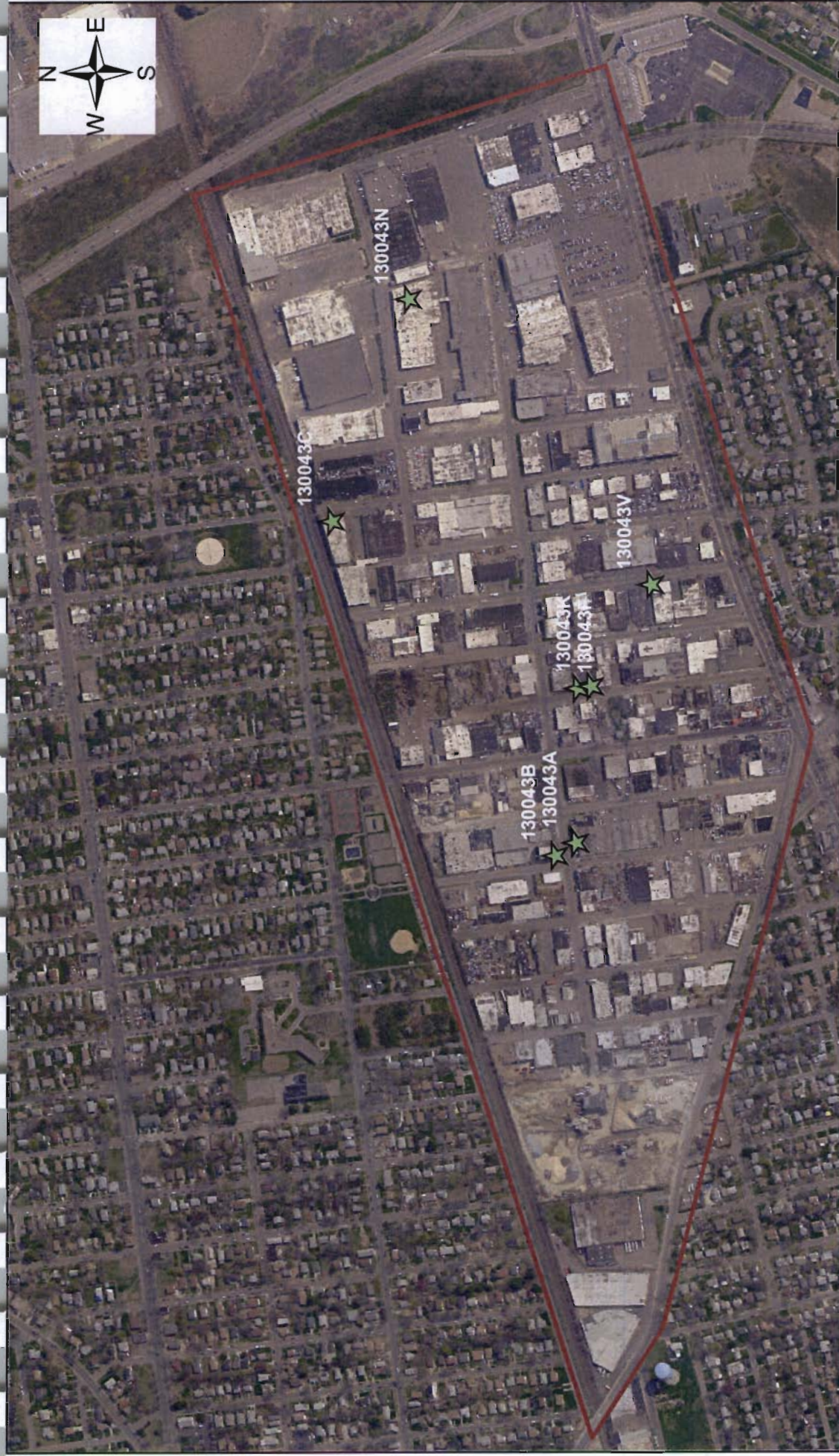
- (1) EPA National Primary Drinking Water Standards (<http://www.epa.gov/safewater/contaminants/index.html>), last updated November 28, 2006.
- (2) NYSDEC. June 1998. TOGS 1.1.1. Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations. Includes April 2000 and June 2004 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**

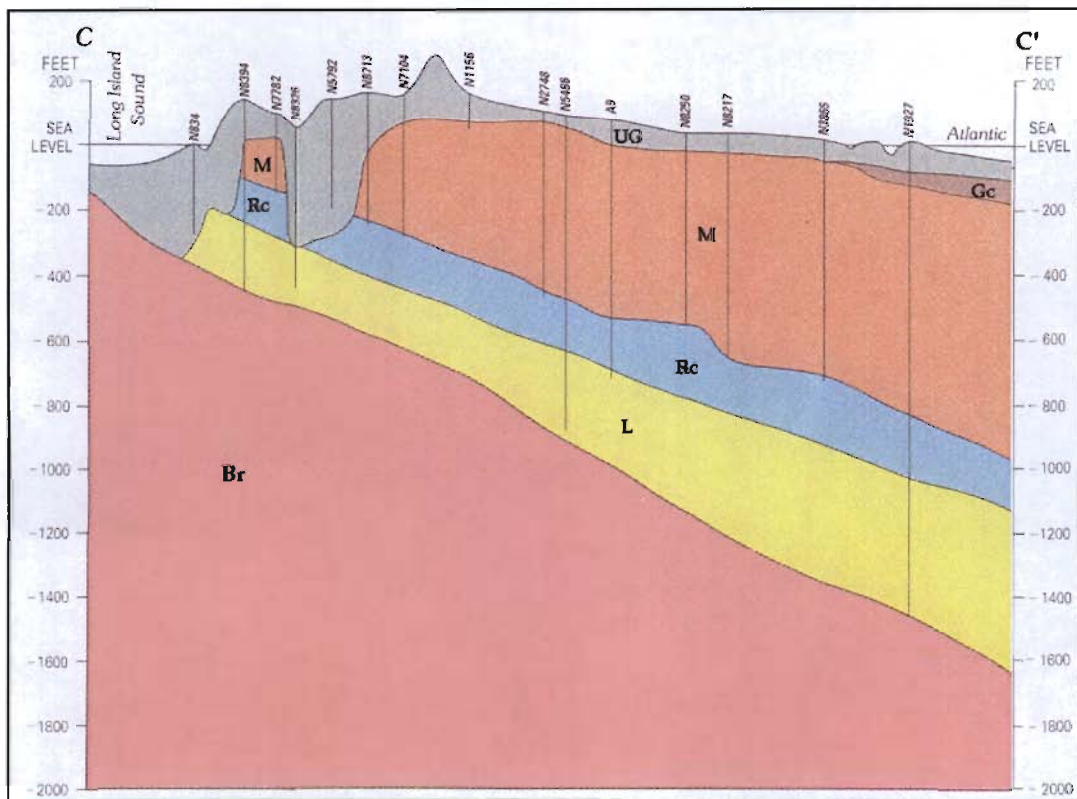
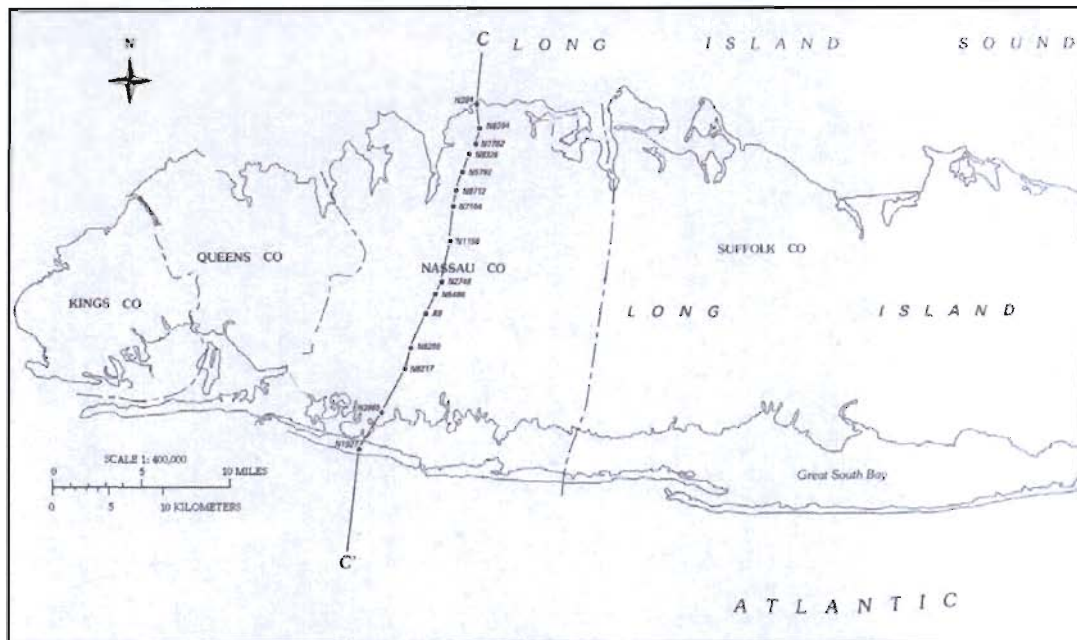


| System                     | Series           | Age                                               | Stratigraphic Unit                                                         | Hydrostratigraphic Unit          |
|----------------------------|------------------|---------------------------------------------------|----------------------------------------------------------------------------|----------------------------------|
| QUATERNARY                 | Holocene         | Postglacial                                       | Holocene (recent) deposits                                                 | Upper glacial aquifer            |
|                            | Pleistocene      | Wisconsin (upper Pleistocene)                     | Upper Pleistocene deposits<br>"20-foot" clay<br>Upper Pleistocene deposits |                                  |
|                            |                  | Sangamon                                          | Gardiners Clay                                                             | Gardiners Clay                   |
|                            |                  | Pre-Sangamon                                      | Jameco Gravel <sup>1</sup>                                                 | Jameco aquifer <sup>1</sup>      |
|                            | Pre-Sangamon     |                                                   | Reworked Matawan-Magothy channel deposits                                  | Upper glacial or Magothy aquifer |
| CRETACEOUS                 | Upper Cretaceous | unconformity                                      |                                                                            |                                  |
|                            |                  | 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**

**CDM**





● Sampling Location

0 35 70  
Feet

**CDM**

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



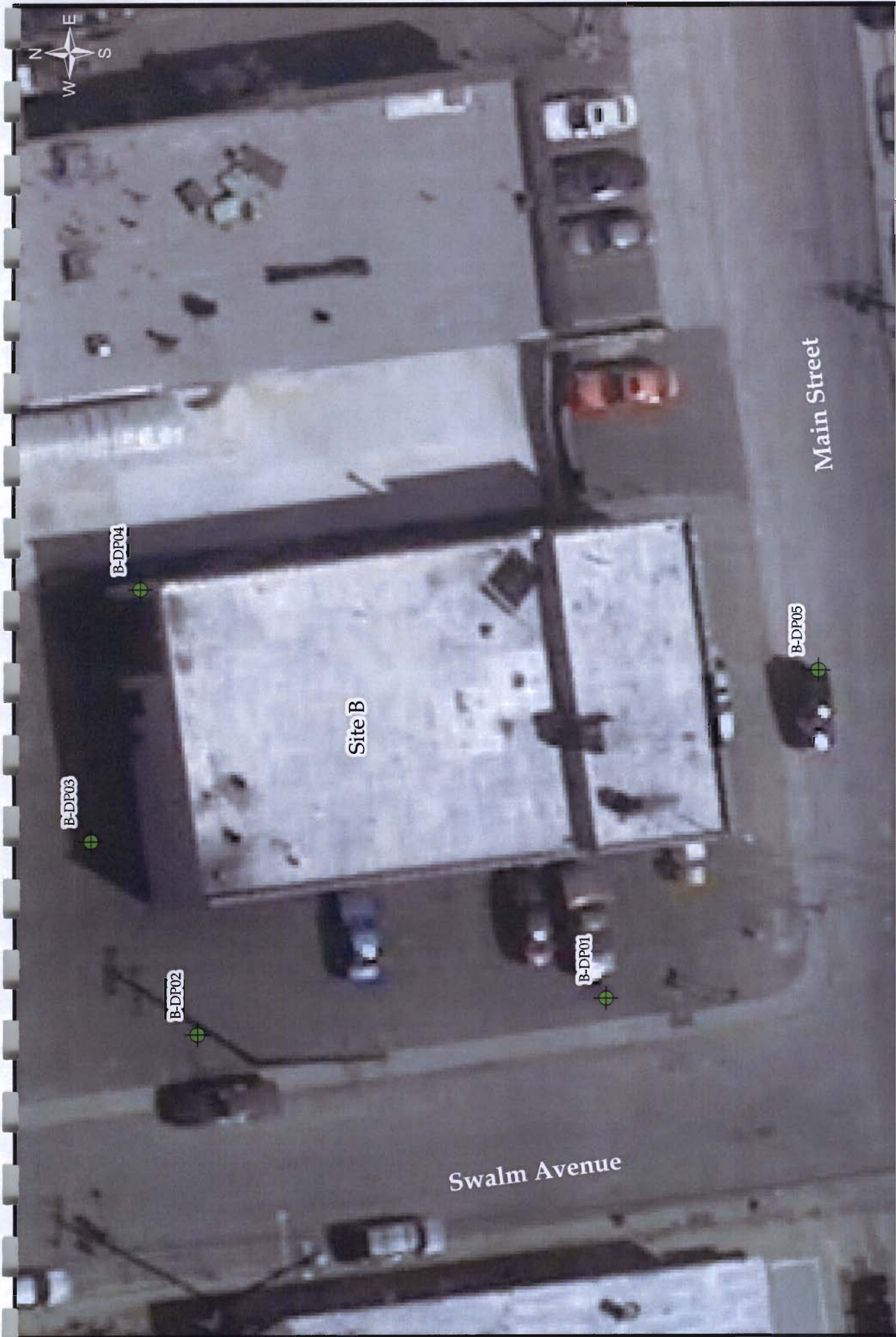


Figure 3-2  
Site B Sample Location Map  
567 Main Street  
New Cassel Industrial Area  
North Hempstead, New York

0 10 20 Feet

Sampling Location



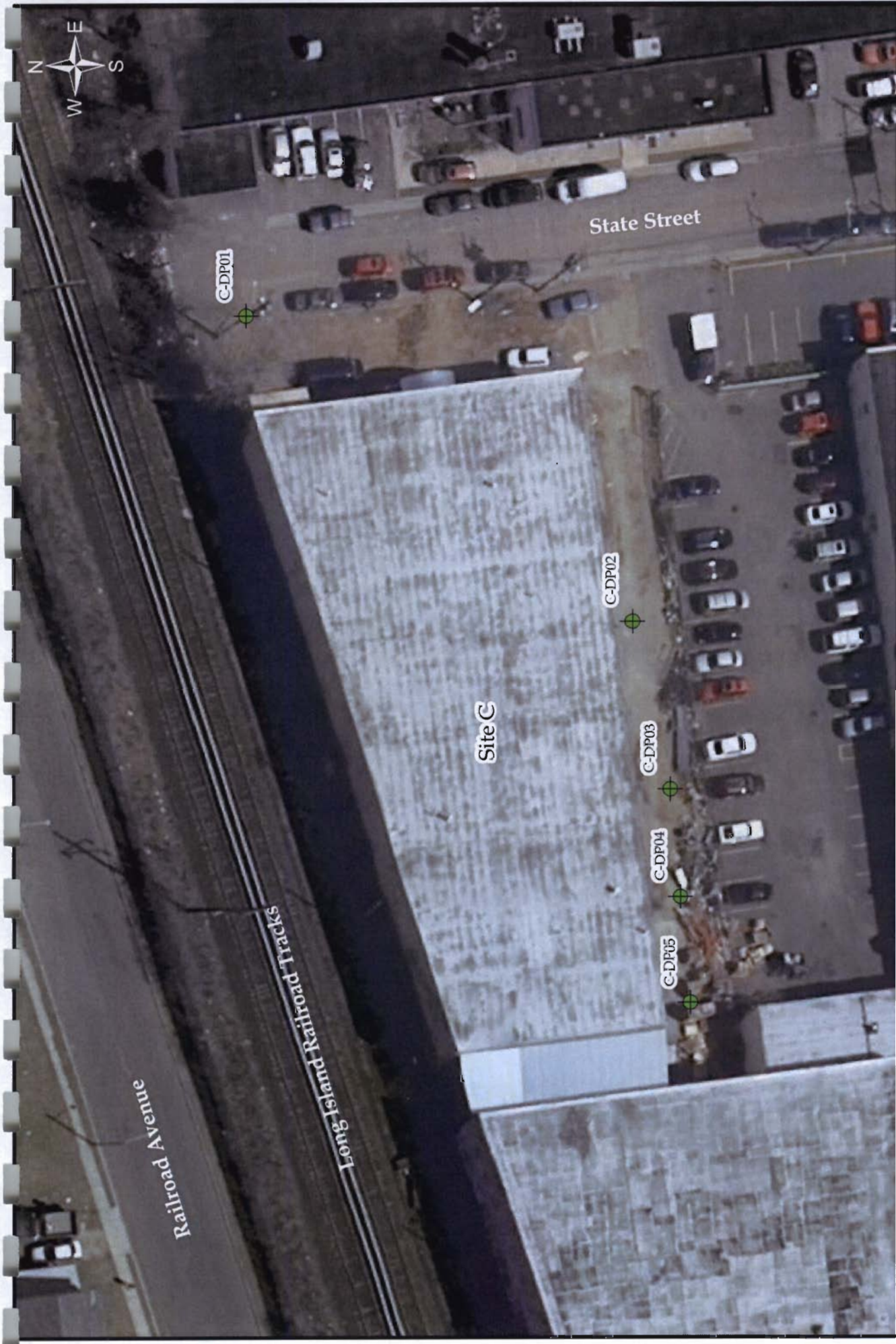


Figure 3-3  
Site C Sample Location Map  
125 State Street  
New Cassel Industrial Area  
North Hempstead, New York

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

0 10 20  
Feet

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





Sampling Location

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





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

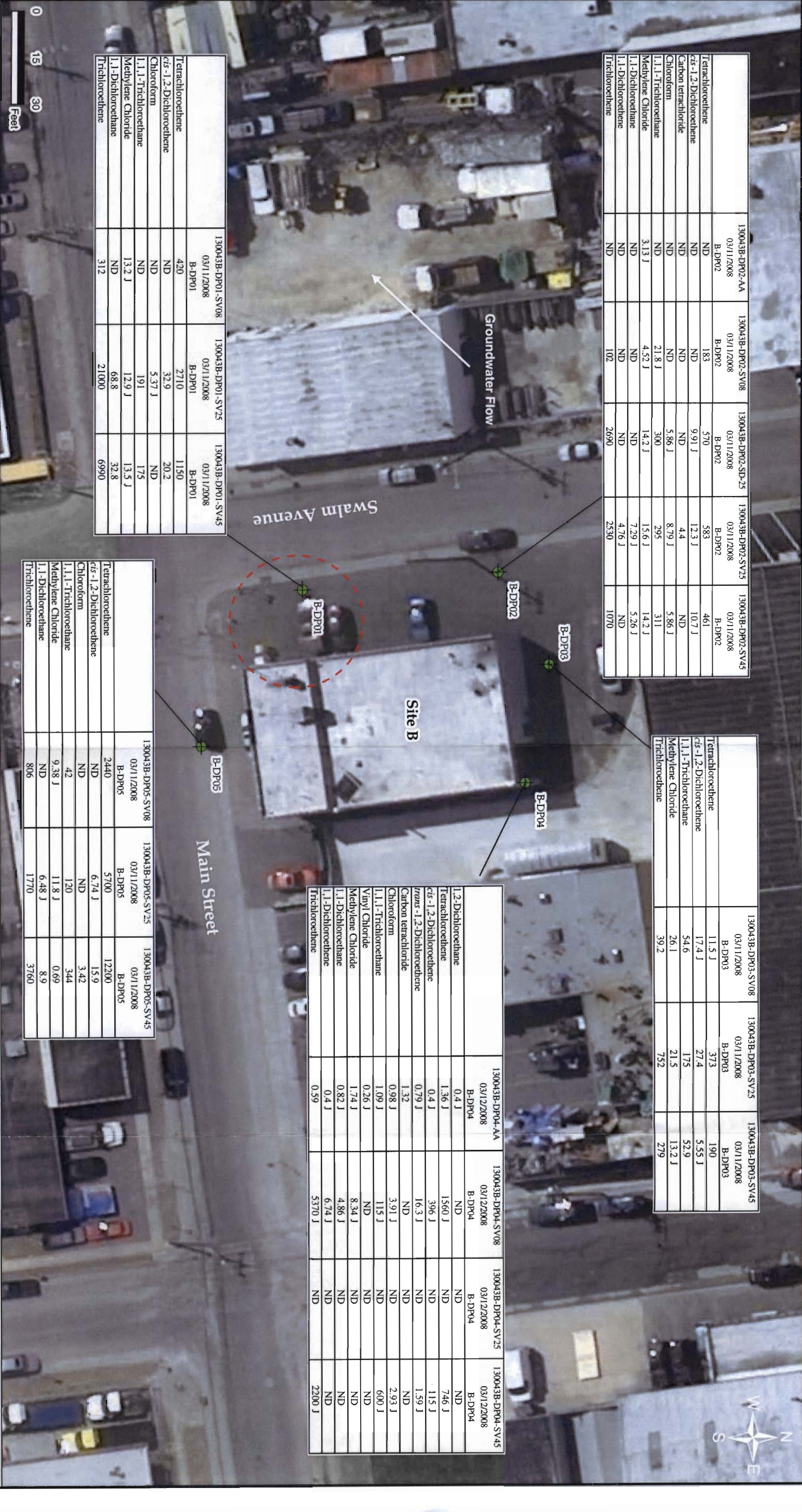
Soil Vapor Chlorinated VOC Detections

570 Main Street

New Cassel Industrial Area

North Hempstead, New York





|                        | 130043B-DP02-AA<br>03/11/2008<br>B-DP02 | 130043B-DP02-SV08<br>03/11/2008<br>B-DP02 | 130043B-DP02-SD-25<br>03/11/2008<br>B-DP02 | 130043B-DP02-SV25<br>03/11/2008<br>B-DP02 | 130043B-DP02-SV45<br>03/11/2008<br>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<br>03/11/2008<br>B-DP03 | 130043B-DP03-SV25<br>03/11/2008<br>B-DP03 | 130043B-DP03-SV45<br>03/11/2008<br>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<br>03/12/2008<br>B-DP04 | 130043B-DP04-SV08<br>03/12/2008<br>B-DP04 | 130043B-DP04-SV25<br>03/12/2008<br>B-DP04 | 130043B-DP04-SV45<br>03/12/2008<br>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<br>03/11/2008<br>B-DP01 | 130043B-DP01-SV25<br>03/11/2008<br>B-DP01 | 130043B-DP01-SV45<br>03/11/2008<br>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<br>03/11/2008<br>B-DP05 | 130043B-DP05-SV25<br>03/11/2008<br>B-DP05 | 130043B-DP05-SV45<br>03/11/2008<br>B-DP05 |
|------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| Tetrachloroethene      | 2440                                      | 6.74 J                                    | 12200                                     |
| cis-1,2-Dichloroethene | ND                                        | ND                                        | 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

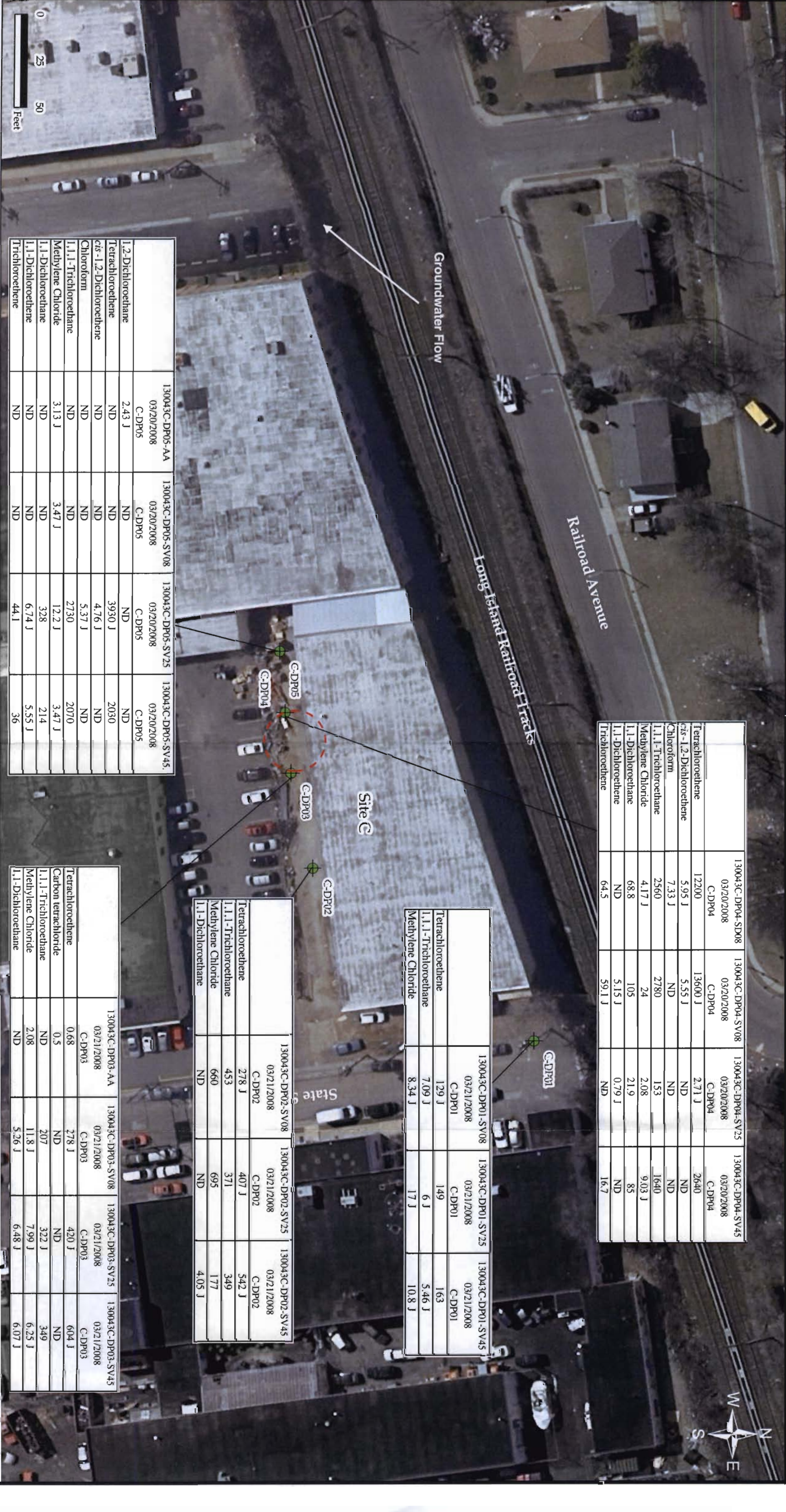
Notes:  
All units in  $\mu\text{g}/\text{m}^3$ .  
ND=Non-detect

**CDM**

Figure 4-2  
Site B

Soil Vapor Chlorinated VOC Detections  
567 Main Street  
New Cassel Industrial Area  
North Hempstead, New York





Sampling Location

Potential Historical Source Area  
Based on Previous Documentation

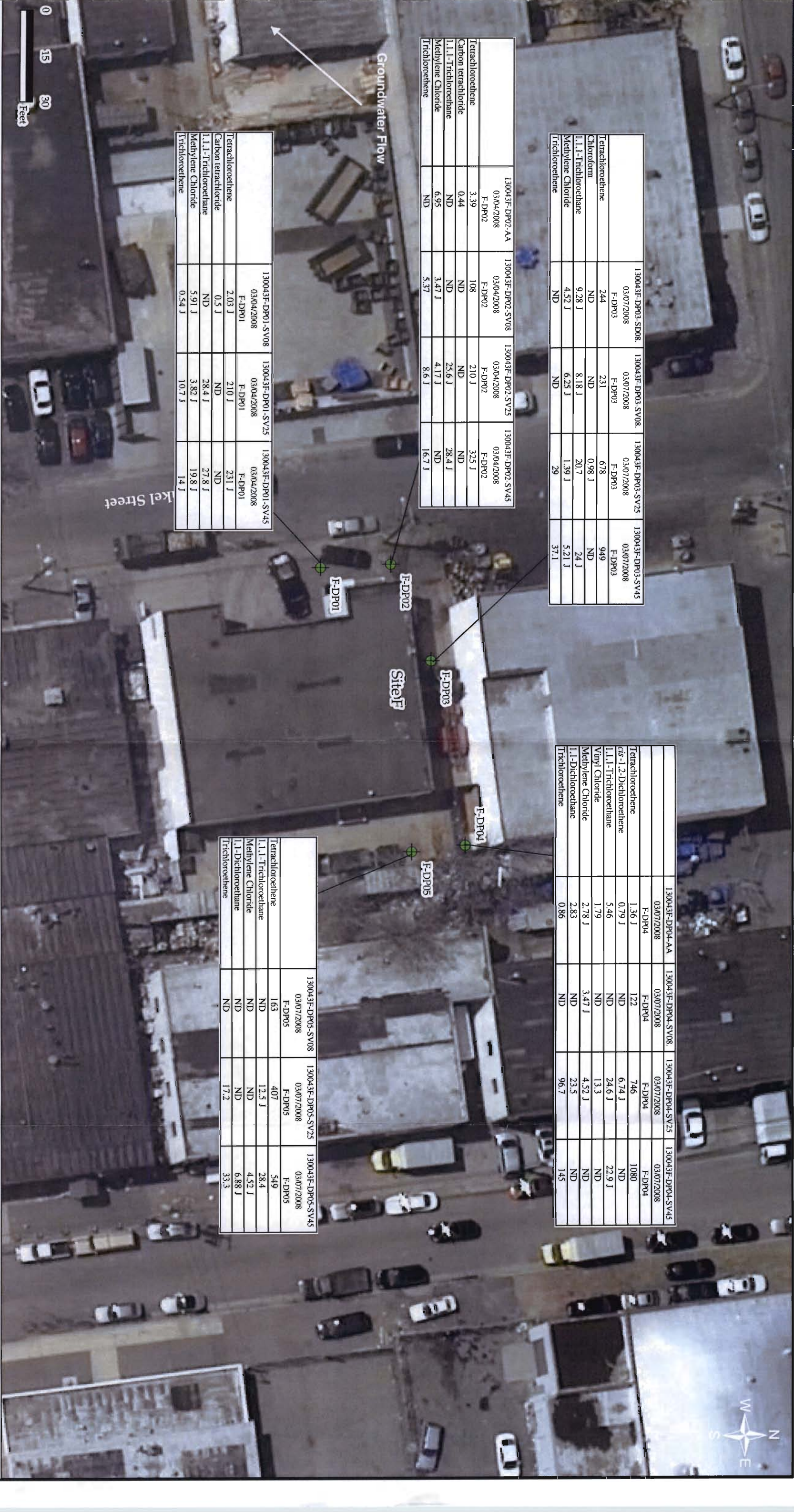
Notes:  
All units in µg\m3.  
ND=Non-detect

CDM

Figure 4-3  
Site C

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





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

Notes:  
All units in ug\m3.  
ND=Non-detect



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







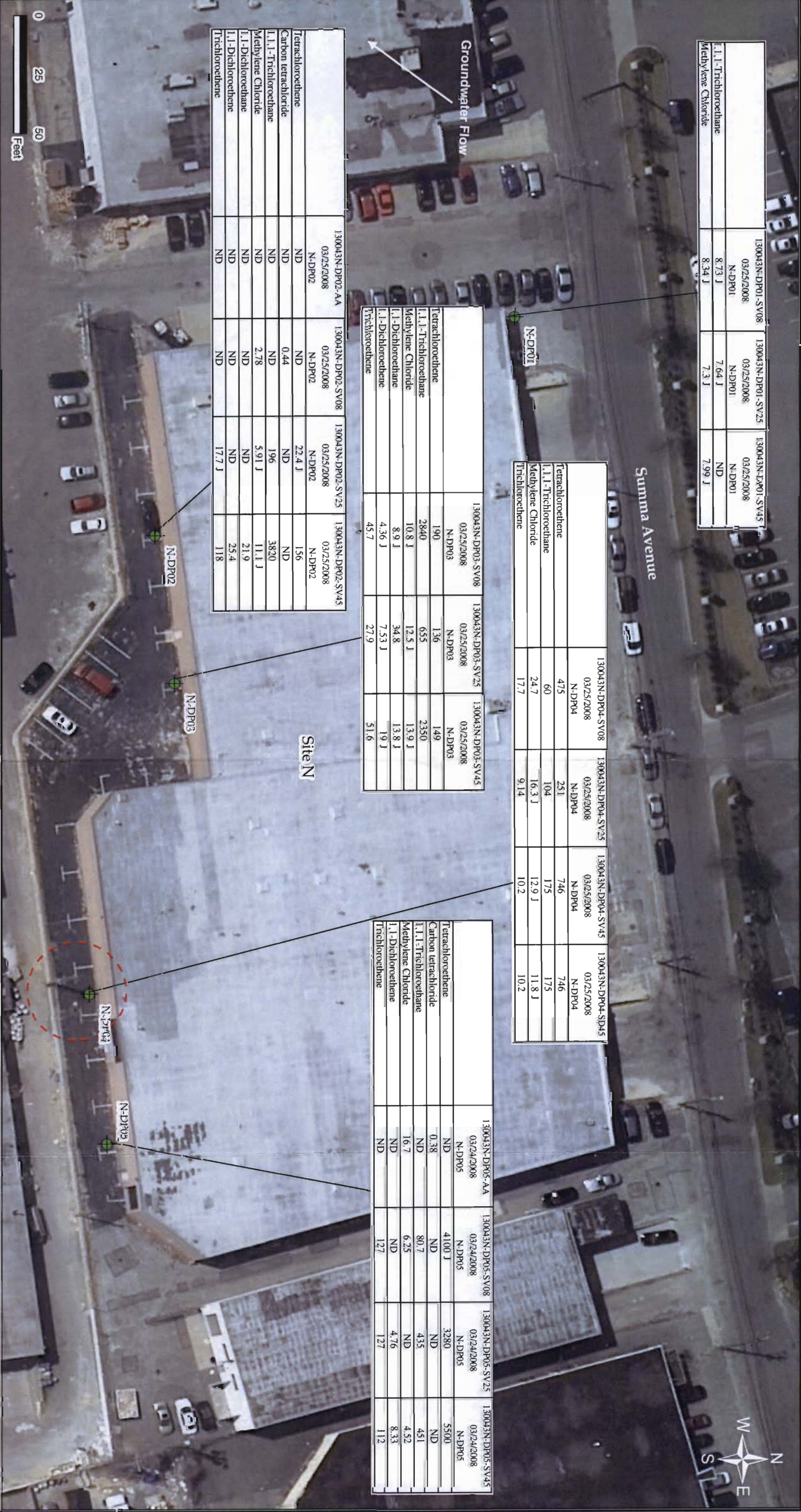


Figure 4-6  
Site N

Soil Vapor Chlorinated VOC Detections  
750 Summa Avenue  
New Cassel Industrial Area  
North Hempstead, New York









Sampling Location

Potential Historical Source Area

Based on Previous Documentation

Notes:

All units in µg/L.

All exceedances highlighted and bolded.

CDM

Figure 4-9

Site B

Groundwater VOC Exceedances

567 Main Street

New Cassel Industrial Area

North Hempstead, New York





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

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

| 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 |

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





Sampling Location

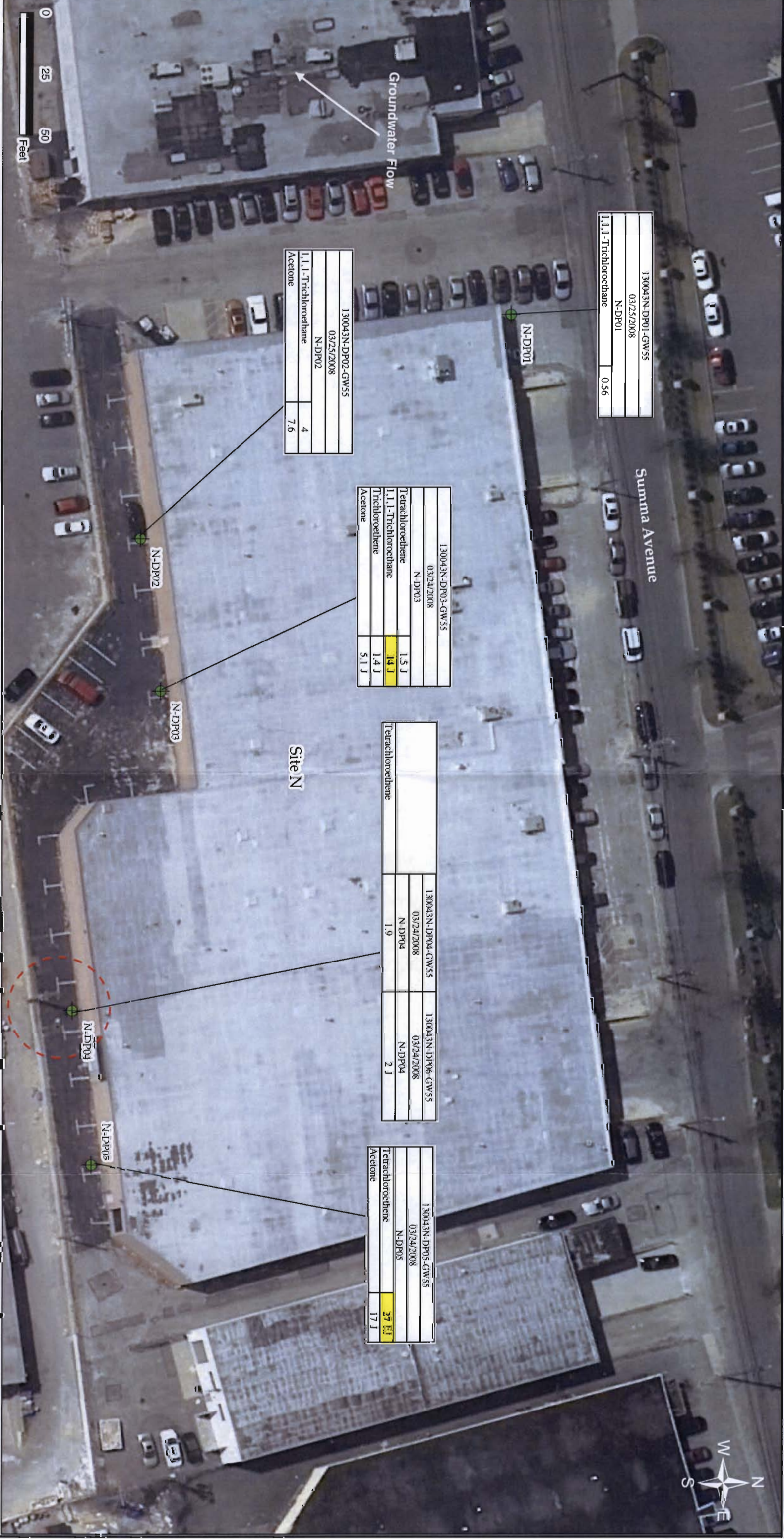
\*Previous investigations failed to locate source areas (e.g. cesspools, drainage structures)

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



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





| 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
- Potential Historical Source Area
- Based on Previous Documentation

Notes:

All units in µg/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





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

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

| 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 |

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





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**

| Sample ID<br>Sample Date<br>Boring Location |                                        |             |                  | 130043A-DP01-AA<br>03/14/2008<br>A-DP01 | 130043A-DP01-SV08<br>03/14/2008<br>A-DP01 | 130043A-DP01-SV25<br>03/14/2008<br>A-DP01 | 130043A-DP01-SV45<br>03/14/2008<br>A-DP01 |
|---------------------------------------------|----------------------------------------|-------------|------------------|-----------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| Case Number                                 | Chemical Name                          | Result Unit | Molecular Weight |                                         |                                           |                                           |                                           |
| 100-41-4                                    | Ethylbenzene                           | ug/m3       | 106.2            | 0.87 J                                  | 21.70 U                                   | 21.70 U                                   | 21.70 U                                   |
| 100-42-5                                    | Styrene                                | ug/m3       | 104.1            | 2.13 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                                   |
| 10061-02-6                                  | trans-1,3-Dichloropropene              | ug/m3       | 111              | 2.27 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                                   |
| 106-93-4                                    | 1,2-Dibromoethane                      | ug/m3       | 187.9            | 3.84 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                                   |
| 107-05-1                                    | Allyl Chloride                         | ug/m3       | 76.53            | 1.57 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                                   |
| 108-10-1                                    | 4-Methyl-2-Pentanone                   | ug/m3       | 100.2            | 2.05 U                                  | 20.50 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                                   | 24.60 U                                   |
| 108-88-3                                    | Toluene                                | ug/m3       | 92.14            | 9.42                                    | 8.67 J                                    | 6.41 J                                    | 10.60 J                                   |
| 108-90-7                                    | Chlorobenzene                          | ug/m3       | 112.6            | 2.30 U                                  | 23.00 U                                   | 23.00 U                                   | 23.00 U                                   |
| 109-99-9                                    | Tetrahydrofuran                        | ug/m3       | 154              | 3.15 U                                  | 7.56 J                                    | 34.00                                     | 46.60                                     |
| 110-54-3                                    | Hexane                                 | ug/m3       | 86.17            | 1.76 U                                  | 17.60 U                                   | 17.60 U                                   | 17.60 U                                   |
| 110-82-7                                    | CYCLOHEXANE                            | ug/m3       | 84.16            | 2.07                                    | 17.20 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                                   | 37.10 U                                   |
| 123-91-1                                    | 1,4-Dioxane                            | ug/m3       | 133              | 2.72 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                                   |
| 126777-61-2                                 | m/p-Xylene                             | ug/m3       | 106.2            | 3.04                                    | 7.38 J                                    | 6.08 J                                    | 9.99 J                                    |
| 127-18-4                                    | Tetrachloroethene                      | ug/m3       | 165.8            | 3.39 U                                  | 67.80 J                                   | 94.90                                     | 278.00                                    |
| 142-82-5                                    | n-Heptane                              | ug/m3       | 100.2            | 0.82 J                                  | 5.33 J                                    | 5.74 J                                    | 8.61 J                                    |
| 156-59-2                                    | CIS-1,2-DICHLOROETHENE                 | ug/m3       | 96.94            | 1.98 U                                  | 19.80 U                                   | 19.80 U                                   | 23.80                                     |
| 156-60-5                                    | TRANS-1,2-DICHLOROETHENE               | ug/m3       | 96.94            | 1.98 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                                   |
| 540-84-1                                    | 2,2,4-Trimethylpentane                 | ug/m3       | 114.2            | 0.93 J                                  | 23.40 U                                   | 23.40 U                                   | 23.40 U                                   |
| 541-73-1                                    | 1,3-DICHLOROETHENE                     | ug/m3       | 147              | 3.01 U                                  | 30.10 U                                   | 30.10 U                                   | 30.10 U                                   |
| 56-23-5                                     | CARBON TETRACHLORIDE                   | ug/m3       | 153.8            | 0.44                                    | 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                                   |
| 622-96-8                                    | 4-ETHYLTOLUENE                         | ug/m3       | 120.2            | 2.46 U                                  | 24.60 U                                   | 24.60 U                                   | 24.60 U                                   |
| 67-64-1                                     | ACETONE                                | ug/m3       | 58.08            | 13.10 B                                 | 68.90 B                                   | 99.80 B                                   | 135.00 B                                  |
| 67-86-3                                     | CHLOROFORM                             | ug/m3       | 119.4            | 2.44 U                                  | 24.40 U                                   | 24.40 U                                   | 24.40 U                                   |
| 71-43-2                                     | BENZENE                                | ug/m3       | 78.11            | 1.92                                    | 16.00 U                                   | 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                                   | 8.73 J                                    |
| 74-83-9                                     | BROMOMETHANE                           | ug/m3       | 94.94            | 1.94 U                                  | 19.40 U                                   | 19.40 U                                   | 19.40 U                                   |
| 74-87-3                                     | CHLOROMETHANE                          | ug/m3       | 50.49            | 1.03                                    | 10.30 U                                   | 10.30 U                                   | 3.92 J                                    |
| 75-00-3                                     | CHLOROETHANE                           | ug/m3       | 64.52            | 1.32 U                                  | 13.20 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                                   | 12.80 U                                   |
| 75-09-2                                     | METHYLENE CHLORIDE                     | ug/m3       | 84.94            | 1.39 J                                  | 3.82 J                                    | 4.17 J                                    | 3.82 J                                    |
| 75-15-0                                     | CARBON DISULFIDE                       | ug/m3       | 76.14            | 1.56 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                                   |
| 75-27-4                                     | BROMODICHLOROMETHANE                   | ug/m3       | 163.8            | 3.35 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                                   |
| 75-35-4                                     | 1,1-DICHLOROETHENE                     | ug/m3       | 96.94            | 1.98 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                                   | 15.20 U                                   | 15.20 U                                   |
| 75-69-4                                     | TRICHLOROFLUOROMETHANE                 | ug/m3       | 137.4            | 2.25 J                                  | 28.10 U                                   | 28.10 U                                   | 8.99 J                                    |
| 75-71-8                                     | DICHLORODIFLUOROMETHANE                | ug/m3       | 120.9            | 1.98 J                                  | 24.70 U                                   | 4.94 J                                    | 5.44 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                                   | 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                                   |
| 78-87-5                                     | 1,2-DICHLOROPROPANE                    | ug/m3       | 113              | 2.31 U                                  | 23.10 U                                   | 23.10 U                                   | 23.10 U                                   |
| 78-93-3                                     | 2-BUTANONE                             | ug/m3       | 72.11            | 4.42                                    | 133.00 J                                  | 198.00                                    | 383.00                                    |
| 79-00-5                                     | 1,1,2-TRICHLOROETHANE                  | ug/m3       | 133.4            | 2.73 U                                  | 27.30 U                                   | 27.30 U                                   | 27.30 U                                   |
| 79-01-6                                     | TRICHLOROETHENE                        | ug/m3       | 131.4            | 0.25 U                                  | 2.47 U                                    | 2.47 U                                    | 75.20                                     |
| 79-34-5                                     | 1,1,2,2-TETRACHLOROETHANE              | ug/m3       | 167.9            | 3.43 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                                   |
| 87-68-3                                     | HEXACHLOROBUTADIENE                    | ug/m3       | 260.8            | 5.33 U                                  | 53.30 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                                   | 21.70 U                                   |
| 95-49-8                                     | 2-Chlorotoluene                        | ug/m3       | 126.58           | 2.59 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                                   |
| 95-63-6                                     | 1,2,4-TRIMETHYLBENZENE                 | ug/m3       | 120.2            | 1.47 J                                  | 4.92 J                                    | 4.92 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**

| Sample ID<br>Sample Date<br>Boring Location |                                        |             |                  | 130043A-DP02-SV08<br>03/14/2008<br>A-DP02 | 130043A-DP02-SV25<br>03/14/2008<br>A-DP02 | 130043A-DP02-SV45<br>03/14/2008<br>A-DP02 | 130043A-DP03A-SV08<br>03/14/2008<br>A-DP03A | 130043A-DP03A-SV25<br>03/14/2008<br>A-DP03A |
|---------------------------------------------|----------------------------------------|-------------|------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|---------------------------------------------|---------------------------------------------|
| Case Number                                 | Chemical Name                          | Result Unit | Molecular Weight |                                           |                                           |                                           |                                             |                                             |
| 100-41-4                                    | Ethylbenzene                           | ug/m3       | 106.2            | 8.69 J                                    | 4.78 J                                    | 21.70 U                                   | 4.34 J                                      | 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            | 12.40 J                                   | 18.80 J                                   | 12.80 J                                   | 13.20 J                                     | 13.20 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              | 11.30 J                                   | 15.10 J                                   | 33.40 J                                   | 11.30 J                                     | 44.10 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            | 26.90 J                                   | 13.00 J                                   | 9.99 J                                    | 10.40 J                                     | 12.20 J                                     |
| 127-18-4                                    | Tetrachloroethene                      | ug/m3       | 165.8            | 54.90 J                                   | 29.20 J                                   | 62.40 J                                   | 624.00 J                                    | 5490.00 JD                                  |
| 142-82-5                                    | n-Heptane                              | ug/m3       | 100.2            | 9.84 J                                    | 6.15 J                                    | 23.40                                     | 14.30 J                                     | 10.70 J                                     |
| 156-59-2                                    | CIS-1,2-DICHLOROETHENE                 | ug/m3       | 96.94            | 19.80 U                                   | 19.80 U                                   | 19.80 U                                   | 95.20                                       | 5550.00 D                                   |
| 156-60-5                                    | TRANS-1,2-DICHLOROETHENE               | ug/m3       | 96.94            | 19.80 U                                   | 19.80 U                                   | 19.80 U                                   | 19.80 U                                     | 43.60                                       |
| 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                                   | 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                                     | 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            | 138.00 B                                  | 107.00 B                                  | 238.00 B                                  | 107.00 B                                    | 207.00 B                                    |
| 67-66-3                                     | CHLOROFORM                             | ug/m3       | 119.4            | 24.40 U                                   | 24.40 U                                   | 5.37 J                                    | 24.40 U                                     | 63.50                                       |
| 71-43-2                                     | BENZENE                                | ug/m3       | 78.11            | 4.47 J                                    | 3.51 J                                    | 4.79 J                                    | 5.11 J                                      | 3.19 J                                      |
| 71-55-6                                     | 1,1,1-TRICHLOROETHANE                  | ug/m3       | 133.4            | 27.30 U                                   | 27.30 U                                   | 27.30 U                                   | 27.30 U                                     | 33.80                                       |
| 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                                     | 2.56 J                                      |
| 75-09-2                                     | METHYLENE CHLORIDE                     | ug/m3       | 84.94            | 4.52 J                                    | 17.40 U                                   | 4.52 J                                    | 3.82 J                                      | 17.40 U                                     |
| 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                                     | 26.30                                       |
| 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                                     | 10.10 J                                     |
| 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                                   | 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            | 239.00 J                                  | 209.00 J                                  | 354.00 J                                  | 177.00 J                                    | 292.00 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            | 45.10 J                                   | 161.00 J                                  | 193.00 J                                  | 365.00 J                                    | 6990.00 JD                                  |
| 79-34-5                                     | 1,1,2,2-TETRACHLOROETHANE              | ug/m3       | 167.9            | 34.30 U                                   | 34.30 U                                   | 34.30 U                                   | 34.30 U                                     | 12.40 J                                     |
| 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            | 9.12 J                                    | 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                                     | 25.90 U                                     |
| 95-50-1                                     | 1,2-DICHLOROBENZENE                    | 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            | 5.41 J                                    | 5.41 J                                    | 5.41 J                                    | 4.92 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**

| Sample ID<br>Sample Date<br>Boring Location |                                        |             |                  | 130043A-DP03A-SV45<br>03/14/2008<br>A-DP03A | 130043A-DP04-AA<br>03/13/2008<br>A-DP04 |
|---------------------------------------------|----------------------------------------|-------------|------------------|---------------------------------------------|-----------------------------------------|
| Case Number                                 | Chemical Name                          | Result Unit | Molecular Weight |                                             |                                         |
| 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-DICHLOROETHENE                     | 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-DICHLOROETHENE                     | 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 Push ID - Identification  
N - presumptive evidence of a compound



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**Soil Vapor Analytical Results**  
**New Cassel Industrial Area**  
**North Hempstead, NY**

| Sample ID<br>Sample Date<br>Boring Location |                                        |             |                  | 130043A-DP04-SV08<br>03/13/2008<br>A-DP04 | 130043A-DP04-SV25<br>03/13/2008<br>A-DP04 | 130043A-DP04-SV45<br>03/13/2008<br>A-DP04 | 130043A-DP05-SD45<br>03/13/2008<br>A-DP05 | 130043A-DP05-SV08<br>03/13/2008<br>A-DP05 |
|---------------------------------------------|----------------------------------------|-------------|------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| Case Number                                 | Chemical Name                          | Result Unit | Molecular Weight |                                           |                                           |                                           |                                           |                                           |
| 100-41-4                                    | Ethylbenzene                           | ug/m3       | 106.2            | 4.34 U                                    | 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                                    | 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                                    | 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                                    | 4.54 U                                    |
| 106-46-7                                    | 1,4-Dichlorobenzene                    | ug/m3       | 147              | 6.01 U                                    | 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                                    | 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                                    | 2.21 U                                    |
| 107-05-1                                    | Allyl Chloride                         | ug/m3       | 76.53            | 3.13 U                                    | 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                                    | 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                                    | 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                                    | 4.92 U                                    |
| 108-88-3                                    | Toluene                                | ug/m3       | 92.14            | 13.90                                     | 12.10                                     | 8.29                                      | 10.60                                     | 10.20                                     |
| 108-90-7                                    | Chlorobenzene                          | ug/m3       | 112.6            | 4.61 U                                    | 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                                    | 13.20                                     |
| 110-54-3                                    | Hexane                                 | ug/m3       | 86.17            | 21.10                                     | 12.70                                     | 20.40                                     | 13.00                                     | 3.52 U                                    |
| 110-82-7                                    | CYCLOHEXANE                            | ug/m3       | 84.16            | 3.44 U                                    | 3.44 U                                    | 7.23                                      | 3.44 U                                    | 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                                    | 7.42 U                                    |
| 123-91-1                                    | 1,4-Dioxane                            | ug/m3       | 133              | 5.44 U                                    | 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                                    | 8.52 U                                    |
| 126777-61-2                                 | m/p-Xylene                             | ug/m3       | 106.2            | 6.08                                      | 9.56                                      | 9.12                                      | 14.30                                     | 6.95                                      |
| 127-18-4                                    | Tetrachloroethene                      | ug/m3       | 165.8            | 6710.00 D                                 | 166000.00 ED                              | 198000.00 ED                              | 224000.00 ED                              | 3200.00 D                                 |
| 142-82-5                                    | n-Heptane                              | ug/m3       | 100.2            | 13.10                                     | 7.79                                      | 10.20                                     | 8.20                                      | 4.51                                      |
| 156-59-2                                    | CIS-1,2-DICHLOROETHENE                 | ug/m3       | 96.94            | 3.96 U                                    | 11.50                                     | 31.70                                     | 286.00                                    | 3.96 U                                    |
| 156-60-5                                    | TRANS-1,2-DICHLOROETHENE               | ug/m3       | 96.94            | 3.96 U                                    | 3.96 U                                    | 3.96 U                                    | 4.36                                      | 3.96 U                                    |
| 1634-04-4                                   | Methyl t-Butyl Ether                   | ug/m3       | 88.15            | 3.61 U                                    | 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                                    | 4.67 U                                    |
| 541-73-1                                    | 1,3-DICHLOROBENZENE                    | ug/m3       | 147              | 6.01 U                                    | 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                                    | 2.52 U                                    |
| 593-60-2                                    | Bromoethene                            | ug/m3       | 106.9            | 4.37 U                                    | 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                                    | 4.92 U                                    |
| 67-64-1                                     | ACETONE                                | ug/m3       | 58.08            | 56.10 JB                                  | 41.30 JB                                  | 38.70 JB                                  | 44.70 JB                                  | 32.10 JB                                  |
| 67-66-3                                     | CHLOROFORM                             | ug/m3       | 119.4            | 4.88 U                                    | 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                                    | 3.51                                      |
| 71-55-6                                     | 1,1,1-TRICHLOROETHANE                  | ug/m3       | 133.4            | 19.10                                     | 437.00                                    | 589.00 D                                  | 385.00                                    | 5.46 U                                    |
| 74-83-9                                     | BROMOMETHANE                           | ug/m3       | 94.94            | 3.88 U                                    | 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                                    | 2.07 U                                    |
| 75-00-3                                     | CHLOROETHANE                           | ug/m3       | 64.52            | 2.64 U                                    | 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                                    | 1.02 U                                    |
| 75-09-2                                     | METHYLENE CHLORIDE                     | ug/m3       | 84.94            | 4.86                                      | 3.47 U                                    | 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                                    | 3.11 U                                    |
| 75-25-2                                     | BROMOFORM                              | ug/m3       | 252.8            | 10.30 U                                   | 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                                    | 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                                    | 4.05 U                                    |
| 75-35-4                                     | 1,1-DICHLOROETHENE                     | ug/m3       | 96.94            | 3.96 U                                    | 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                                    | 3.03 U                                    |
| 75-69-4                                     | TRICHLOROFLUOROMETHANE                 | ug/m3       | 137.4            | 5.62 U                                    | 5.62 U                                    | 5.62 U                                    | 8.99                                      | 5.62 U                                    |
| 75-71-8                                     | DICHLORODIFLUOROMETHANE                | ug/m3       | 120.9            | 4.94 U                                    | 4.94 U                                    | 4.94 U                                    | 4.94 U                                    | 4.94 U                                    |
| 76-13-1                                     | 1,1,2-Trichloro-1,2,2-trifluoroethane  | ug/m3       | 187.4            | 75.90                                     | 2910.00 D                                 | 4410.00 D                                 | 4320.00 D                                 | 14.60                                     |
| 76-14-2                                     | 1,2-dichloro-1,1,2,2-tetrafluoroethane | ug/m3       | 170.9            | 6.99 U                                    | 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                                    | 4.62 U                                    |
| 78-93-3                                     | 2-BUTANONE                             | ug/m3       | 72.11            | 90.20 J                                   | 127.00 J                                  | 103.00 J                                  | 109.00 J                                  | 116.00 J                                  |
| 79-00-5                                     | 1,1,2-TRICHLOROETHANE                  | ug/m3       | 133.4            | 5.46 U                                    | 5.46 U                                    | 5.46 U                                    | 5.46 U                                    | 5.46 U                                    |
| 79-01-6                                     | TRICHLOROETHENE                        | ug/m3       | 131.4            | 17.70                                     | 437.00                                    | 774.00                                    | 2620.00 D                                 | 25.80                                     |
| 79-34-5                                     | 1,1,2,2-TETRACHLOROETHANE              | ug/m3       | 167.9            | 6.87 U                                    | 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                                    | 4.09 U                                    |
| 87-68-3                                     | HEXACHLOROBTADIENE                     | ug/m3       | 260.8            | 10.70 U                                   | 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                                      | 4.34 U                                    |
| 95-49-8                                     | 2-Chlorotoluene                        | ug/m3       | 126.58           | 5.18 U                                    | 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                                    | 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                                    | 4.92 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**

| Sample ID<br>Sample Date<br>Boring Location |                                        |             |                  | 130043A-DP05-SV25<br>03/13/2008<br>A-DP05 | 130043A-DP05-SV45<br>03/13/2008<br>A-DP05 | 130043B-DP01-SV08<br>03/11/2008<br>B-DP01 | 130043B-DP01-SV25<br>03/11/2008<br>B-DP01 | 130043B-DP01-SV45<br>03/11/2008<br>B-DP01 |
|---------------------------------------------|----------------------------------------|-------------|------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| Case Number                                 | Chemical Name                          | Result Unit | Molecular Weight |                                           |                                           |                                           |                                           |                                           |
| 100-41-4                                    | Ethylbenzene                           | ug/m3       | 106.2            | 4.34 U                                    | 4.34 U                                    | 5.21 J                                    | 208.00                                    | 8.69 J                                    |
| 100-42-5                                    | Styrene                                | ug/m3       | 104.1            | 4.26 U                                    | 4.26 U                                    | 2.64 UJ                                   | 2.64 UJ                                   | 2.64 UJ                                   |
| 10061-01-5                                  | cis-1,3-Dichloropropene                | ug/m3       | 111              | 4.54 U                                    | 4.54 U                                    | 2.27 U                                    | 2.27 U                                    | 2.27 U                                    |
| 10061-02-6                                  | trans-1,3-Dichloropropene              | ug/m3       | 111              | 4.54 U                                    | 4.54 U                                    | 2.59 U                                    | 2.59 U                                    | 2.59 U                                    |
| 106-46-7                                    | 1,4-Dichlorobenzene                    | ug/m3       | 147              | 6.01 U                                    | 6.01 U                                    | 1.50 U                                    | 1.50 U                                    | 1.50 U                                    |
| 106-93-4                                    | 1,2-Dibromoethane                      | ug/m3       | 187.9            | 7.69 U                                    | 7.69 U                                    | 9.99 U                                    | 9.99 U                                    | 9.99 U                                    |
| 106-99-0                                    | 1,3-Butadiene                          | ug/m3       | 54.09            | 2.21 UJ                                   | 2.21 U                                    | 0.80 U                                    | 0.80 U                                    | 0.80 U                                    |
| 107-05-1                                    | Allyl Chloride                         | ug/m3       | 76.53            | 3.13 UJ                                   | 3.13 U                                    | 1.91 U                                    | 1.91 U                                    | 1.91 U                                    |
| 107-06-2                                    | 1,2-Dichloroethane                     | ug/m3       | 98.96            | 4.05 U                                    | 4.05 U                                    | 2.02 U                                    | 2.02 U                                    | 2.02 U                                    |
| 108-10-1                                    | 4-Methyl-2-Pentanone                   | ug/m3       | 100.2            | 4.10 U                                    | 4.10 U                                    | 2.05 U                                    | 2.05 U                                    | 2.05 U                                    |
| 108-67-8                                    | 1,3,5-Trimethylbenzene                 | ug/m3       | 120.2            | 4.92 U                                    | 4.92 U                                    | 1.72 UJ                                   | 1.72 UJ                                   | 1.72 UJ                                   |
| 108-88-3                                    | Toluene                                | ug/m3       | 92.14            | 8.67                                      | 9.42                                      | 24.90                                     | 52.80                                     | 45.20                                     |
| 108-90-7                                    | Chlorobenzene                          | ug/m3       | 112.6            | 4.61 U                                    | 4.61 U                                    | 1.20 U                                    | 1.20 U                                    | 1.20 U                                    |
| 109-99-9                                    | Tetrahydrofuran                        | ug/m3       | 154              | 32.80                                     | 6.30 U                                    | 25.20 J                                   | 40.30                                     | 44.70                                     |
| 110-54-3                                    | Hexane                                 | ug/m3       | 86.17            | 3.52 UJ                                   | 3.52 U                                    | 0.92 U                                    | 0.92 U                                    | 28.20                                     |
| 110-82-7                                    | CYCLOHEXANE                            | ug/m3       | 84.16            | 3.44 UJ                                   | 3.44 U                                    | 0.41 U                                    | 0.41 U                                    | 0.41 U                                    |
| 120-82-1                                    | 1,2,4-Trichlorobenzene                 | ug/m3       | 181.5            | 7.42 U                                    | 7.42 U                                    | 21.50 J                                   | 2.60 U                                    | 2.60 U                                    |
| 123-91-1                                    | 1,4-Dioxane                            | ug/m3       | 133              | 5.44 U                                    | 5.44 U                                    | 2.50 U                                    | 2.50 U                                    | 2.50 U                                    |
| 124-48-1                                    | Dibromochloromethane                   | ug/m3       | 208.3            | 8.52 U                                    | 8.52 U                                    | 2.22 U                                    | 2.22 U                                    | 2.22 U                                    |
| 126777-61-2                                 | m/p-Xylene                             | ug/m3       | 106.2            | 5.65                                      | 6.52                                      | 13.00 J                                   | 695.00                                    | 23.00                                     |
| 127-18-4                                    | Tetrachloroethene                      | ug/m3       | 165.8            | 42000.00 ED                               | 94300.00 ED                               | 420.00                                    | 2710.00 D                                 | 1150.00 D                                 |
| 142-82-5                                    | n-Heptane                              | ug/m3       | 100.2            | 5.33 J                                    | 4.10 U                                    | 4.92 J                                    | 7.79 J                                    | 9.84 J                                    |
| 156-59-2                                    | CIS-1,2-DICHLOROETHENE                 | ug/m3       | 96.94            | 227.00 J                                  | 117.00                                    | 1.39 U                                    | 32.90                                     | 20.20                                     |
| 156-60-5                                    | TRANS-1,2-DICHLOROETHENE               | ug/m3       | 96.94            | 3.96 UJ                                   | 3.96 U                                    | 1.23 U                                    | 1.23 U                                    | 1.23 U                                    |
| 1634-04-4                                   | Methyl t-Butyl Ether                   | ug/m3       | 88.15            | 3.61 UJ                                   | 3.61 U                                    | 0.61 U                                    | 0.61 U                                    | 0.61 U                                    |
| 540-84-1                                    | 2,2,4-Trimethylpentane                 | ug/m3       | 114.2            | 4.67 U                                    | 4.67 U                                    | 1.17 U                                    | 1.17 U                                    | 1.17 U                                    |
| 541-73-1                                    | 1,3-DICHLOROBENZENE                    | ug/m3       | 147              | 6.01 U                                    | 6.01 U                                    | 1.02 U                                    | 1.02 U                                    | 1.02 U                                    |
| 56-23-5                                     | CARBON TETRACHLORIDE                   | ug/m3       | 153.8            | 2.52 U                                    | 2.52 U                                    | 1.07 U                                    | 1.07 U                                    | 1.07 U                                    |
| 593-60-2                                    | Bromoethene                            | ug/m3       | 106.9            | 4.37 UJ                                   | 4.37 U                                    | 1.05 U                                    | 1.05 U                                    | 1.05 U                                    |
| 622-96-8                                    | 4-ETHYLTOLUENE                         | ug/m3       | 120.2            | 4.92 U                                    | 4.92 U                                    | 1.28 UJ                                   | 1.28 UJ                                   | 1.28 UJ                                   |
| 67-64-1                                     | ACETONE                                | ug/m3       | 58.08            | 62.70 JB                                  | 15.90 JB                                  | 59.40 B                                   | 138.00 B                                  | 195.00 B                                  |
| 67-66-3                                     | CHLOROFORM                             | ug/m3       | 119.4            | 4.88 UJ                                   | 4.88 U                                    | 1.51 U                                    | 5.37 J                                    | 1.51 U                                    |
| 71-43-2                                     | BENZENE                                | ug/m3       | 78.11            | 3.51                                      | 3.19 U                                    | 30.30                                     | 8.63 J                                    | 8.63 J                                    |
| 71-55-6                                     | 1,1,1-TRICHLOROETHANE                  | ug/m3       | 133.4            | 119.00 J                                  | 159.00                                    | 1.20 U                                    | 191.00                                    | 175.00                                    |
| 74-83-9                                     | BROMOMETHANE                           | ug/m3       | 94.94            | 3.88 UJ                                   | 3.88 U                                    | 0.93 U                                    | 0.93 U                                    | 0.93 U                                    |
| 74-87-3                                     | CHLOROMETHANE                          | ug/m3       | 50.49            | 2.07 UJ                                   | 2.07 U                                    | 0.52 U                                    | 0.52 U                                    | 3.10 J                                    |
| 75-00-3                                     | CHLOROETHANE                           | ug/m3       | 64.52            | 2.64 UJ                                   | 2.64 U                                    | 0.45 U                                    | 0.45 U                                    | 0.45 U                                    |
| 75-01-4                                     | VINYL CHLORIDE                         | ug/m3       | 62.5             | 1.02 UJ                                   | 1.02 U                                    | 0.61 U                                    | 0.61 U                                    | 0.61 U                                    |
| 75-09-2                                     | METHYLENE CHLORIDE                     | ug/m3       | 84.94            | 3.47 UJ                                   | 3.47 U                                    | 13.20 J                                   | 12.90 J                                   | 13.50 J                                   |
| 75-15-0                                     | CARBON DISULFIDE                       | ug/m3       | 76.14            | 3.11 UJ                                   | 3.11 U                                    | 0.47 U                                    | 0.47 U                                    | 6.85 J                                    |
| 75-25-2                                     | BROMOFORM                              | ug/m3       | 252.8            | 10.30 U                                   | 10.30 U                                   | 1.55 U                                    | 1.55 U                                    | 1.55 U                                    |
| 75-27-4                                     | BROMODICHLOROMETHANE                   | ug/m3       | 163.8            | 6.70 U                                    | 6.70 U                                    | 3.35 U                                    | 3.35 U                                    | 3.35 U                                    |
| 75-34-3                                     | 1,1-DICHLOROETHANE                     | ug/m3       | 98.96            | 4.05 UJ                                   | 4.05 U                                    | 0.97 U                                    | 68.80                                     | 32.80                                     |
| 75-35-4                                     | 1,1-DICHLOROETHENE                     | ug/m3       | 96.94            | 3.96 UJ                                   | 3.96 U                                    | 0.99 U                                    | 0.99 U                                    | 0.99 U                                    |
| 75-65-0                                     | tert-Butyl Alcohol                     | ug/m3       | 74.12            | 3.03 UJ                                   | 3.03 U                                    | 2.39 U                                    | 2.39 U                                    | 15.80                                     |
| 75-69-4                                     | TRICHLOROFLUOROMETHANE                 | ug/m3       | 137.4            | 5.62 UJ                                   | 5.62 J                                    | 5.62 J                                    | 10.10 J                                   | 19.70 J                                   |
| 75-71-8                                     | DICHLORODIFLUOROMETHANE                | ug/m3       | 120.9            | 4.94 UJ                                   | 4.94 U                                    | 6.92 J                                    | 5.44 J                                    | 0.84 U                                    |
| 76-13-1                                     | 1,1,2-Trichloro-1,2,2-trifluoroethane  | ug/m3       | 187.4            | 743.00 J                                  | 973.00                                    | 10.70 J                                   | 29.90 J                                   | 54.40                                     |
| 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 U                                    | 1.54 U                                    |
| 78-87-5                                     | 1,2-DICHLOROPROPANE                    | ug/m3       | 113              | 4.62 U                                    | 4.62 U                                    | 2.22 U                                    | 2.22 U                                    | 2.22 U                                    |
| 78-93-3                                     | 2-BUTANONE                             | ug/m3       | 72.11            | 179.00                                    | 29.20 J                                   | 227.00 B                                  | 280.00 B                                  | 442.00 B                                  |
| 79-00-5                                     | 1,1,2-TRICHLOROETHANE                  | ug/m3       | 133.4            | 5.46 U                                    | 5.46 U                                    | 2.40 U                                    | 2.40 U                                    | 2.40 U                                    |
| 79-01-6                                     | TRICHLOROETHENE                        | ug/m3       | 131.4            | 570.00                                    | 661.00                                    | 312.00                                    | 21000.00 D                                | 6990.00 D                                 |
| 79-34-5                                     | 1,1,2,2-TETRACHLOROETHANE              | ug/m3       | 167.9            | 6.87 U                                    | 6.87 U                                    | 1.65 U                                    | 1.65 U                                    | 1.65 U                                    |
| 80-62-6                                     | Methyl Methacrylate                    | ug/m3       | 100.117          | 4.09 U                                    | 4.09 U                                    | 2.58 U                                    | 2.58 U                                    | 2.58 U                                    |
| 87-68-3                                     | HEXACHLOROBUTADIENE                    | ug/m3       | 260.8            | 10.70 U                                   | 10.70 U                                   | 28.80 J                                   | 2.35 U                                    | 2.35 U                                    |
| 95-47-6                                     | O-XYLENE                               | ug/m3       | 106.2            | 4.34 U                                    | 4.34 U                                    | 5.21 J                                    | 182.00                                    | 6.95 J                                    |
| 95-49-8                                     | 2-Chlorotoluene                        | ug/m3       | 126.58           | 5.18 U                                    | 5.18 U                                    | 1.97 UJ                                   | 1.97 UJ                                   | 1.97 UJ                                   |
| 95-50-1                                     | 1,2-DICHLOROBENZENE                    | ug/m3       | 147              | 6.01 U                                    | 6.01 U                                    | 1.32 U                                    | 1.32 U                                    | 1.32 U                                    |
| 95-63-6                                     | 1,2,4-TRIMETHYLBENZENE                 | ug/m3       | 120.2            | 4.92 U                                    | 4.92 U                                    | 1.18 U                                    | 1.18 U                                    | 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**

|             |                                        |             |                  | Sample ID       | 130043B-DP02-AA | 130043B-DP02-SD25 | 130043B-DP02-SV08 | 130043B-DP02-SV25 | 130043B-DP02-SV45 |
|-------------|----------------------------------------|-------------|------------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|
|             |                                        |             |                  | Sample Date     | 03/11/2008      | 03/11/2008        | 03/11/2008        | 03/11/2008        | 03/11/2008        |
|             |                                        |             |                  | Boring Location | B-DP02          | B-DP02            | B-DP02            | B-DP02            | B-DP02            |
| Case Number | Chemical Name                          | Result Unit | Molecular Weight |                 |                 |                   |                   |                   |                   |
| 100-41-4    | Ethylbenzene                           | ug/m3       | 106.2            | 6.95            |                 | 43.00             |                   | 47.80             |                   |
| 100-42-5    | Styrene                                | ug/m3       | 104.1            | 2.13            | U               | 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                 |
| 10061-02-6  | trans-1,3-Dichloropropene              | ug/m3       | 111              | 2.27            | U               | 2.59              | U                 | 2.59              | U                 |
| 106-46-7    | 1,4-Dichlorobenzene                    | ug/m3       | 147              | 3.01            | U               | 1.50              | U                 | 6.01              | J                 |
| 106-93-4    | 1,2-Dibromoethane                      | ug/m3       | 187.9            | 3.84            | 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                 |
| 107-05-1    | Allyl Chloride                         | ug/m3       | 76.53            | 1.57            | 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                 |
| 108-10-1    | 4-Methyl-2-Pentanone                   | ug/m3       | 100.2            | 0.82            | J               | 2.05              | U                 | 2.05              | U                 |
| 108-67-8    | 1,3,5-Trimethylbenzene                 | ug/m3       | 120.2            | 2.46            | U               | 1.72              | U                 | 7.37              | J                 |
| 108-88-3    | Toluene                                | ug/m3       | 92.14            | 10.20           |                 | 71.60             |                   | 71.60             |                   |
| 108-90-7    | Chlorobenzene                          | ug/m3       | 112.6            | 2.30            | U               | 1.20              | U                 | 1.20              | U                 |
| 109-99-9    | Tetrahydrofuran                        | ug/m3       | 154              | 3.15            | U               | 5.29              | U                 | 5.29              | U                 |
| 110-54-3    | Hexane                                 | ug/m3       | 86.17            | 1.76            | UJ              | 0.92              | U                 | 0.92              | U                 |
| 110-82-7    | CYCLOHEXANE                            | ug/m3       | 84.16            | 1.72            | U               | 0.41              | U                 | 0.41              | U                 |
| 120-82-1    | 1,2,4-Trichlorobenzene                 | ug/m3       | 181.5            | 3.71            | U               | 17.80             | J                 | 24.50             | J                 |
| 123-91-1    | 1,4-Dioxane                            | ug/m3       | 133              | 2.72            | U               | 2.50              | U                 | 2.50              | U                 |
| 124-48-1    | Dibromochloromethane                   | ug/m3       | 208.3            | 4.26            | U               | 2.22              | U                 | 2.22              | U                 |
| 126777-61-2 | m/p-Xylene                             | ug/m3       | 106.2            | 22.60           |                 | 126.00            |                   | 139.00            |                   |
| 127-18-4    | Tetrachloroethene                      | ug/m3       | 165.8            | 3.39            | U               | 570.00            |                   | 583.00            |                   |
| 142-82-5    | n-Heptane                              | ug/m3       | 100.2            | 0.41            | J               | 8.20              | J                 | 16.00             | J                 |
| 156-59-2    | CIS-1,2-DICHLOROETHENE                 | ug/m3       | 96.94            | 1.98            | U               | 9.91              | J                 | 1.39              | U                 |
| 156-60-5    | TRANS-1,2-DICHLOROETHENE               | ug/m3       | 96.94            | 1.98            | 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                 |
| 540-84-1    | 2,2,4-Trimethylpentane                 | ug/m3       | 114.2            | 0.93            | J               | 1.17              | U                 | 6.54              | J                 |
| 541-73-1    | 1,3-DICHLOROBENZENE                    | ug/m3       | 147              | 3.01            | U               | 1.02              | U                 | 1.02              | U                 |
| 56-23-5     | CARBON TETRACHLORIDE                   | ug/m3       | 153.8            | 0.25            | U               | 1.07              | U                 | 1.07              | U                 |
| 593-60-2    | Bromoethene                            | ug/m3       | 106.9            | 2.19            | 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                 |
| 67-64-1     | ACETONE                                | ug/m3       | 58.08            | 11.20           | U               | 1730.00           | DB                | 1020.00           | DB                |
| 67-66-3     | CHLOROFORM                             | ug/m3       | 119.4            | 2.44            | U               | 5.86              | J                 | 1.51              | U                 |
| 71-43-2     | BENZENE                                | ug/m3       | 78.11            | 1.60            |                 | 7.99              | J                 | 12.80             | J                 |
| 71-55-6     | 1,1,1-TRICHLOROETHANE                  | ug/m3       | 133.4            | 2.73            | U               | 300.00            |                   | 21.80             | J                 |
| 74-83-9     | BROMOMETHANE                           | ug/m3       | 94.94            | 1.94            | U               | 0.93              | U                 | 0.93              | U                 |
| 74-87-3     | CHLOROMETHANE                          | ug/m3       | 50.49            | 1.24            | J               | 0.52              | U                 | 0.52              | U                 |
| 75-00-3     | CHLOROETHANE                           | ug/m3       | 64.52            | 1.32            | 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                 |
| 75-09-2     | METHYLENE CHLORIDE                     | ug/m3       | 84.94            | 3.13            | J               | 14.20             | J                 | 4.52              | J                 |
| 75-15-0     | CARBON DISULFIDE                       | ug/m3       | 76.14            | 1.56            | U               | 0.47              | U                 | 0.47              | U                 |
| 75-25-2     | BROMOFORM                              | ug/m3       | 252.8            | 5.17            | U               | 1.55              | U                 | 1.55              | U                 |
| 75-27-4     | BROMODICHLOROMETHANE                   | ug/m3       | 163.8            | 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                 |
| 75-35-4     | 1,1-DICHLOROETHENE                     | ug/m3       | 96.94            | 1.98            | U               | 0.99              | U                 | 0.99              | U                 |
| 75-65-0     | tert-Butyl Alcohol                     | ug/m3       | 74.12            | 1.52            | U               | 5.76              | J                 | 4.55              | J                 |
| 75-69-4     | TRICHLOROFLUOROMETHANE                 | ug/m3       | 137.4            | 1.69            | J               | 61.80             |                   | 5.62              | J                 |
| 75-71-8     | DICHLORODIFLUOROMETHANE                | ug/m3       | 120.9            | 31.60           | J               | 7.42              | J                 | 6.43              | 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                 |
| 76-14-2     | 1,2-dichloro-1,1,2,2-tetrafluoroethane | ug/m3       | 170.9            | 3.49            | 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                 |
| 78-93-3     | 2-BUTANONE                             | ug/m3       | 72.11            | 2.65            | J               | 29.50             | B                 | 26.50             | B                 |
| 79-00-5     | 1,1,2-TRICHLOROETHANE                  | ug/m3       | 133.4            | 2.73            | U               | 2.40              | U                 | 2.40              | U                 |
| 79-01-6     | TRICHLOROETHENE                        | ug/m3       | 131.4            | 0.25            | U               | 2690.00           | D                 | 102.00            |                   |
| 79-34-5     | 1,1,2,2-TETRACHLOROETHANE              | ug/m3       | 167.9            | 3.43            | 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                 |
| 87-68-3     | HEXACHLOROBTADIENE                     | ug/m3       | 260.8            | 5.33            | U               | 36.30             | J                 | 39.50             | J                 |
| 95-47-6     | O-XYLENE                               | ug/m3       | 106.2            | 4.34            |                 | 31.30             |                   | 17.80             | J                 |
| 95-49-8     | 2-Chlorotoluene                        | ug/m3       | 126.58           | 2.59            | U               | 1.97              | U                 | 1.97              | U                 |
| 95-50-1     | 1,2-DICHLOROETHANE                     | ug/m3       | 147              | 3.01            | U               | 1.32              | U                 | 1.32              | U                 |
| 95-63-6     | 1,2,4-TRIMETHYLBENZENE                 | ug/m3       | 120.2            | 0.98            | J               | 29.50             |                   | 28.00             |                   |

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**

| Sample ID<br>Sample Date<br>Boring Location |                                        |             |                  | 130043B-DP03-SV08<br>03/11/2008<br>B-DP03 | 130043B-DP03-SV25<br>03/11/2008<br>B-DP03 | 130043B-DP03-SV45<br>03/11/2008<br>B-DP03 | 130043B-DP04-AA<br>03/12/2008<br>B-DP04 | 130043B-DP04-SV08<br>03/12/2008<br>B-DP04 |
|---------------------------------------------|----------------------------------------|-------------|------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|-------------------------------------------|
| Case Number                                 | Chemical Name                          | Result Unit | Molecular Weight |                                           |                                           |                                           |                                         |                                           |
| 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 UJ                                   | 2.64 UJ                                   | 0.26 UJ                                 | 2.13 U                                    |
| 10061-01-5                                  | cis-1,3-Dichloropropene                | ug/m3       | 111              | 2.27 U                                    | 2.27 U                                    | 2.27 U                                    | 0.23 U                                  | 2.27 U                                    |
| 10061-02-6                                  | trans-1,3-Dichloropropene              | ug/m3       | 111              | 2.59 U                                    | 2.59 U                                    | 2.59 U                                    | 0.26 U                                  | 2.27 U                                    |
| 106-46-7                                    | 1,4-Dichlorobenzene                    | ug/m3       | 147              | 1.50 U                                    | 1.50 U                                    | 1.50 U                                    | 0.15 U                                  | 3.01 U                                    |
| 106-93-4                                    | 1,2-Dibromoethane                      | ug/m3       | 187.9            | 9.99 U                                    | 9.99 U                                    | 9.99 U                                    | 1.00 U                                  | 3.84 U                                    |
| 106-99-0                                    | 1,3-Butadiene                          | ug/m3       | 54.09            | 0.80 U                                    | 0.80 U                                    | 0.80 U                                    | 0.08 U                                  | 1.11 U                                    |
| 107-05-1                                    | Allyl Chloride                         | ug/m3       | 76.53            | 1.91 U                                    | 1.91 U                                    | 1.91 U                                    | 0.63 J                                  | 1.57 U                                    |
| 107-06-2                                    | 1,2-Dichloroethane                     | ug/m3       | 98.96            | 2.02 U                                    | 2.02 U                                    | 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 U                                    | 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 UJ                                   | 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 U                                    | 1.20 U                                    | 0.46 J                                  | 2.30 U                                    |
| 109-99-9                                    | Tetrahydrofuran                        | ug/m3       | 154              | 5.29 U                                    | 5.29 U                                    | 8.82 J                                    | 0.53 U                                  | 8.19 J                                    |
| 110-54-3                                    | Hexane                                 | ug/m3       | 86.17            | 0.92 U                                    | 0.92 U                                    | 0.92 U                                    | 0.09 U                                  | 1.76 UJ                                   |
| 110-82-7                                    | CYCLOHEXANE                            | ug/m3       | 84.16            | 0.41 U                                    | 0.41 U                                    | 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 U                                    | 2.60 U                                    | 0.26 U                                  | 3.71 U                                    |
| 123-91-1                                    | 1,4-Dioxane                            | ug/m3       | 133              | 2.50 U                                    | 2.50 U                                    | 2.50 U                                    | 0.25 U                                  | 2.72 U                                    |
| 124-48-1                                    | Dibromochloromethane                   | ug/m3       | 208.3            | 2.22 U                                    | 2.22 U                                    | 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 J                                    | 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 U                                    | 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 J                                    | 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 U                                    | 1.17 U                                    | 0.47 J                                  | 2.34 U                                    |
| 541-73-1                                    | 1,3-DICHLOROETHANE                     | ug/m3       | 147              | 1.02 U                                    | 1.02 U                                    | 1.02 U                                    | 0.10 U                                  | 3.01 U                                    |
| 56-23-5                                     | CARBON TETRACHLORIDE                   | ug/m3       | 153.8            | 1.07 U                                    | 1.07 U                                    | 1.07 U                                    | 1.32                                    | 0.25 U                                    |
| 593-60-2                                    | Bromoethene                            | ug/m3       | 106.9            | 1.05 U                                    | 1.05 U                                    | 1.05 U                                    | 0.87 J                                  | 2.19 U                                    |
| 622-96-8                                    | 4-ETHYLTOLUENE                         | ug/m3       | 120.2            | 1.28 UJ                                   | 1.28 UJ                                   | 1.28 UJ                                   | 0.13 UJ                                 | 2.46 U                                    |
| 67-64-1                                     | ACETONE                                | ug/m3       | 58.08            | 2380.00 DB                                | 1620.00 DB                                | 92.60 B                                   | 7.13 U                                  | 333.00 JDB                                |
| 67-66-3                                     | CHLOROFORM                             | ug/m3       | 119.4            | 1.51 U                                    | 1.51 U                                    | 1.51 U                                    | 0.98 J                                  | 3.91 J                                    |
| 71-43-2                                     | BENZENE                                | ug/m3       | 78.11            | 1.41 U                                    | 7.67 J                                    | 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 U                                    | 0.93 U                                    | 0.78 J                                  | 1.94 U                                    |
| 74-87-3                                     | CHLOROMETHANE                          | ug/m3       | 50.49            | 0.52 U                                    | 0.52 U                                    | 22.70                                     | 1.65                                    | 1.03 U                                    |
| 75-00-3                                     | CHLOROETHANE                           | ug/m3       | 64.52            | 0.45 U                                    | 0.45 U                                    | 0.45 U                                    | 0.53 J                                  | 1.32 U                                    |
| 75-01-4                                     | VINYL CHLORIDE                         | ug/m3       | 62.5             | 0.61 U                                    | 0.61 U                                    | 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 U                                    | 0.47 U                                    | 0.31 J                                  | 6.23 J                                    |
| 75-25-2                                     | BROMOFORM                              | ug/m3       | 252.8            | 1.55 U                                    | 1.55 U                                    | 1.55 U                                    | 0.16 U                                  | 5.17 U                                    |
| 75-27-4                                     | BROMODICHLOROMETHANE                   | ug/m3       | 163.8            | 3.35 U                                    | 3.35 U                                    | 3.35 U                                    | 0.67 J                                  | 3.35 U                                    |
| 75-34-3                                     | 1,1-DICHLOROETHANE                     | ug/m3       | 98.96            | 0.97 U                                    | 0.97 U                                    | 0.97 U                                    | 0.81 J                                  | 4.86 J                                    |
| 75-35-4                                     | 1,1-DICHLOROETHENE                     | ug/m3       | 96.94            | 0.99 U                                    | 0.99 U                                    | 0.99 U                                    | 0.40 J                                  | 6.74 J                                    |
| 75-65-0                                     | tert-Butyl Alcohol                     | ug/m3       | 74.12            | 3.33 J                                    | 7.58 J                                    | 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 J                                    | 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 U                                    | 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 U                                    | 1.54 U                                    | 1.40 J                                  | 3.49 U                                    |
| 78-87-5                                     | 1,2-DICHLOROPROPANE                    | ug/m3       | 113              | 2.22 U                                    | 2.22 U                                    | 2.22 U                                    | 0.46 J                                  | 2.31 U                                    |
| 78-93-3                                     | 2-BUTANONE                             | ug/m3       | 72.11            | 18.00 B                                   | 28.90 B                                   | 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 U                                    | 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 U                                    | 1.65 U                                    | 0.69 J                                  | 3.43 U                                    |
| 80-62-6                                     | Methyl Methacrylate                    | ug/m3       | 100.117          | 2.58 U                                    | 2.58 U                                    | 2.58 U                                    | 0.26 U                                  | 2.05 U                                    |
| 87-68-3                                     | HEXACHLOROBUTADIENE                    | ug/m3       | 260.8            | 34.10 J                                   | 2.35 U                                    | 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 UJ                                   | 1.97 UJ                                   | 0.20 U                                  | 2.59 U                                    |
| 95-50-1                                     | 1,2-DICHLOROETHANE                     | ug/m3       | 147              | 1.32 U                                    | 1.32 U                                    | 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 U                                    | 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 Push ID - Identification  
N - presumptive evidence of a compound

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

|             |                                     |             | Sample ID        | 130043B-DP04-SV25 | 130043B-DP04-SV45 | 130043B-DP05-SV08 | 130043B-DP05-SV25 | 130043B-DP05-SV45 |
|-------------|-------------------------------------|-------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|             |                                     |             | Sample Date      | 03/12/2008        | 03/12/2008        | 03/1/2008         | 03/11/2008        | 03/11/2008        |
|             |                                     |             | Boring Location  | B-DP04            | B-DP04            | A-DP05            | B-DP05            | B-DP05            |
| Case Number | Chemical Name                       | Result Unit | Molecular Weight |                   |                   |                   |                   |                   |
| 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-DICHLOROBENZENE                 | 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            |
| 67-64-1     | 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-trifluoroetha | 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-tetrafluoroeth | 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           |
| 87-68-3     | HEXACHLOROBTADIENE                  | 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-DICHLOROBENZENE                 | 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 Push ID - Identification  
N - presumptive evidence of a compound

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

| Sample ID<br>Sample Date<br>Boring Location |                                        |             |                  | 130043C-DP01-SV08<br>03/21/2008<br>C-DP01 | 130043C-DP01-SV25<br>03/21/2008<br>C-DP01 | 130043C-DP01-SV45<br>03/21/2008<br>C-DP01 | 130043C-DP02-SV08<br>03/21/2008<br>C-DP02 | 130043C-DP02-SV25<br>03/21/2008<br>C-DP02 |
|---------------------------------------------|----------------------------------------|-------------|------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| Case Number                                 | Chemical Name                          | Result Unit | Molecular Weight |                                           |                                           |                                           |                                           |                                           |
| 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                                     | 45.20                                     | 52.80                                     | 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                                     | 52.10                                     | 39.10 J                                   | 32.60 J                                   |
| 127-18-4                                    | Tetrachloroethene                      | ug/m3       | 165.8            | 129.00 J                                  | 149.00                                    | 163.00                                    | 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                                     | 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                                     | 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                                   | 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                                    | 371.00                                    |
| 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                                     | 21.20 J                                   | 91.40                                     | 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-DICHLOROBENZENE                    | 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 Push ID - Identification

N - presumptive evidence of a compound



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

| Sample ID<br>Sample Date<br>Boring Location |                                        |             |                  | 130043C-DP02-SV45<br>03/21/2008<br>C-DP02 | 130043C-DP03-AA<br>03/21/2008<br>C-DP03 | 130043C-DP03-SV08<br>03/21/2008<br>C-DP03 | 130043C-DP03-SV25<br>03/21/2008<br>C-DP03 | 130043C-DP03-SV45<br>03/21/2008<br>C-DP03 |
|---------------------------------------------|----------------------------------------|-------------|------------------|-------------------------------------------|-----------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| Case Number                                 | Chemical Name                          | Result Unit | Molecular Weight |                                           |                                         |                                           |                                           |                                           |
| 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 U                                  | 322.00 J                                  | 349.00 U                                  |
| 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 Push ID - Identification

N - presumptive evidence of a compound

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

| Sample ID<br>Sample Date<br>Boring Location |                                        |             |                  | 130043C-DP04-SD08<br>03/20/2008<br>C-DP04 | 130043C-DP04-SV08<br>03/20/2008<br>C-DP04 | 130043C-DP04-SV25<br>03/20/2008<br>C-DP04 | 130043C-DP04-SV45<br>03/20/2008<br>F-DP04 | 130043C-DP05-AA<br>03/20/2008<br>C-DP05 |
|---------------------------------------------|----------------------------------------|-------------|------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|
| Case Number                                 | Chemical Name                          | Result Unit | Molecular Weight |                                           |                                           |                                           |                                           |                                         |
| 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                                    | Allyl 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            | 12200.0 D                                 | 13600.0 JD                                | 2.71 J                                    | 2640.0 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            | 2560.0 D                                  | 2780.0 D                                  | 153.00 D                                  | 1640.0 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 U                                   | 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                                  |
| 87-88-3                                     | 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**

| Sample ID<br>Sample Date<br>Boring Location |                                        |             |                  | 130043C-DP05-SV08<br>03/20/2008<br>C-DP05 | 130043C-DP05-SV25<br>03/20/2008<br>C-DP05 | 130043F-DP01-SV08<br>03/04/2008<br>F-DP01 | 130043F-DP01-SV25<br>03/04/2008<br>F-DP01 | 130043F-DP01-SV45<br>03/04/2008<br>F-DP01 |
|---------------------------------------------|----------------------------------------|-------------|------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| Case Number                                 | Chemical Name                          | Result Unit | Molecular Weight |                                           |                                           |                                           |                                           |                                           |
| 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-DICHLOROBENZENE                    | 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                                    | 28.40 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-DICHLOROBENZENE                    | 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 Push ID - Identification  
N - presumptive evidence of a compound



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

| Sample ID<br>Sample Date<br>Boring Location |                                        |             |                  | 130043F-DP02-AA<br>03/04/2008<br>F-DP02 | 130043F-DP02-SV08<br>03/04/2008<br>F-DP02 | 130043F-DP02-SV25<br>03/04/2008<br>F-DP02 | 130043F-DP02-SV45<br>03/04/2008<br>F-DP02 | 130043F-DP03-SD08<br>03/07/2008<br>F-DP03 |
|---------------------------------------------|----------------------------------------|-------------|------------------|-----------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| Case Number                                 | Chemical Name                          | Result Unit | Molecular Weight |                                         |                                           |                                           |                                           |                                           |
| 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                                    | 60.30                                     | 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                                    | 78.20                                     | 69.50 J                                   | 122.00 J                                  | 21.70 U                                   |
| 127-18-4                                    | Tetrachloroethene                      | ug/m3       | 165.8            | 3.39                                    | 108.00                                    | 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                                    | 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                                    | 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                                    | 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                                    | 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                                      | 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**

| Sample ID<br>Sample Date<br>Boring Location |                                        |             |                  | 130043F-DP03-SV08<br>03/07/2008<br>F-DP03 | 130043F-DP03-SV25<br>03/07/2008<br>F-DP03 | 130043F-DP03-SV45<br>03/07/2008<br>F-DP03 | 130043F-DP04-AA<br>03/07/2008<br>F-DP04 | 130043F-DP04-SV08<br>03/07/2008<br>F-DP04 |
|---------------------------------------------|----------------------------------------|-------------|------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|-------------------------------------------|
| Case Number                                 | Chemical Name                          | Result Unit | Molecular Weight |                                           |                                           |                                           |                                         |                                           |
| 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                                     | 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-DICHLOROBENZENE                    | 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-DICHLOROBENZENE                    | 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 Push ID - Identification

N - presumptive evidence of a compound

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

| Sample ID<br>Sample Date<br>Boring Location |                                        |             |                  | 130043F-DP04-SV25<br>03/07/2008<br>F-DP04 | 130043F-DP04-SV45<br>03/07/2008<br>F-DP04 | 130043F-DP05-SV08<br>03/07/2008<br>F-DP05 | 130043F-DP05-SV25<br>03/07/2008<br>F-DP05 | 130043F-DP05-SV45<br>03/07/2008<br>F-DP05 |
|---------------------------------------------|----------------------------------------|-------------|------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| Case Number                                 | Chemical Name                          | Result Unit | Molecular Weight |                                           |                                           |                                           |                                           |                                           |
| 100-41-4                                    | Ethylbenzene                           | ug/m3       | 106.2            | 10.40 J                                   | 11.70 J                                   | 9.99 J                                    | 9.56 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                                   | 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                                   | 24.60 U                                   |
| 108-88-3                                    | Toluene                                | ug/m3       | 92.14            | 34.30 U                                   | 45.20 U                                   | 36.90 U                                   | 41.50 U                                   | 49.00 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              | 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            | 47.80 U                                   | 52.10 U                                   | 52.10 U                                   | 43.40 U                                   | 43.40 U                                   |
| 127-18-4                                    | Tetrachloroethene                      | ug/m3       | 165.8            | 746.00 U                                  | 1080.00 U                                 | 163.00 U                                  | 407.00 U                                  | 549.00 U                                  |
| 142-82-5                                    | n-Heptane                              | ug/m3       | 100.2            | 20.50 U                                   | 4.92 J                                    | 20.50 U                                   | 4.51 J                                    | 8.20 J                                    |
| 156-59-2                                    | CIS-1,2-DICHLOROETHENE                 | ug/m3       | 96.94            | 6.74 J                                    | 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                                   | 23.40 U                                   | 23.40 U                                   | 23.40 U                                   | 23.40 U                                   |
| 541-73-1                                    | 1,3-DICHLOROETHANE                     | 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            | 4.92 J                                    | 5.41 J                                    | 4.92 J                                    | 24.60 U                                   | 24.60 U                                   |
| 67-64-1                                     | ACETONE                                | ug/m3       | 58.08            | 451.00 B                                  | 475.00 B                                  | 285.00 B                                  | 181.00 B                                  | 356.00 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            | 4.15 J                                    | 5.11 J                                    | 4.47 J                                    | 5.75 J                                    | 8.31 J                                    |
| 71-55-6                                     | 1,1,1-TRICHLOROETHANE                  | ug/m3       | 133.4            | 24.60 J                                   | 22.90 J                                   | 27.30 U                                   | 12.50 J                                   | 28.40 U                                   |
| 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            | 87.10 U                                   | 13.20 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                                   | 12.80 U                                   |
| 75-09-2                                     | METHYLENE CHLORIDE                     | ug/m3       | 84.94            | 4.52 J                                    | 17.40 UJ                                  | 17.40 UJ                                  | 17.40 UJ                                  | 4.52 J                                    |
| 75-15-0                                     | CARBON DISULFIDE                       | ug/m3       | 76.14            | 15.60 U                                   | 15.60 U                                   | 8.10 J                                    | 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            | 23.50 U                                   | 20.20 U                                   | 20.20 U                                   | 20.20 U                                   | 6.88 J                                    |
| 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                                   | 3.94 J                                    | 15.20 U                                   | 15.20 U                                   | 15.20 U                                   |
| 75-69-4                                     | TRICHLOROFLUOROMETHANE                 | ug/m3       | 137.4            | 29.80 U                                   | 50.60 U                                   | 6.74 J                                    | 15.20 J                                   | 36.50 U                                   |
| 75-71-8                                     | DICHLORODIFLUOROMETHANE                | ug/m3       | 120.9            | 18.80 J                                   | 14.80 J                                   | 24.70 UJ                                  | 8.90 J                                    | 9.89 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                                   | 15.30 J                                   |
| 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            | 8.26 J                                    | 21.80 U                                   | 9.44 J                                    | 11.20 J                                   | 23.60 U                                   |
| 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            | 96.70 U                                   | 145.00 U                                  | 2.47 U                                    | 17.20 U                                   | 33.30 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                                     | HEXACHLOROBTADIENE                     | ug/m3       | 260.8            | 23.50 J                                   | 23.50 J                                   | 21.30 J                                   | 53.30 U                                   | 53.30 U                                   |
| 95-47-6                                     | O-XYLENE                               | ug/m3       | 106.2            | 12.60 J                                   | 13.90 J                                   | 13.00 J                                   | 10.90 J                                   | 9.99 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-DICHLOROETHANE                     | 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**

| Sample ID<br>Sample Date<br>Boring Location |                                        |             |                  | 130043K-DP01-SV08<br>03/04/2008<br>K-DP01 | 130043K-DP01-SV08<br>03/04/2008<br>K-DP01 | 130043K-DP01-SV25<br>03/04/2008<br>K-DP01 | 130043K-DP01-SV45<br>03/04/2008<br>K-DP01 | 130043K-DP02-SV08<br>03/05/2008<br>K-DP02 |
|---------------------------------------------|----------------------------------------|-------------|------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| Case Number                                 | Chemical Name                          | Result Unit | Molecular Weight |                                           |                                           |                                           |                                           |                                           |
| 100-41-4                                    | Ethylbenzene                           | ug/m3       | 106.2            | 13.50 U                                   | 11.70 J                                   | 17.40 J                                   | 20.00 U                                   | 2.61 U                                    |
| 100-42-5                                    | Styrene                                | ug/m3       | 104.1            | 21.30 U                                   | 21.30 U                                   | 21.30 U                                   | 21.30 U                                   | 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                                   | 20.50 U                                   | 2.05 U                                    |
| 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 J                                    |
| 108-88-3                                    | Toluene                                | ug/m3       | 92.14            | 36.60 J                                   | 30.50 J                                   | 56.50 J                                   | 56.50 J                                   | 4.52 J                                    |
| 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              | 31.50 U                                   | 31.50 U                                   | 31.50 U                                   | 31.50 U                                   | 3.15 U                                    |
| 110-54-3                                    | Hexane                                 | ug/m3       | 86.17            | 30.70 J                                   | 25.40 J                                   | 17.60 U                                   | 17.60 U                                   | 1.76 U                                    |
| 110-82-7                                    | CYCLOHEXANE                            | ug/m3       | 84.16            | 7.92 J                                    | 8.26 J                                    | 7.23 J                                    | 5.85 J                                    | 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            | 38.70 J                                   | 34.30 J                                   | 43.40 J                                   | 52.10 J                                   | 7.38 J                                    |
| 127-18-4                                    | Tetrachloroethene                      | ug/m3       | 165.8            | 88.20 J                                   | 74.60 J                                   | 170.00 J                                  | 292.00 J                                  | 21.00 J                                   |
| 142-82-5                                    | n-Heptane                              | ug/m3       | 100.2            | 27.90 J                                   | 29.90 J                                   | 32.40 J                                   | 30.70 J                                   | 1.23 J                                    |
| 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 U                                    |
| 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 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            | 10.30 J                                   | 8.41 J                                    | 7.01 J                                    | 23.40 U                                   | 2.34 U                                    |
| 541-73-1                                    | 1,3-DICHLOROBENZENE                    | 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                                    | 0.25 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            | 2.95 J                                    | 24.60 U                                   | 24.60 U                                   | 24.60 U                                   | 0.98 J                                    |
| 67-64-1                                     | ACETONE                                | ug/m3       | 58.08            | 356.00 J                                  | 333.00 J                                  | 831.00 JD                                 | 1540.00 JD                                | 1310.00 JD                                |
| 67-66-3                                     | CHLOROFORM                             | ug/m3       | 119.4            | 24.40 U                                   | 24.40 U                                   | 24.40 U                                   | 24.40 U                                   | 2.44 U                                    |
| 71-43-2                                     | BENZENE                                | ug/m3       | 78.11            | 6.71 J                                    | 5.75 J                                    | 10.50 J                                   | 8.63 J                                    | 0.64 J                                    |
| 71-55-6                                     | 1,1,1-TRICHLOROETHANE                  | ug/m3       | 133.4            | 13.60 J                                   | 13.60 J                                   | 37.60 J                                   | 60.00 J                                   | 8.18 J                                    |
| 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                                   | 1.03 U                                    |
| 75-00-3                                     | CHLOROETHANE                           | ug/m3       | 64.52            | 13.20 U                                   | 13.20 U                                   | 13.20 U                                   | 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            | 4.17 J                                    | 4.86 J                                    | 5.21 J                                    | 4.17 J                                    | 1.74 U                                    |
| 75-15-0                                     | CARBON DISULFIDE                       | ug/m3       | 76.14            | 4.36 J                                    | 3.74 J                                    | 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                                   | 20.20 U                                   | 20.20 U                                   | 15.80 J                                   | 1.62 J                                    |
| 75-35-4                                     | 1,1-DICHLOROETHENE                     | ug/m3       | 96.94            | 19.80 U                                   | 19.80 U                                   | 19.80 U                                   | 19.80 U                                   | 1.98 U                                    |
| 75-65-0                                     | tert-Butyl Alcohol                     | ug/m3       | 74.12            | 15.20 U                                   | 15.20 U                                   | 6.67 J                                    | 7.88 J                                    | 0.30 J                                    |
| 75-69-4                                     | TRICHLOROFLUOROMETHANE                 | ug/m3       | 137.4            | 5.62 J                                    | 5.62 J                                    | 16.30 J                                   | 37.70 J                                   | 1.12 J                                    |
| 75-71-8                                     | DICHLORODIFLUOROMETHANE                | ug/m3       | 120.9            | 3.96 J                                    | 24.70 U                                   | 4.94 J                                    | 8.41 J                                    | 2.47 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                                   | 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            | 13.90 J                                   | 11.20 J                                   | 5.31 J                                    | 7.67 J                                    | 1.47 J                                    |
| 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            | 5.91 J                                    | 5.91 J                                    | 22.00 J                                   | 50.50 J                                   | 6.99 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                                   | 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            | 9.56 J                                    | 8.69 J                                    | 9.99 J                                    | 10.90 J                                   | 1.74 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-DICHLOROBENZENE                    | 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            | 8.36 J                                    | 6.88 J                                    | 10.80 J                                   | 13.30 J                                   | 2.46 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**

| Sample ID<br>Sample Date<br>Boring Location |                                        |             |                  | 130043K-DP02-SV25<br>03/05/2008<br>K-DP02 | 130043K-DP02-SV45<br>03/05/2008<br>K-DP02 | 130043K-DP03-AA<br>03/05/2008<br>K-DP03 | 130043K-DP03-SV08<br>03/05/2008<br>K-DP03 | 130043K-DP03-SV25<br>03/05/2008<br>K-DP03 |
|---------------------------------------------|----------------------------------------|-------------|------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|-------------------------------------------|-------------------------------------------|
| Case Number                                 | Chemical Name                          | Result Unit | Molecular Weight |                                           |                                           |                                         |                                           |                                           |
| 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                                     | 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                                   | 39.60 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 Push ID - Identification  
N - presumptive evidence of a compound

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

|             |                                        | Sample ID<br>Sample Date<br>Boring Location |                  | 130043K-DP03-SV45<br>03/05/2008<br>K-DP03 | 130043K-DP04-SV08<br>03/06/2008<br>K-DP04 | 130043K-DP04-SV25<br>03/06/2008<br>K-DP04 | 130043K-DP04-SV45<br>03/06/2008<br>K-DP04 | 130043K-DP05-AA<br>03/06/2008<br>K-DP05 |
|-------------|----------------------------------------|---------------------------------------------|------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|
| Case Number | Chemical Name                          | Result Unit                                 | Molecular Weight |                                           |                                           |                                           |                                           |                                         |
| 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 U                                   | 29.00 J                                   | 2.26 U                                  |
| 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 U                                   | 36.50 U                                   | 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 U                                   | 43.40 J                                   | 0.87 J                                  |
| 127-18-4    | Tetrachloroethene                      | ug/m3                                       | 165.8            | 359.00 U                                  | 102.00 U                                  | 244.00 U                                  | 373.00 J                                  | 3.39 U                                  |
| 142-82-5    | n-Heptane                              | ug/m3                                       | 100.2            | 9.84 J                                    | 4.51 J                                    | 16.80 U                                   | 11.50 J                                   | 2.46 U                                  |
| 156-59-2    | CIS-1,2-DICHLOROETHENE                 | ug/m3                                       | 96.94            | 18.20 J                                   | 19.80 U                                   | 7.93 U                                    | 39.30 U                                   | 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 U                                  | 11.40 U                                 |
| 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 U                                   | 104.00 U                                  | 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 U                                   | 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 U                                   | 42.70 U                                   | 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 U                                  |
| 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 U                                   | 80.60 U                                   | 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 Push ID - Identification  
N - presumptive evidence of a compound



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

| Sample ID<br>Sample Date<br>Boring Location |                                        |             |                  | 130043K-DP05-SV08<br>03/06/2008<br>K-DP05 | 130043K-DP05-SV25<br>03/06/2008<br>K-DP05 | 130043K-DP05-SV45<br>03/06/2008<br>K-DP05 | 130043N-DP01-SV08<br>03/25/2008<br>N-DP01 | 130043N-DP01-SV25<br>03/25/2008<br>N-DP01 |
|---------------------------------------------|----------------------------------------|-------------|------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| Case Number                                 | Chemical Name                          | Result Unit | Molecular Weight |                                           |                                           |                                           |                                           |                                           |
| 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 Push ID - Identification  
N - presumptive evidence of a compound

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

| Sample ID<br>Sample Date<br>Boring Location |                                     |             |                  | 130043N-DP01-SV45<br>03/25/2008<br>N-DP01 | 130043N-DP02-AA<br>03/25/2008<br>N-DP02 | 130043N-DP02-SV08<br>03/25/2008<br>N-DP02 | 130043N-DP02-SV25<br>03/25/2008<br>N-DP02 | 130043N-DP02-SV45<br>03/25/2008<br>N-DP02 |
|---------------------------------------------|-------------------------------------|-------------|------------------|-------------------------------------------|-----------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| Case Number                                 | Chemical Name                       | Result Unit | Molecular Weight |                                           |                                         |                                           |                                           |                                           |
| 100-41-4                                    | Ethylbenzene                        | ug/m3       | 106.2            | 6.08 J                                    | 2.17 U                                  | 2.17 U                                    | 6.08 J                                    | 6.95 J                                    |
| 100-42-5                                    | Styrene                             | ug/m3       | 104.1            | 21.30 U                                   | 2.13 U                                  | 2.13 U                                    | 21.30 UJ                                  | 21.30 U                                   |
| 10061-01-5                                  | cis-1,3-Dichloropropene             | ug/m3       | 111              | 22.70 U                                   | 2.27 U                                  | 2.27 U                                    | 22.70 UJ                                  | 22.70 U                                   |
| 10061-02-6                                  | trans-1,3-Dichloropropene           | ug/m3       | 111              | 22.70 U                                   | 2.27 U                                  | 2.27 U                                    | 22.70 UJ                                  | 22.70 U                                   |
| 106-46-7                                    | 1,4-Dichlorobenzene                 | ug/m3       | 147              | 30.10 U                                   | 3.01 U                                  | 3.01 U                                    | 30.10 UJ                                  | 30.10 U                                   |
| 106-93-4                                    | 1,2-Dibromoethane                   | ug/m3       | 187.9            | 38.40 U                                   | 3.84 U                                  | 3.84 U                                    | 38.40 UJ                                  | 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                                   | 11.10 U                                   |
| 107-05-1                                    | Allyl Chloride                      | ug/m3       | 76.53            | 15.70 U                                   | 1.57 U                                  | 1.57 U                                    | 15.70 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 UJ                                  | 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 UJ                                  | 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 UJ                                  | 24.60 U                                   |
| 108-88-3                                    | Toluene                             | ug/m3       | 92.14            | 21.10                                     | 1.88 U                                  | 2.64                                      | 13.20 J                                   | 22.20                                     |
| 108-90-7                                    | Chlorobenzene                       | ug/m3       | 112.6            | 23.00 U                                   | 2.30 U                                  | 2.30 U                                    | 23.00 UJ                                  | 23.00 U                                   |
| 109-99-9                                    | Tetrahydrofuran                     | ug/m3       | 154              | 23.90 J                                   | 3.15 U                                  | 3.15 U                                    | 29.00 J                                   | 40.30                                     |
| 110-54-3                                    | Hexane                              | ug/m3       | 86.17            | 17.60 U                                   | 1.76 U                                  | 1.76 U                                    | 17.60 U                                   | 17.60 U                                   |
| 110-82-7                                    | CYCLOHEXANE                         | ug/m3       | 84.16            | 17.20 U                                   | 1.72 U                                  | 1.72 U                                    | 17.20 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 UJ                                  | 37.10 U                                   |
| 123-91-1                                    | 1,4-Dioxane                         | ug/m3       | 133              | 27.20 U                                   | 2.72 U                                  | 2.72 U                                    | 27.20 UJ                                  | 27.20 U                                   |
| 124-48-1                                    | Dibromochloromethane                | ug/m3       | 208.3            | 42.60 U                                   | 4.26 U                                  | 4.26 U                                    | 42.60 UJ                                  | 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                                   | 17.40 J                                   |
| 127-18-4                                    | Tetrachloroethene                   | ug/m3       | 165.8            | 2.71 U                                    | 0.00 U                                  | 0.00 U                                    | 22.40 J                                   | 156.00                                    |
| 142-82-5                                    | n-Heptane                           | ug/m3       | 100.2            | 20.90                                     | 2.05 U                                  | 2.05 U                                    | 6.15 J                                    | 13.90 J                                   |
| 156-59-2                                    | CIS-1,2-DICHLOROETHENE              | ug/m3       | 96.94            | 19.80 U                                   | 1.98 U                                  | 1.98 U                                    | 19.80 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                                   | 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                                   | 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 UJ                                  | 23.40 U                                   |
| 541-73-1                                    | 1,3-DICHLOROBENZENE                 | ug/m3       | 147              | 30.10 U                                   | 3.01 U                                  | 3.01 U                                    | 30.10 UJ                                  | 30.10 U                                   |
| 56-23-5                                     | CARBON TETRACHLORIDE                | ug/m3       | 153.8            | 2.52 U                                    | 0.25 U                                  | 0.44                                      | 2.52 UJ                                   | 2.52 U                                    |
| 593-60-2                                    | Bromoethene                         | ug/m3       | 106.9            | 21.90 U                                   | 2.19 U                                  | 2.19 U                                    | 21.90 U                                   | 21.90 U                                   |
| 622-96-8                                    | 4-ETHYLTOLUENE                      | ug/m3       | 120.2            | 24.60 U                                   | 2.46 U                                  | 2.46 U                                    | 24.60 UJ                                  | 24.60 U                                   |
| 67-64-1                                     | ACETONE                             | ug/m3       | 58.08            | 285.00 B                                  | 1.43 U                                  | 5.46 U                                    | 235.00 B                                  | 285.00 B                                  |
| 67-66-3                                     | CHLOROFORM                          | ug/m3       | 119.4            | 24.40 U                                   | 2.44 U                                  | 2.44 U                                    | 24.40 U                                   | 24.40 U                                   |
| 71-43-2                                     | BENZENE                             | ug/m3       | 78.11            | 19.20                                     | 1.60 U                                  | 0.64 J                                    | 4.15 J                                    | 13.40 J                                   |
| 71-55-6                                     | 1,1,1-TRICHLOROETHANE               | ug/m3       | 133.4            | 27.30 U                                   | 2.73 U                                  | 2.73 U                                    | 196.00                                    | 3820.00 D                                 |
| 74-83-9                                     | BROMOMETHANE                        | ug/m3       | 94.94            | 19.40 U                                   | 1.94 U                                  | 1.94 U                                    | 19.40 U                                   | 19.40 U                                   |
| 74-87-3                                     | CHLOROMETHANE                       | ug/m3       | 50.49            | 10.30 U                                   | 1.03 U                                  | 3.30                                      | 10.30 U                                   | 10.30 U                                   |
| 75-00-3                                     | CHLOROETHANE                        | ug/m3       | 64.52            | 13.20 U                                   | 1.32 U                                  | 1.32 U                                    | 13.20 U                                   | 13.20 U                                   |
| 75-01-4                                     | VINYL CHLORIDE                      | ug/m3       | 62.5             | 12.80 U                                   | 1.28 U                                  | 1.28 U                                    | 12.80 U                                   | 12.80 U                                   |
| 75-09-2                                     | METHYLENE CHLORIDE                  | ug/m3       | 84.94            | 7.99 J                                    | 1.74 U                                  | 2.78                                      | 5.91 J                                    | 11.10 J                                   |
| 75-15-0                                     | CARBON DISULFIDE                    | ug/m3       | 76.14            | 15.60 U                                   | 1.56 U                                  | 1.56 U                                    | 15.60 U                                   | 15.60 U                                   |
| 75-25-2                                     | BROMOFORM                           | ug/m3       | 252.8            | 51.70 U                                   | 5.17 UJ                                 | 5.17 UJ                                   | 51.70 UJ                                  | 51.70 UJ                                  |
| 75-27-4                                     | BROMODICHLOROMETHANE                | ug/m3       | 163.8            | 33.50 U                                   | 3.35 U                                  | 3.35 U                                    | 33.50 UJ                                  | 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                                   | 21.90                                     |
| 75-35-4                                     | 1,1-DICHLOROETHENE                  | ug/m3       | 96.94            | 19.80 U                                   | 1.98 U                                  | 1.98 U                                    | 19.80 U                                   | 25.40                                     |
| 75-65-0                                     | tert-Butyl Alcohol                  | ug/m3       | 74.12            | 15.20 U                                   | 1.52 U                                  | 1.52 U                                    | 7.28 J                                    | 15.20 U                                   |
| 75-69-4                                     | TRICHLOROFLUOROMETHANE              | ug/m3       | 137.4            | 48.90                                     | 2.81 U                                  | 2.81 U                                    | 28.10 U                                   | 28.10 U                                   |
| 75-71-8                                     | DICHLORODIFLUOROMETHANE             | ug/m3       | 120.9            | 24.70 U                                   | 2.47 U                                  | 2.47 J                                    | 24.70 U                                   | 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                                   | 18.40 J                                   |
| 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                                   | 34.90 U                                   |
| 78-87-5                                     | 1,2-DICHLOROPROPANE                 | ug/m3       | 113              | 23.10 U                                   | 2.31 U                                  | 2.31 U                                    | 23.10 UJ                                  | 23.10 U                                   |
| 78-93-3                                     | 2-BUTANONE                          | ug/m3       | 72.11            | 413.00 J                                  | 1.47 U                                  | 1.18 J                                    | 283.00 D                                  | 354.00                                    |
| 79-00-5                                     | 1,1,2-TRICHLOROETHANE               | ug/m3       | 133.4            | 27.30 U                                   | 2.73 U                                  | 2.73 U                                    | 27.30 UJ                                  | 27.30 U                                   |
| 79-01-6                                     | TRICHLOROETHENE                     | ug/m3       | 131.4            | 2.47 U                                    | 0.25 U                                  | 0.25 U                                    | 17.70 J                                   | 118.00                                    |
| 79-34-5                                     | 1,1,2,2-TETRACHLOROETHANE           | ug/m3       | 167.9            | 34.30 U                                   | 3.43 U                                  | 3.43 U                                    | 34.30 UJ                                  | 34.30 U                                   |
| 80-62-6                                     | Methyl Methacrylate                 | ug/m3       | 100.117          | 20.50 U                                   | 2.05 U                                  | 2.05 U                                    | 20.50 UJ                                  | 20.50 U                                   |
| 87-68-3                                     | HEXACHLOROBTADIENE                  | ug/m3       | 260.8            | 53.30 U                                   | 5.33 U                                  | 5.33 U                                    | 53.30 UJ                                  | 53.30 U                                   |
| 95-47-6                                     | O-XYLENE                            | ug/m3       | 106.2            | 4.34 J                                    | 2.17 U                                  | 2.17 U                                    | 4.34 J                                    | 4.78 J                                    |
| 95-49-8                                     | 2-Chlorotoluene                     | ug/m3       | 126.58           | 25.90 U                                   | 2.59 U                                  | 2.59 U                                    | 25.90 UJ                                  | 25.90 U                                   |
| 95-50-1                                     | 1,2-DICHLOROBENZENE                 | ug/m3       | 147              | 30.10 U                                   | 3.01 U                                  | 3.01 U                                    | 30.10 UJ                                  | 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 UJ                                  | 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**

|             |                                        |             | Sample ID        | 130043N-DP03-SV08 | 130043N-DP03-SV25 | 130043N-DP03-SV45 | 130043N-DP04-SD45 | 130043N-DP04-SV08 |
|-------------|----------------------------------------|-------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|             |                                        |             | Sample Date      | 03/25/2008        | 03/25/2008        | 03/25/2008        | 03/25/2008        | 03/25/2008        |
|             |                                        |             | Boring Location  | N-DP03            | N-DP03            | N-DP03            | N-DP04            | N-DP04            |
| Case Number | Chemical Name                          | Result Unit | Molecular Weight |                   |                   |                   |                   |                   |
| 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 U          | 2350.00 D         | 175.00 U          | 60.00 U           |
| 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 U           |
| 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 U           | 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-DICHLOROBENZENE                    | 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<br>N-DP04 | 03/25/2008<br>N-DP04 | 03/24/2008<br>N-DP05 | 03/24/2008<br>N-DP05 | 03/24/2008<br>N-DP05 |
| 100-41-4    | Ethylbenzene                           | ug/m3       | 106.2            |           |             |                 | 21.70 U              | 12.20 J              | 0.08 U               | 10.40                | 11.70                |
| 100-42-5    | Styrene                                | ug/m3       | 104.1            |           |             |                 | 21.30 U              | 21.30 U              | 0.26 U               | 2.64 U               | 2.64 U               |
| 10061-01-5  | cis-1,3-Dichloropropene                | ug/m3       | 111              |           |             |                 | 22.70 U              | 22.70 U              | 0.23 U               | 2.27 U               | 2.27 U               |
| 10061-02-6  | trans-1,3-Dichloropropene              | ug/m3       | 111              |           |             |                 | 22.70 U              | 22.70 U              | 0.26 U               | 2.59 U               | 2.59 U               |
| 106-46-7    | 1,4-Dichlorobenzene                    | ug/m3       | 147              |           |             |                 | 30.10 U              | 30.10 U              | 0.15 U               | 1.50 UJ              | 1.50 U               |
| 106-93-4    | 1,2-Dibromoethane                      | ug/m3       | 187.9            |           |             |                 | 38.40 U              | 38.40 U              | 1.00 U               | 9.99 U               | 9.99 U               |
| 106-99-0    | 1,3-Butadiene                          | ug/m3       | 54.09            |           |             |                 | 11.10 U              | 11.10 U              | 0.08 U               | 0.80 U               | 0.80 U               |
| 107-05-1    | Allyl Chloride                         | ug/m3       | 76.53            |           |             |                 | 15.70 U              | 15.70 U              | 0.19 U               | 1.91 U               | 1.91 U               |
| 107-06-2    | 1,2-Dichloroethane                     | ug/m3       | 98.96            |           |             |                 | 20.20 U              | 20.20 U              | 0.20 U               | 2.02 U               | 2.02 U               |
| 108-10-1    | 4-Methyl-2-Pentanone                   | ug/m3       | 100.2            |           |             |                 | 20.50 U              | 20.50 U              | 0.82 J               | 4.51                 | 2.05 UJ              |
| 108-67-8    | 1,3,5-Trimethylbenzene                 | ug/m3       | 120.2            |           |             |                 | 24.60 U              | 24.60 U              | 0.17 U               | 1.72 UJ              | 1.72 U               |
| 108-88-3    | Toluene                                | ug/m3       | 92.14            |           |             |                 | 15.10 J              | 52.80                | 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 U               | 1.20 U               |
| 109-99-9    | Tetrahydrofuran                        | ug/m3       | 154              |           |             |                 | 18.30 J              | 29.60 J              | 2.52                 | 5.29 U               | 5.29 U               |
| 110-54-3    | Hexane                                 | ug/m3       | 86.17            |           |             |                 | 17.60 U              | 17.60 U              | 0.09 U               | 0.92 U               | 0.92 U               |
| 110-82-7    | CYCLOHEXANE                            | ug/m3       | 84.16            |           |             |                 | 17.20 U              | 17.20 U              | 0.04 U               | 0.41 U               | 0.41 U               |
| 120-82-1    | 1,2,4-Trichlorobenzene                 | ug/m3       | 181.5            |           |             |                 | 37.10 U              | 37.10 U              | 0.26 UJ              | 2.60 UJ              | 2.60 UJ              |
| 123-91-1    | 1,4-Dioxane                            | ug/m3       | 133              |           |             |                 | 27.20 U              | 27.20 U              | 0.25 UJ              | 2.50 UJ              | 2.50 UJ              |
| 124-48-1    | Dibromochloromethane                   | ug/m3       | 208.3            |           |             |                 | 42.60 U              | 42.60 U              | 0.22 U               | 2.22 UJ              | 2.22 U               |
| 126777-61-2 | m/p-Xylene                             | ug/m3       | 106.2            |           |             |                 | 12.60 J              | 42.60                | 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 U               | 1.39 U               |
| 156-60-5    | TRANS-1,2-DICHLOROETHENE               | ug/m3       | 96.94            |           |             |                 | 19.80 U              | 19.80 U              | 0.12 U               | 1.23 U               | 1.23 U               |
| 1634-04-4   | Methyl t-Butyl Ether                   | ug/m3       | 88.15            |           |             |                 | 18.00 U              | 18.00 U              | 0.06 U               | 0.61 U               | 0.61 U               |
| 540-84-1    | 2,2,4-Trimethylpentane                 | ug/m3       | 114.2            |           |             |                 | 23.40 U              | 23.40 U              | 0.12 U               | 1.17 U               | 1.17 U               |
| 541-73-1    | 1,3-DICHLOROETHANE                     | ug/m3       | 147              |           |             |                 | 30.10 U              | 30.10 U              | 0.10 U               | 1.02 U               | 1.02 U               |
| 56-23-5     | CARBON TETRACHLORIDE                   | ug/m3       | 153.8            |           |             |                 | 2.52 U               | 2.52 U               | 0.38                 | 1.07 U               | 1.07 U               |
| 593-60-2    | Bromoethene                            | ug/m3       | 106.9            |           |             |                 | 21.90 U              | 21.90 U              | 0.10 U               | 1.05 U               | 1.05 U               |
| 622-96-8    | 4-ETHYLTOLUENE                         | ug/m3       | 120.2            |           |             |                 | 24.60 U              | 24.60 U              | 0.13 U               | 1.28 UJ              | 1.28 U               |
| 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 U               | 1.51 U               |
| 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 U               | 0.93 U               |
| 74-87-3     | CHLOROMETHANE                          | ug/m3       | 50.49            |           |             |                 | 10.30 U              | 10.30 U              | 1.03                 | 0.52 U               | 0.52 U               |
| 75-00-3     | CHLOROETHANE                           | ug/m3       | 64.52            |           |             |                 | 13.20 U              | 13.20 U              | 0.04 U               | 0.45 U               | 0.45 U               |
| 75-01-4     | VINYL CHLORIDE                         | ug/m3       | 62.5             |           |             |                 | 12.80 U              | 12.80 U              | 0.06 U               | 0.61 U               | 0.61 U               |
| 75-09-2     | METHYLENE CHLORIDE                     | ug/m3       | 84.94            |           |             |                 | 16.30 J              | 12.90 J              | 16.70                | 6.25                 | 0.52 U               |
| 75-15-0     | CARBON DISULFIDE                       | ug/m3       | 76.14            |           |             |                 | 15.60 U              | 15.60 U              | 0.05 U               | 4.67                 | 0.47 U               |
| 75-25-2     | BROMOFORM                              | ug/m3       | 252.8            |           |             |                 | 51.70 U              | 51.70 U              | 0.16 U               | 1.55 UJ              | 1.55 U               |
| 75-27-4     | BROMODICHLOROMETHANE                   | ug/m3       | 163.8            |           |             |                 | 33.50 U              | 33.50 U              | 0.33 U               | 3.35 U               | 3.35 U               |
| 75-34-3     | 1,1-DICHLOROETHANE                     | ug/m3       | 98.96            |           |             |                 | 20.20 U              | 20.20 U              | 0.10 U               | 0.97 U               | 0.97 U               |
| 75-35-4     | 1,1-DICHLOROETHENE                     | ug/m3       | 96.94            |           |             |                 | 19.80 U              | 19.80 U              | 0.10 U               | 0.99 U               | 4.76                 |
| 75-65-0     | tert-Butyl Alcohol                     | ug/m3       | 74.12            |           |             |                 | 15.20 U              | 15.20 U              | 0.24 UJ              | 4.85 J               | 2.39 UJ              |
| 75-69-4     | TRICHLOROFLUOROMETHANE                 | ug/m3       | 137.4            |           |             |                 | 28.10 U              | 28.10 U              | 1.12                 | 1.57 U               | 1.57 U               |
| 75-71-8     | DICHLORODIFLUOROMETHANE                | ug/m3       | 120.9            |           |             |                 | 24.70 U              | 24.70 U              | 2.47 J               | 0.84 U               | 0.84 UJ              |
| 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 U               | 1.99 U               |
| 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 U               | 1.54 U               |
| 78-87-5     | 1,2-DICHLOROPROPANE                    | ug/m3       | 113              |           |             |                 | 23.10 U              | 23.10 U              | 0.22 U               | 2.22 U               | 2.22 U               |
| 78-93-3     | 2-BUTANONE                             | ug/m3       | 72.11            |           |             |                 | 189.00 J             | 324.00 D             | 0.88 U               | 17.40                | 21.50 U              |
| 79-00-5     | 1,1,2-TRICHLOROETHANE                  | ug/m3       | 133.4            |           |             |                 | 27.30 U              | 27.30 U              | 0.24 U               | 2.40 U               | 2.40 U               |
| 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 U               | 1.65 U               |
| 80-62-6     | Methyl Methacrylate                    | ug/m3       | 100.117          |           |             |                 | 20.50 U              | 20.50 U              | 0.26 U               | 2.58 U               | 2.58 U               |
| 87-68-3     | HEXACHLOROBUTADIENE                    | ug/m3       | 260.8            |           |             |                 | 53.30 U              | 53.30 U              | 0.23 UJ              | 2.35 UJ              | 2.35 UJ              |
| 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 U               | 1.97 U               |
| 95-50-1     | 1,2-DICHLOROETHANE                     | ug/m3       | 147              |           |             |                 | 30.10 U              | 30.10 U              | 0.13 U               | 1.32 UJ              | 1.32 U               |
| 95-63-6     | 1,2,4-TRIMETHYLBENZENE                 | ug/m3       | 120.2            |           |             |                 | 24.60 U              | 24.60 U              | 0.49                 | 1.18 UJ              | 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**

| Sample ID<br>Sample Date<br>Boring Location |                                        |             |                  | 130043N-DP05-SV45<br>03/24/2008<br>N-DP05 | 130043V-DP01-SV08<br>03/18/2008<br>V-DP01 | 130043V-DP01-SV25<br>03/18/2008<br>V-DP01 | 130043V-DP01-SV45<br>03/18/2008<br>V-DP01 | 130043V-DP02-SD45<br>03/18/2008<br>V-DP02 |
|---------------------------------------------|----------------------------------------|-------------|------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| Case Number                                 | Chemical Name                          | Result Unit | Molecular Weight |                                           |                                           |                                           |                                           |                                           |
| 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                                     | TRICHLOROFLUOROMETHANE                 | 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 Push ID - Identification

N - presumptive evidence of a compound

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

| Sample ID<br>Sample Date<br>Boring Location |                                        |             |                  | 130043V-DP02-SV08<br>03/18/2008<br>V-DP02 | 130043V-DP02-SV25<br>03/18/2008<br>V-DP02 | 130043V-DP02-SV45<br>03/18/2008<br>V-DP02 | 130043V-DP03-SV08<br>03/18/2008<br>V-DP03 | 130043V-DP03-SV25<br>03/18/2008<br>V-DP03 |
|---------------------------------------------|----------------------------------------|-------------|------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| Case Number                                 | Chemical Name                          | Result Unit | Molecular Weight |                                           |                                           |                                           |                                           |                                           |
| 100-41-4                                    | Ethylbenzene                           | ug/m3       | 106.2            | 21.70 U                                   | 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                                  | 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                                   | 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                                   | 4.92 J                                    | 24.60 U                                   | 24.60 U                                   | 5.41 J                                    |
| 108-88-3                                    | Toluene                                | ug/m3       | 92.14            | 10.90 J                                   | 17.70 J                                   | 7.54 J                                    | 10.60 J                                   | 20.70                                     |
| 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              | 8.19 J                                    | 13.90 J                                   | 31.50 U                                   | 31.50 U                                   | 13.20 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            | 21.70 U                                   | 7.38 J                                    | 21.70 U                                   | 6.08 J                                    | 10.40 J                                   |
| 127-18-4                                    | Tetrachloroethene                      | ug/m3       | 165.8            | 21.70 J                                   | 38.00                                     | 19.70 J                                   | 23.10 J                                   | 74.60                                     |
| 142-82-5                                    | n-Heptane                              | ug/m3       | 100.2            | 20.50 U                                   | 6.15 J                                    | 20.50 U                                   | 20.50 U                                   | 4.51 J                                    |
| 156-59-2                                    | CIS-1,2-DICHLOROETHENE                 | ug/m3       | 96.94            | 19.80 U                                   | 19.80 U                                   | 19.80 U                                   | 19.80 U                                   | 14.30 J                                   |
| 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                                   | 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            | 28.50 U                                   | 90.30 B                                   | 33.30 U                                   | 78.40 B                                   | 90.30 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            | 3.51 J                                    | 5.11 J                                    | 16.00 U                                   | 16.00 U                                   | 3.83 J                                    |
| 71-55-6                                     | 1,1,1-TRICHLOROETHANE                  | ug/m3       | 133.4            | 13.60 J                                   | 25.60 J                                   | 12.50 J                                   | 109.00                                    | 2460.00 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            | 4.17 J                                    | 17.40 U                                   | 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                                   | 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            | 6.07 J                                    | 20.20 U                                   | 6.48 J                                    | 18.20 J                                   | 1210.00 D                                 |
| 75-35-4                                     | 1,1-DICHLOROETHENE                     | ug/m3       | 96.94            | 5.55 J                                    | 19.80 U                                   | 6.34 J                                    | 19.80 U                                   | 39.60                                     |
| 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                                   | 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            | 41.30                                     | 115.00                                    | 50.10                                     | 156.00                                    | 324.00                                    |
| 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 U                                   |
| 79-01-6                                     | TRICHLOROETHENE                        | ug/m3       | 131.4            | 4.84                                      | 2.47 U                                    | 4.30                                      | 5.91                                      | 48.40                                     |
| 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            | 21.70 U                                   | 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                                   | 25.90 U                                   |
| 95-50-1                                     | 1,2-DICHLOROETHANE                     | 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**

| Sample ID<br>Sample Date<br>Boring Location |                                        |             |                  | 130043V-DP03-SV45<br>03/18/2008<br>V-DP03 | 130043V-DP04-SV08<br>03/18/2008<br>V-DP04 | 130043V-DP04-SV25<br>03/18/2008<br>V-DP04 | 130043V-DP04-SV45<br>03/18/2008<br>V-DP04 | 130043V-DP05-AA<br>03/17/2008<br>V-DP05 |
|---------------------------------------------|----------------------------------------|-------------|------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-----------------------------------------|
| Case Number                                 | Chemical Name                          | Result Unit | Molecular Weight |                                           |                                           |                                           |                                           |                                         |
| 100-41-4                                    | Ethylbenzene                           | ug/m3       | 106.2            | 21.70 U                                   | 4.78 J                                    | 21.70 U                                   | 29.50                                     | 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                                     | 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                                     | 14.70 J                                   | 20.30                                     | 490.00                                    | 15.50                                   |
| 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                                     | 1.30 J                                  |
| 127-18-4                                    | Tetrachloroethene                      | ug/m3       | 165.8            | 10.80 J                                   | 237.00 J                                  | 502.00                                    | 19.70 J                                   | 29.80                                   |
| 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                                    | 476.00                                    | 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-DICHLOROBENZENE                    | 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                                    |
| 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                                     | 137.00                                    | 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                                    |
| 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                                    |
| 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                                    | 365.00                                    | 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                                    | 133.00                                    | 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                                      | 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-DICHLOROBENZENE                    | 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**

| Sample ID<br>Sample Date<br>Boring Location |                                        |             |                  | 130043V-DP05-SV08<br>03/17/2008<br>V-DP05 | 130043V-DP05-SV25<br>03/17/2008<br>V-DP05 | 130043V-DP05-SV45<br>03/17/2008<br>V-DP05 |
|---------------------------------------------|----------------------------------------|-------------|------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| Case Number                                 | Chemical Name                          | Result Unit | Molecular Weight |                                           |                                           |                                           |
| 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 U                                  | 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                                     | TRICHLOROFLUOROMETHANE                 | 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**

| Sample ID<br>Sample Date<br>Boring Location |                                        |             |                  | 130043V-DP02-SD45<br>03/18/2008<br>V-DP02 | 130043V-DP02-SV08<br>03/18/2008<br>V-DP02 | 130043V-DP02-SV25<br>03/18/2008<br>V-DP02 | 130043V-DP02-SV45<br>03/18/2008<br>V-DP02 | 130043V-I<br>03/18<br>V-D |
|---------------------------------------------|----------------------------------------|-------------|------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|---------------------------|
| Case Number                                 | Chemical Name                          | Result Unit | Molecular Weight |                                           |                                           |                                           |                                           |                           |
| 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                                     | 21.70 J                                   | 38.00                                     | 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-DICHLOROBENZENE                    | 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                                     | 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                                     | 41.30                                     | 115.00                                    | 50.10                                     | 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                                     | 4.84                                      | 2.47 U                                    | 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                                   | 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-DICHLOROBENZENE                    | 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 | Molecular Weight | Sample ID | Sample Date | Boring Location | 130043V-DP03-SV25 | 130043V-DP03-SV45 | 130043V-DP04-SV08 | 130043V-DP04-SV25 |
|-------------|----------------------------------------|-------------|------------------|-----------|-------------|-----------------|-------------------|-------------------|-------------------|-------------------|
|             |                                        |             |                  | P03-SV08  | 2008        | P03             | 03/18/2008        | 03/18/2008        | 03/18/2008        | 03/18/2008        |
|             |                                        |             |                  |           |             | V-DP03          | V-DP03            | V-DP03            | V-DP04            | V-DP04            |
| 100-41-4    | Ethylbenzene                           | ug/m3       | 106.2            | U         |             |                 | 4.78 J            | 21.70 U           | 4.78 J            | 21.70 U           |
| 100-42-5    | Styrene                                | ug/m3       | 104.1            | UJ        |             |                 | 21.30 UJ          | 21.30 UJ          | 21.30 U           | 21.30 UJ          |
| 10061-01-5  | cis-1,3-Dichloropropene                | ug/m3       | 111              | U         |             |                 | 22.70 U           | 22.70 U           | 22.70 U           | 22.70 U           |
| 10061-02-6  | trans-1,3-Dichloropropene              | ug/m3       | 111              | U         |             |                 | 22.70 U           | 22.70 U           | 22.70 U           | 22.70 U           |
| 106-46-7    | 1,4-Dichlorobenzene                    | ug/m3       | 147              | U         |             |                 | 30.10 U           | 30.10 U           | 30.10 U           | 30.10 U           |
| 106-93-4    | 1,2-Dibromoethane                      | ug/m3       | 187.9            | U         |             |                 | 38.40 U           | 38.40 U           | 38.40 U           | 38.40 U           |
| 106-99-0    | 1,3-Butadiene                          | ug/m3       | 54.09            | U         |             |                 | 11.10 U           | 11.10 U           | 11.10 U           | 11.10 U           |
| 107-05-1    | Allyl Chloride                         | ug/m3       | 76.53            | U         |             |                 | 15.70 U           | 15.70 U           | 15.70 U           | 15.70 U           |
| 107-06-2    | 1,2-Dichloroethane                     | ug/m3       | 98.96            | U         |             |                 | 20.20 U           | 20.20 U           | 20.20 U           | 20.20 U           |
| 108-10-1    | 4-Methyl-2-Pentanone                   | ug/m3       | 100.2            | U         |             |                 | 20.50 U           | 20.50 U           | 20.50 U           | 20.50 U           |
| 108-67-8    | 1,3,5-Trimethylbenzene                 | ug/m3       | 120.2            | U         |             |                 | 5.41 J            | 24.60 U           | 24.60 U           | 5.90 J            |
| 108-88-3    | Toluene                                | ug/m3       | 92.14            | J         |             |                 | 20.70 U           | 26.00 U           | 14.70 J           | 20.30 U           |
| 108-90-7    | Chlorobenzene                          | ug/m3       | 112.6            | U         |             |                 | 23.00 U           | 23.00 U           | 23.00 U           | 23.00 U           |
| 109-99-9    | Tetrahydrofuran                        | ug/m3       | 154              | U         |             |                 | 13.20 J           | 10.70 J           | 31.50 U           | 16.40 J           |
| 110-54-3    | Hexane                                 | ug/m3       | 86.17            | U         |             |                 | 17.60 U           | 17.60 U           | 17.60 U           | 17.60 U           |
| 110-82-7    | CYCLOHEXANE                            | ug/m3       | 84.16            | U         |             |                 | 17.20 U           | 17.20 U           | 17.20 U           | 17.20 U           |
| 120-82-1    | 1,2,4-Trichlorobenzene                 | ug/m3       | 181.5            | U         |             |                 | 37.10 U           | 37.10 U           | 37.10 U           | 37.10 U           |
| 123-91-1    | 1,4-Dioxane                            | ug/m3       | 133              | U         |             |                 | 27.20 U           | 27.20 U           | 27.20 U           | 27.20 U           |
| 124-48-1    | Dibromochloromethane                   | ug/m3       | 208.3            | U         |             |                 | 42.60 U           | 42.60 U           | 42.60 U           | 42.60 U           |
| 126777-61-2 | m/p-Xylene                             | ug/m3       | 106.2            | J         |             |                 | 10.40 J           | 4.78 J            | 15.60 J           | 6.52 J            |
| 127-18-4    | Tetrachloroethene                      | ug/m3       | 165.8            | J         |             |                 | 74.60 J           | 10.80 J           | 237.00 J          | 502.00 J          |
| 142-82-5    | n-Heptane                              | ug/m3       | 100.2            | U         |             |                 | 4.51 J            | 20.50 U           | 20.50 U           | 4.51 J            |
| 156-59-2    | CIS-1,2-DICHLOROETHENE                 | ug/m3       | 96.94            | U         |             |                 | 14.30 J           | 19.80 U           | 143.00 U          | 476.00 U          |
| 156-60-5    | TRANS-1,2-DICHLOROETHENE               | ug/m3       | 96.94            | U         |             |                 | 19.80 U           | 19.80 U           | 4.36 J            | 5.55 J            |
| 1634-04-4   | Methyl t-Butyl Ether                   | ug/m3       | 88.15            | U         |             |                 | 18.00 U           | 18.00 U           | 18.00 U           | 18.00 U           |
| 540-84-1    | 2,2,4-Trimethylpentane                 | ug/m3       | 114.2            | U         |             |                 | 23.40 U           | 23.40 U           | 23.40 U           | 23.40 U           |
| 541-73-1    | 1,3-DICHLOROBENZENE                    | ug/m3       | 147              | U         |             |                 | 30.10 U           | 30.10 U           | 30.10 U           | 30.10 U           |
| 56-23-5     | CARBON TETRACHLORIDE                   | ug/m3       | 153.8            | U         |             |                 | 2.52 U            | 2.52 U            | 2.52 U            | 2.52 U            |
| 593-60-2    | Bromoethene                            | ug/m3       | 106.9            | U         |             |                 | 21.90 U           | 21.90 U           | 21.90 U           | 21.90 U           |
| 622-96-8    | 4-ETHYLTOLUENE                         | ug/m3       | 120.2            | U         |             |                 | 24.60 U           | 24.60 U           | 24.60 U           | 24.60 U           |
| 67-64-1     | ACETONE                                | ug/m3       | 58.08            | B         |             |                 | 90.30 B           | 119.00 B          | 97.40 B           | 87.90 B           |
| 67-66-3     | CHLOROFORM                             | ug/m3       | 119.4            | U         |             |                 | 24.40 U           | 24.40 U           | 46.40 U           | 137.00 U          |
| 71-43-2     | BENZENE                                | ug/m3       | 78.11            | U         |             |                 | 3.83 J            | 16.00 U           | 16.00 U           | 3.19 J            |
| 71-55-6     | 1,1,1-TRICHLOROETHANE                  | ug/m3       | 133.4            | U         |             |                 | 2460.00 D         | 27.30 U           | 16900.00 D        | 98200.00 D        |
| 74-83-9     | BROMOMETHANE                           | ug/m3       | 94.94            | U         |             |                 | 19.40 U           | 19.40 U           | 19.40 U           | 19.40 U           |
| 74-87-3     | CHLOROMETHANE                          | ug/m3       | 50.49            | U         |             |                 | 10.30 U           | 10.30 U           | 10.30 U           | 10.30 U           |
| 75-00-3     | CHLOROETHANE                           | ug/m3       | 64.52            | U         |             |                 | 13.20 U           | 13.20 U           | 13.20 U           | 4.22 J            |
| 75-01-4     | VINYL CHLORIDE                         | ug/m3       | 62.5             | U         |             |                 | 12.80 U           | 12.80 U           | 12.80 U           | 12.80 U           |
| 75-09-2     | METHYLENE CHLORIDE                     | ug/m3       | 84.94            | U         |             |                 | 17.40 U           | 5.56 J            | 17.40 U           | 7.99 J            |
| 75-15-0     | CARBON DISULFIDE                       | ug/m3       | 76.14            | U         |             |                 | 15.60 U           | 15.60 U           | 15.60 U           | 15.60 U           |
| 75-25-2     | BROMOFORM                              | ug/m3       | 252.8            | U         |             |                 | 51.70 U           | 51.70 U           | 51.70 U           | 51.70 U           |
| 75-27-4     | BROMODICHLOROMETHANE                   | ug/m3       | 163.8            | U         |             |                 | 33.50 U           | 33.50 U           | 33.50 U           | 33.50 U           |
| 75-34-3     | 1,1-DICHLOROETHANE                     | ug/m3       | 98.96            | J         |             |                 | 1210.00 D         | 20.20 U           | 8090.00 D         | 44500.00 D        |
| 75-35-4     | 1,1-DICHLOROETHENE                     | ug/m3       | 96.94            | U         |             |                 | 39.60 U           | 19.80 U           | 139.00 U          | 365.00 U          |
| 75-65-0     | tert-Butyl Alcohol                     | ug/m3       | 74.12            | U         |             |                 | 15.20 U           | 3.64 J            | 15.20 U           | 15.20 U           |
| 75-69-4     | TRICHLOROFLUOROMETHANE                 | ug/m3       | 137.4            | U         |             |                 | 28.10 U           | 28.10 U           | 28.10 U           | 28.10 U           |
| 75-71-8     | DICHLORODIFLUOROMETHANE                | ug/m3       | 120.9            | 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            | 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            | U         |             |                 | 34.90 U           | 34.90 U           | 34.90 U           | 34.90 U           |
| 78-87-5     | 1,2-DICHLOROPROPANE                    | ug/m3       | 113              | U         |             |                 | 23.10 U           | 23.10 U           | 23.10 U           | 23.10 U           |
| 78-93-3     | 2-BUTANONE                             | ug/m3       | 72.11            | U         |             |                 | 324.00 U          | 295.00 D          | 168.00 J          | 354.00 U          |
| 79-00-5     | 1,1,2-TRICHLOROETHANE                  | ug/m3       | 133.4            | U         |             |                 | 27.30 U           | 27.30 U           | 27.30 U           | 27.30 U           |
| 79-01-6     | TRICHLOROETHENE                        | ug/m3       | 131.4            | U         |             |                 | 48.40 U           | 2.47 U            | 376.00 J          | 1290.00 D         |
| 79-34-5     | 1,1,2,2-TETRACHLOROETHANE              | ug/m3       | 167.9            | U         |             |                 | 34.30 U           | 34.30 U           | 34.30 U           | 34.30 U           |
| 80-62-6     | Methyl Methacrylate                    | ug/m3       | 100.117          | U         |             |                 | 20.50 U           | 20.50 U           | 20.50 U           | 20.50 U           |
| 87-68-3     | HEXACHLOROBUTADIENE                    | ug/m3       | 260.8            | U         |             |                 | 53.30 U           | 53.30 U           | 53.30 U           | 53.30 U           |
| 95-47-6     | O-XYLENE                               | ug/m3       | 106.2            | U         |             |                 | 21.70 U           | 21.70 U           | 4.34 J            | 21.70 U           |
| 95-49-8     | 2-Chlorotoluene                        | ug/m3       | 126.58           | U         |             |                 | 25.90 U           | 25.90 U           | 25.90 U           | 25.90 U           |
| 95-50-1     | 1,2-DICHLOROBENZENE                    | ug/m3       | 147              | U         |             |                 | 30.10 U           | 30.10 U           | 30.10 U           | 30.10 U           |
| 95-63-6     | 1,2,4-TRIMETHYLBENZENE                 | ug/m3       | 120.2            | U         |             |                 | 24.60 U           | 24.60 U           | 6.39 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

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

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

|             |                                       |             | Sample ID       | 130043A-DP01-GW55 | 130043A-DP02-GW55 |
|-------------|---------------------------------------|-------------|-----------------|-------------------|-------------------|
|             |                                       |             | Sample Date     | 03/13/2008        | 03/13/2008        |
|             |                                       |             | Boring Location | A-DP01            | A-DP02            |
| Case Number | Chemical Name                         | 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        |                 | 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**

|             |                                       | Sample ID       | 130043A-DP03A-GW55 | 130043A-DP03-GW55 | 130043A-DP04-GW55 |
|-------------|---------------------------------------|-----------------|--------------------|-------------------|-------------------|
|             |                                       | Sample Date     | 03/13/2008         | 03/12/2008        | 03/12/2008        |
|             |                                       | Boring Location | A-DP03A            | A-DP03            | A-DP04            |
| Case Number | Chemical Name                         | 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 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-DICHLOROBENZENE                   | 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-DICHLOROBENZENE                   | 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<br>Sample Date<br>Boring Location<br>Result Unit | 130043A-DP05-GW55    | 130043A-DP06-GW55    | 130043B-DP01-GW55    |
|-------------|---------------------------------------|------------------------------------------------------------|----------------------|----------------------|----------------------|
|             |                                       |                                                            | 03/12/2008<br>A-DP05 | 03/12/2008<br>A-DP04 | 03/10/2008<br>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**

|             |                                       | Sample ID       | 130043B-DP02-GW55 | 130043B-DP03-GW55 | 130043B-DP04-GW55 |
|-------------|---------------------------------------|-----------------|-------------------|-------------------|-------------------|
|             |                                       | Sample Date     | 03/10/2008        | 03/10/2008        | 03/11/2008        |
|             |                                       | Boring Location | B-DP02            | B-DP03            | B-DP04            |
| Case Number | Chemical Name                         | 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 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-DICHLOROBENZENE                   | 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-DICHLOROBENZENE                   | 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**

|             |                                       | Sample ID       | 130043B-DP05-GW55 | 130043B-DP06-GW55 | 130043C-DP01-GW55 |
|-------------|---------------------------------------|-----------------|-------------------|-------------------|-------------------|
|             |                                       | Sample Date     | 03/10/2008        | 03/10/2008        | 03/21/2008        |
|             |                                       | Boring Location | B-DP05            | B-DP01            | C-DP01            |
| Case Number | Chemical Name                         | 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       | 130043C-DP02-GW55 | 130043C-DP03-GW55 | 130043C-DP04-GW55 |
|-------------|---------------------------------------|-----------------|-------------------|-------------------|-------------------|
|             |                                       | Sample Date     | 03/21/2008        | 03/21/2008        | 03/19/2008        |
| Case Number | Chemical Name                         | Boring Location | C-DP02            | C-DP03            | C-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             | 0.5 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**

| Sample ID<br>Sample Date<br>Boring Location |                                       |             | 130043C-DP05-GW55<br>03/19/2008<br>C-DP05 | 130043C-DP06-GW55<br>03/19/2008<br>C-DP04 | 130043F-DP01-GW55<br>03/03/2008<br>F-DP01 |
|---------------------------------------------|---------------------------------------|-------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| Case Number                                 | Chemical Name                         | 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        | 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-DICHLOROBENZENE                   | 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-DICHLOROBENZENE                   | 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**

|             |                                       | Sample ID       | 130043F-DP02-GW55 | 130043F-DP03-GW55 | 130043F-DP04-GW55 |
|-------------|---------------------------------------|-----------------|-------------------|-------------------|-------------------|
|             |                                       | Sample Date     | 03/03/2008        | 03/06/2008        | 03/06/2008        |
|             |                                       | Boring Location | F-DP02            | F-DP03            | F-DP04            |
| Case Number | Chemical Name                         | 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              | 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-DICHLOROBENZENE                   | 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-DICHLOROBENZENE                   | 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**

| Sample ID<br>Sample Date<br>Boring Location |                                       |             | 130043F-DP05-GW55<br>03/06/2008<br>F-DP05 | 130043F-DP06-GW55<br>03/03/2008<br>F-DP01 | 130043K-DP01-GW55<br>03/03/2008<br>K-DP01 |
|---------------------------------------------|---------------------------------------|-------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| Case Number                                 | Chemical Name                         | Result Unit |                                           |                                           |                                           |
| 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-DICHLOROBENZENE                   | 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-DICHLOROBENZENE                   | 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**

|             |                                       | Sample ID       | 130043K-DP02-GW55 | 130043K-DP03-GW55 | 130043K-DP04-GW55 |
|-------------|---------------------------------------|-----------------|-------------------|-------------------|-------------------|
|             |                                       | Sample Date     | 03/04/2008        | 03/04/2008        | 03/05/2008        |
|             |                                       | Boring Location | K-DP02            | K-DP03            | K-DP04            |
| Case Number | Chemical Name                         | 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             | 0.88              |
| 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-DICHLOROBENZENE                   | 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-DICHLOROBENZENE                   | 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**

| Sample ID<br>Sample Date<br>Boring Location |                                       |             | 130043K-DP05-GW55<br>03/05/2008<br>K-DP05 | 130043K-DP06-GW55<br>03/03/2008<br>K-DP01 | 130043N-DP01-GW55<br>03/25/2008<br>N-DP01 |
|---------------------------------------------|---------------------------------------|-------------|-------------------------------------------|-------------------------------------------|-------------------------------------------|
| Case Number                                 | Chemical Name                         | 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                                     | 0.54                                      | 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**

|             |                                       | Sample ID       | 130043N-DP02-GW55 | 130043N-DP03-GW55 | 130043N-DP04-GW55 |
|-------------|---------------------------------------|-----------------|-------------------|-------------------|-------------------|
|             |                                       | Sample Date     | 03/25/2008        | 03/24/2008        | 03/24/2008        |
|             |                                       | Boring Location | N-DP02            | N-DP03            | N-DP04            |
| Case Number | Chemical Name                         | 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            | 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**

|             |                                       |             | Sample ID       | 130043N-DP05-GW55 | 130043N-DP06-GW55 | 130043V-DP01-GW55 |
|-------------|---------------------------------------|-------------|-----------------|-------------------|-------------------|-------------------|
|             |                                       |             | Sample Date     | 03/24/2008        | 03/24/2008        | 03/18/2000        |
|             |                                       |             | Boring Location | N-DP05            | N-DP04            | V-DP01            |
| Case Number | Chemical Name                         | 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-DICHLOROBENZENE                   | 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     | 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             | 0.5 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-DICHLOROBENZENE                   | 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**

|             |                                       |             | Sample ID       | 130043V-DP02-GW55 | 130043V-DP03-GW55 | 130043V-DP04-GW55 |
|-------------|---------------------------------------|-------------|-----------------|-------------------|-------------------|-------------------|
|             |                                       |             | Sample Date     | 03/17/2008        | 03/17/2008        | 03/17/2008        |
|             |                                       |             | Boring Location | V-DP02            | V-DP03            | V-DP04            |
| Case Number | Chemical Name                         | 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 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-DICHLOROBENZENE                   | 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-DICHLOROBENZENE                   | 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**

|             |                                       | Sample ID       | 130043V-DP05-GW55 | 130043V-DP06-GW55 |
|-------------|---------------------------------------|-----------------|-------------------|-------------------|
|             |                                       | Sample Date     | 03/17/2008        | 03/17/2008        |
|             |                                       | Boring Location | V-DP05            | V-DP04            |
| Case Number | Chemical Name                         | 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            | 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**

|                |                                       | Sample ID<br>Sample Date | 130043A-FB-Z1970<br>03/05/2008 | 130043A-FB-Z2003<br>03/13/2008 |
|----------------|---------------------------------------|--------------------------|--------------------------------|--------------------------------|
| Case Number    | Chemical Name                         | 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 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-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                     |                                | 0.67 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**

|                |                                       | Sample ID   | 130043A-TB-Z1970 |
|----------------|---------------------------------------|-------------|------------------|
|                |                                       | Sample Date | 03/12/2008       |
| 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       | 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-DICHLOROBENZENE                   | 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-DICHLOROBENZENE                   | 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**

|                |                                       | Sample ID   | 130043A-TB-Z2003 | 130043B-FB-Z1907 |
|----------------|---------------------------------------|-------------|------------------|------------------|
|                |                                       | Sample Date | 03/05/2008       | 03/10/2008       |
| Case Number    | Chemical Name                         | 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        | 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 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        |                  | 0.81 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**

|                |                                       | Sample ID   | 130043B-TB-Z1963 | 130043C-FB-Z2052 |
|----------------|---------------------------------------|-------------|------------------|------------------|
|                |                                       | Sample Date | 03/11/2008       | 03/19/2008       |
| Case Number    | Chemical Name                         | 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-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              | 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-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        | 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   | 130043C-TB-Z2087 | 130043F-FB-Z1794 |
|----------------|---------------------------------------|-------------|------------------|------------------|
|                |                                       | Sample Date | 03/03/2008       | 03/03/2008       |
| Case Number    | Chemical Name                         | 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        |                  |                  |
| 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-DICHLOROBENZENE                   | 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 U            |
| 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        | TRICHLOROFLUOROMETHANE                | 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-DICHLOROBENZENE                   | 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**

|                |                                       | Sample ID   | 130043F-TB-Z1812 | 130043K-FB-Z1812 |
|----------------|---------------------------------------|-------------|------------------|------------------|
|                |                                       | Sample Date | 02/28/2008       | 03/04/2008       |
| Case Number    | Chemical Name                         | 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        |                  |                  |
| 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<br>Result Unit | 03/05/2008       | 02/29/2008       |
| 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-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**

|                |                                       |             | Sample ID   | 130043K-TB-Z1857 | 130043N-FB-Z2105 |
|----------------|---------------------------------------|-------------|-------------|------------------|------------------|
|                |                                       |             | Sample Date | 02/28/2008       | 03/24/2008       |
| Case Number    | Chemical Name                         | 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 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-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        | 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<br>Result Unit | 03/25/2008       | 03/19/2008       |
| 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-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 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-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                       |                  | 0.6 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**

|                |                                       | Sample ID   | 130043N-TB-Z2130 | 130043V-FB-Z2022 |
|----------------|---------------------------------------|-------------|------------------|------------------|
|                |                                       | Sample Date | 03/19/2008       | 03/17/2008       |
| Case Number    | Chemical Name                         | 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 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-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        | 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       |
| Case Number    | Chemical Name                         | 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-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 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-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        | 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       | 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        | 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  
68 / Ginkgo 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 Kinkla  
DTW ~ 48' 02 SE  
0800- Setting up at DP-97 by Kinkla St.  
1300 43F DP-02 02 SW  
0805- Starting down at DP-02 02  
0820- Calibrated Hilti U-22 see  
Cal sheets for details  
0825- Down to 55' will collect water  
sample. The set SV limit. 6W ~ 50'  
0835- Sampled DP-02 02 02 SW  
1300 43F DP-02 02 SW 55'  
for VOC EPA OLC03.2  
Hilti Measurements: pH: 5.46 Cond: 0.582  
DO: 6.21 Temp: 11.00°C ORP: 70 mV = 625

*John E. ...*

10 MON 3/3/68

0850 - Collected <sup>field</sup> ~~trip~~ blank from chocolate  
used to calibrate DP01 sample

130043F-FB

0900 - Setting Deep Soil Vapor Point

at 45" Sand I put a blue Screen after  
beats all the way to the top

0910 - Starting DP01 to 25"

0930 DP01 25" <sup>finished</sup>

0940 - DP01 8' SV Point finally

0950 - My mistake this is DP02 NOT  
DP01

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, ran dry. something  
happened will pull out, install DP01-5045  
have the try again to take a wet  
sample

1110 - Down to 55" "same" DP01

1105 - Went Dry again

*Frank*

MON 3/3/68

1120 - Sampled DP01

130043F-DP01-6W55 and

1125 Spud Duplicate of DP01

130043F-DP06-6W55

1130 - Arrive 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 Little St.

130043K Start at DP01

1300 - 130043K DP01 Down to 55'

1320 - Sampled DP01 for sk

130043K-DP01-6W55 and

1325 Duplicate of DP01

130043K-DP06-6W55

1330 - Arrive 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*



MON 3/2/08

1505- Dropped coils off C FedEx  
 AB# : 861929654324

Summary of Samples Shipped:

130043 - TB

130043F-DP02-6W55

130043F-FB

130043F-DP-01-6W55

130043F-DP06-6W55 Dup of DP01

130043K-DP01-6W55

130043K-DP06-6W55 Dup of DP-01

*Frank*

Tues 3/4/08

0625- F Robinson on site  
 Weather: Mostly Cloudy 51°  
 0645- Moist. - 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 - Evam + Jose  
 0800 - 130043F-DP02-SV45 Purged 15 mins  
 Start sampling w/ 60 Summer Counter  
 0802 - 130043F-DP02-SV25 Purged 8 mins  
 Start sampling  
 0805 - 130043F-DP02-SV08 Purged 4 mins  
 Start sampling  
 0810 - Setup ambient air summer  
 Between DP02 + DP01 (130043F)  
 130043F-AA  
 0820 - Starting at 130043K-DP02

*Frank*

Tues 3/4/68

0901 - Purged 130043K - DP01-SU08 for 25  
 15 minutes and started sample  
 0905 - Purged 130043K - DP01-SU08 for 25  
 for 15 minutes and started to sample  
 0912 - Purged 130043K - DP01-SU08 for 25  
 for 4 minutes and started to sample  
 0920 - Sampled 130043K - DP02-GW55  
 q60 MS/MSD  
 0925 - Hahn water Quality for DP02-GW55  
 pH = 6.06 Cond = 0.302 turb > 1000  
 Temp = 14.89 ORP = 31  
 0943 - 130043K - DP02-SU45 off (-3.5)  
 0947 - 130043K - DP02-SU25 off (-3.5)  
 0951 - 130043K - DP02-SU08 off (-3.5)  
 0955 - 130043K - AA off (-3.5)  
 1016 - Start 130043K - DP01-SU25 (-27.5) ✓  
 Purge for 9 minutes  
 1020 - Start 130043K - DP01-SU45 (-22.5) ✓  
 after purge of 15 minutes  
 1030 - Start 130043K - DP01-SU08 (-27.5) ✓  
 end 130043K - DP01-SU08 (-27.5) Duplicated ✓  
 1032 End 130043K - DP01-SU45 (-4.0)  
 1035 End 130043K - DP01-SU08 26 (-3.5)  
 1040 End 130043K - DP01-SU08 (-2.0)

Friedrich

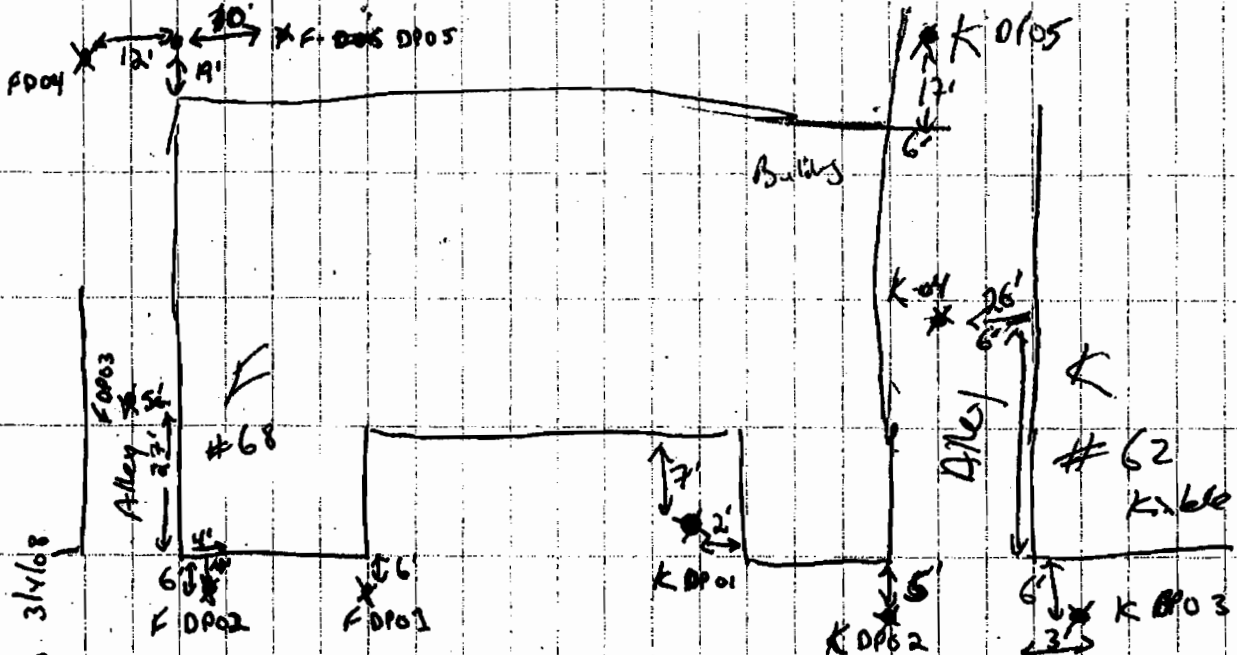
Tues 3/4/68

1045 - finished:  
 130043K - DP02-SU45  
 130043K - DP02-SU25  
 130043K - DP02-SU08  
 1100 - A+ 130043K - DP03 - Refill  
 @ 45', will set SU @ 45' and  
 try again  
 1110 - finished 130043K - DP03-SU25  
 1125 - finished 130043K - DP03-SU08  
 1135 - Try's again to set down to 55'  
 1150 130043K - DP01-SU25 off (-3.5)  
 1200 130043K - DP01-SU08 off (-3.0)  
 1202 130043K - DP01-SU08 off (-3.5)  
 Duplicate of SU08  
 1207 130043K - DP01-SU45 off (-4.5)  
 1220 - Sampled 130043K - DP03-GW55  
 Water Quality Data: pH = 5.57  
 Cond = 0.299 DO = 9.11 Temp = 18.20  
 ORP = 157 Turb = > 1000  
 1255 - Red out the ground  
 1320 - Zebra chug up, starting to rain  
 leaving the site

Friedrich

91

Tues 3/4/08



Feb 11

21

Tues 3/4/08

1348- At Cedar office dropping off  
1 cooler + 3 boxes w/ summer canisters  
4848: 8619 2865 4346  
8619 2865 4368  
8719 2965 4357  
8719 2965 4379  
1415- At Woodbury office picking up  
452 3 boxes of summer canisters

Frühling

Wed 3/5/08

0645- Robbins on site  
 weather - Showers ~ 50°  
 0735- Before on site Even + drive  
 0750- Pump truck in 11.1 by 62 kille  
 won't start, need to move it for access  
 0755- Sean O'Hara (KIM) on site  
 0810- Miniliner Plus calibrated see Gil  
 Sheets for details  
 0825- He test on 130043K-DP02-SV08  
 No leakage VOC = 0.4 ppm  
 0835- He test on 130043K-DP03-SV08 ✓  
 No leakage VOC = 0.2 ppm  
 0840- Trade and setting up  
 on K DP05  
 0855- Start Supply 130043K-DP02-SV25 ✓  
 (>30) 0.2 ppm  
 0902- Start supply 130043K-DP02-SV45 ✓  
 (-29.0) 0.4 ppm  
 0910- Start supply 130043K-DP02-SV08 ✓  
 (-29.5) 0.2 ppm  
 0915- At Rebasal @ 45' on K-DP05-SV45  
 will try to set temporary well point later  
 0925- 130043K-DP05-SV25 Intellig  
 1015- Showers returned for ~ 30 min while supply  
 finished

Wed 3/5/08

1030 Sampled 130043K-DP05-SV55  
 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-FK  
 1055- End Supply 130043K-DP02-SV25  
 (-5.0)  
 1102- End Supply 130043K-DP02-SV45  
 (-3.5)  
 1110- End Supply 130043K-DP02-SV08  
 1127 Start supply 130043K-DP03-SV25 ✓  
 (-29.0)  
 1135- Start supply 130043K-DP03-SV08 ✓  
 (-27.5)  
 1140 Setup Ambient + Air - by  
 in front of 62 kille street + by  
 003 Sample 130043K-AA Start  
 1150- Sampled 130043K-DP04-SV55  
 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-SV45 ✓  
 (-29.5)  
 Finished



Wed 3/5/08

1205-Installed 130043k-0804-SU45  
 1225-Installed 130043k-0804-SU25  
 1240-Installed 130043k-0804-SU08  
 1315-Finished Supply 130043k-0803-SU45  
 (-4.0)

1327-Finished Supply 130043k-0803-SU25  
 (-4.0)

1340-Finished Supply 130043k-0803-SU  
 -AA

for Ambient Air.

1355-Leaving the site

1410-AA Felix dragging off 1 cooler  
 and 2 boxes w/ 7 Sumner Canisters  
 A/B # 8619 2965 4335

Doing the day I called:

Site B 562 near St. - Mr. Alfaro said

its OK to work there next week

Site V: 29 NY Ave: Karen Ledoux said

HS OK to work at the next week

Site A: 570 Main St: Called Andres

Moss Seaved times did not call back

Sel-T-Swim 631-580-2825

*Fredrick*

Thurs 3/6/08

0635-~~to~~ Return on site

Weather: Clear 35°

0700-Jean on site

0725-Calibrated multi-Raw Plw Sk

see cal sheets for details

0730-Calibrated Humida U-22 - OK

see cal sheets for details

0754-Start Supply 130043k-0804-SU25 ✓

(-26.5) 0.6 ppm

0800-Start Supply 130043k-0804-SU45 ✓

(-30.0) 1.0 ppm

0817-Start Supply 130043k-0804-SU08 ✓

(-32.0) 0.4 ppm

0818-Start Supply 130043k-0805-SU25 ✓

(-230.0) 0.7 ppm

0825-Start Supply 130043k-0805-SU45 ✓

(-230.0) 1.3 ppm

0836-Start Supply 130043k-0805-SU08 ✓

(-26.5) 0.7 ppm

0855-Start Supply 130043k-AA ✓

Ambient Air by DPOS

0850-Sampled 130043k-0804-6WSS

Gas Quality: pH 6.26 Cond: 0.324 DO=7.61

Temp=11.58°C OLF=82 Turb 76000

*Fredrick*

22 Thurs 3/6/08

0910 - Collected Field Black Sample

of Check valve: 130043 F- DP05

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

env (-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-SV55

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

*Trunk*

Thurs 3/6/08

1100 Installed 130043 F- DP05-SV25

and 130043 F- DP05-SV08

1210 Sampled 130043 F- DP03-SV655

Gas Quality: pH=6.34 Cond=0.425

DO=1.16 T=16.16°C ORP=-8

turbidity >1000

1300 - Installed:

130043 F- DP03-SV25

130043 F- DP03-SV08

1030 Sen will be dropping off 1 center

+ 2 bases of ammonia capacity b

Federex Office: A68: 8596-4243-1670

*Trunk*

FR 3/7/08

0635- F Abnorm onsite

Waters Chem 35°

0655- Calibrated minirec plus successfully see

Cal sheets for details.

0705- Standard Helium test on 130043F-0803-SU08

well passed, no leakage

0710- Standard Helium test on 130043F-0804-SU08

0730 Starting to sample 130043F-0803-SU25

(-28.5) 0.2 ppm

0735- Starting to sample 130043F-0803-SU45

(-29.5) 0.2 ppm

0737 Starting 130043F-0803-SU68 + SD08

(Duplicate) SD08 - 29.5 SU08 - 28.5 1.2 ppm

0752 Start sampling 130043F-0804-SU25

(-28.5) 0.2 ppm

0756 Start sampling 130043F-0804-SU08

(-28.0) 0.7 ppm

0812- Start sampling 130043F-0805-SU25

(-30.0) 0.0 ppm

0817- Both duplicate samples same as

but after only 4 min.

130043F-0803-SU08 (-3.5)

130043F-0803-SU08 (-0.5)

0827 Setting up and starting ambient air

Frank Mc

0827- 130043F-AA between

DP-04 and DP05 locations

0846- Resampling 130043F-0803-SU08 + SU08

short time on last 2

SU08 (-26.5)

SU08 (-25.0)

0854- Resampling 130043F-0804-SU08

due to short time (-30.0)

0910 Stopped sampling 130043F-0803-SU25

(-4.5)

0922 Stopped sampling 130043F-0804-SU25

(-4.0)

0925 Stopped sampling 130043F-0805-SU45

(-4.0)

0931- Stopped sampling 130043F-0804-SU45

(-4.5)

0938- Stopped sampling 2nd duplicate

130043F-0803-SU08 (-4.5)

130043F-0803-SU08 (-4.0)

0947- Stopped sampling 130043F-0805-SU25

0918 Stopped sampling 130043F-0805-SU08

(-5.0)

1021 Stopped sampling 130043F-0804-SU08

Resample (-4.5)

Frank Mc

Feb 1 3/2/08

1028- Ambient Air - stopped sampling  
 1300436-AA (-25.0)  
 Stays regular 6 HR?  
 1100- Finished piling up boxes,  
 Debra patched the holes and reamed  
 the tubing + DP-03, 04 and 05.  
 1140 Dropped off 4 boxes @ Kedy  
 A64 8596 9243 1680

*Frank*

Mon 3/10/08

0645- FR bins on site cut  
 567 Main St. Alt: 1300436  
 Weather: Clear 30°  
 0705- marked out 5 DP locations  
 DP04 had to be moved due to  
 H3 location is on another property  
 moved to the corner of the building  
 0710- Calculated H3 bin OK see Cal  
 Sheet for details  
 0745- Debra on site: Evin + Jose  
 0800- Settling up on 1300436-DP05  
 0815- Dawn to 55  
 0835- Sampled 1300436-DP05-6055  
 plus MS/MSD  
 Water quality: pH = 5.69 cond = 0.619  
 DO = 7.60 Temp = 10.07°C  
 ORP = 152 Turb = >1000  
 0845- Calculated field limit of clock value  
 1300436- FB  
 0850- Installed 1300436-DP05-SU5545  
 0900- Installed 1300436-DP05-SV 25  
 0910- Installed 1300436-DP05-SU08  
 Settling up on 1300436-DP01  
 0930- Dawn to 55

*Frank*



6940-Sampled 1300 438-DP01-6W55 and  
Duplicate Sample 1300 438-DP06-6W55  
GW Quality:  $\rho H = 5.12$  Cond = 0.440  
DO = 5.01 Temp = 10.25°C

ORP = 74 turb > 100

0955<sup>u</sup> hotel 1300 438-0007-SV45

1300433-D.O.T. - SU25

|      |           |                    |
|------|-----------|--------------------|
| 1020 | Installed | 130543.8-2907-5008 |
|------|-----------|--------------------|

1025. Setting up on 1304B3-0A02

550/1055 June 4 55

1115 - No work pulling out

1220-Sampled 130028-AP02-6W55

6w Quality:  $p_H = 6.03$  Cond = 0.397  
 $D_0 = 4.75$   $T_{\text{exp}} = 12.28^\circ\text{C}$

83 July 21 1950

1230 - Helium leak test on 130438-5U08

Passed - No leaks No He detected

1235- ~~Unlabeled~~ 800438-0802-SV45 and

12605436-9802-SU 25

1740: Helium leak test on 1300436-0901-5068

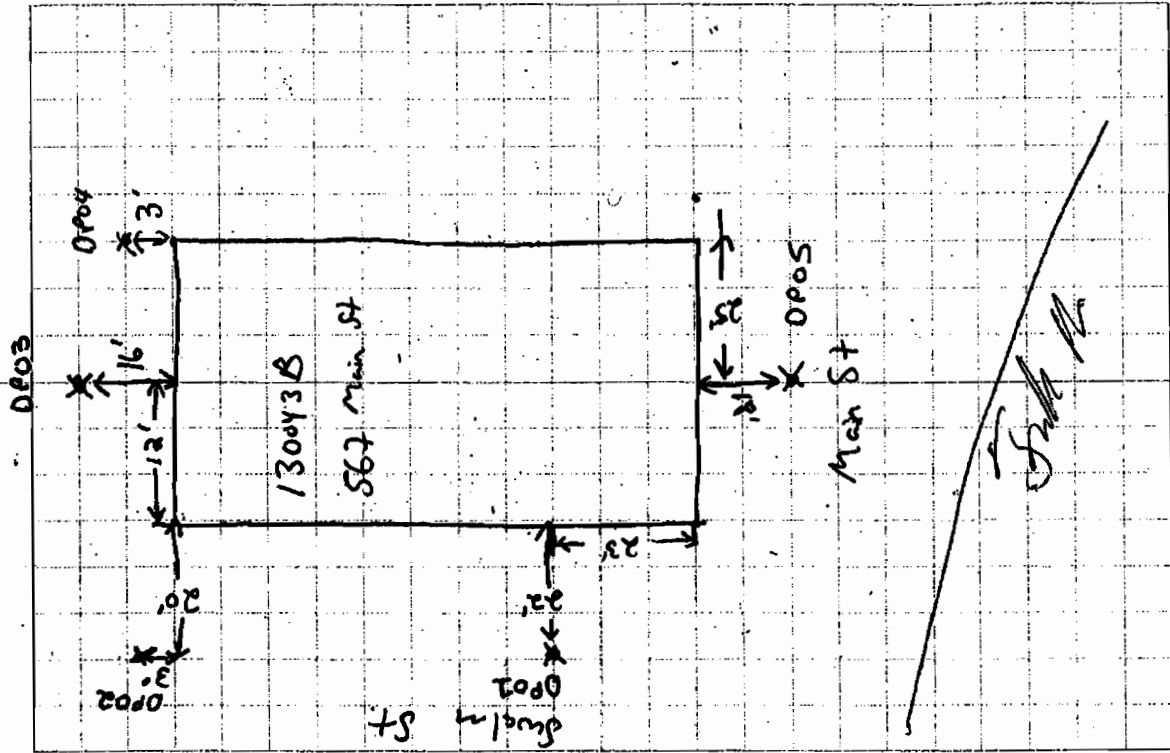
Passed - No He detected

1245-Installd 1366438-0102-5068

1320-Sanded 1300436-DP03-6WS

6w Quality:  $\eta = 67\%$  Cond = 0.342 DS = 5.75  
Temp = 11.82°C ORP = 71 Tds > 1000

Franklin



MON 3/10/08

1330 - Spoke to Mr. Bob Scarpelli (Castle Collision) → Sgt. A. Did not get the NJ45 DEC 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

1405 - Zebra Cleaning going to FedEx

1420 - Dropped off 1 color @ FedEx

Ab #: 8596 4243 1669

1440 - At Woodbury office picking up

5 boxes (20) Simms Canisters

*Fate*

Tues 3/11/08

0625 - F. Robison on site

Weather: Partly Cloudy 37°

0645 - Call started multi 2nd Aus and

Arrive 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

(-23.0) 7.1 ppm

0745 - Start Supply 130043B-DP05-SU08

(-29.5) 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 On-site - only 5 min

0828 - Dropped Supply 130043B-DP05-SU25

(-4.5)

0835 - Start Supply 130043B-DP02-SU25

(-29.5) 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

*Fate*

Tues 3/1/68

0843 - Sampled 1300438-0P02-SU08  
 (-27.5) 0.5 ppm  
 0845 - Started Sampling Ambient Air Sample  
 ended at 0P02  
 1300438-AA (-30.0)  
 0848 - Stopped Sampling 1300438-0P05-SU08  
 (-4.0)  
 0855 - Stopped Sampling 1300438-0P05-SU45  
 (-4.0)  
 0905 - Stopped Sampling 1300438-0P01-SU25  
 (-4.5)  
 0920 - Sampled 1300438-0P04-GW55  
 GW Quality: pH = 5.98 Cond = 0.600  
 DO = 4.45 Temp = 9.91°C OCP = 108  
 Turb = 21000  
 0925 - Stopped Sampling 1300438-0P01-SU45  
 (-5.0)  
 0940 - Collected <sup>in</sup> Field Black sample &  
 Check valve 1300438-PB  
 0945 - Stopped Sampling 1300438-0P01-SU08  
 (-4.5)  
 0950 - Installed 1300438-0P04-SU45  
 1005 - Installed 1300438-0P04-SU25  
 1008 - Stopped Sampling 1300438-0P02-SU45  
 (-4.0)

Frank

Tues 3/1/68

1012 - Stopped Sampling  
 1300438-0P02-SU25 (-5.0)  
 1200438-0P02-SU25 (Duplicate) -5.5  
 1018 - Started Sampling 1300438-0P03-SU25  
 (-28.5) 0.9 ppm  
 1021 - Started Sampling 1300438-0P03-SU45  
 (-30.0) 0.6 ppm  
 1025 - Started Sampling 1300438-0P03-SU08  
 (-30.0) 1.6 ppm  
 1027 - Stopped Sampling 1300438-AA AA  
 Ambient Air Sample  
 1034 - Stopped Sampling 1300438-0P02-SU08  
 (-4.0)  
 1035 - Installed 1300438-0P04-SU08  
 1138 - Stopped Sampling 1300438-0P03-SU25  
 (-5.0)  
 1200 - Finished Sampling 1300438-0P03-SU45  
 (-4.5)  
 1220 - Finished Sampling 1300438-0P03-SU08  
 (-5.0)  
 1240 - Muted at location at 1300438 A site  
 w/ Gun (Zebra)  
 1325 - Drugged off 5 bass & taken  
 AB# 8619 2965 4313

Frank



Wed 3/12/08

0630 - F Robinson on site

Weather: Overcast 45°

0650 - Calibrated Multimeter 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

0729 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 next to DPO4

0730 Zebra on site (Even only again)

0745 - Start on 130043A-DPO5

0808 - Stopped Supply 130043B-DPO4-SU25

(-4.5) East Regulator

0815 - Sampled 130043A-DPO5-GWSS + mS/mSO

GW Quantity: 5.96 Cond = 0.666 DO = 3.80

Temp = 11.27°C ORP = 69 torb = &gt; 1000

0830 - Sampled Field Blank at Check Valve

130043A-FB

0840 Installed 130043A-DPO5-SU45

F. L. 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-GWSS and

Dip Probe Spec 130043A-DPO4-GWSS

GW Quantity: pH = 6.28 Cond = 0.427

DO = 0.47 Temp = 11.44°C ORP = 2

torb = &gt; 1000

1020 - Installed 130043A-DPO4-SU45

1050 - Installed 130043A-DPO4-SU25

1100 - Installed 130043A-DPO4-SU08

1125 At 130043A-DPO3 Loc. A

1220 - Sampled 130043A-DPO3-GWSS

GW Quantity: pH = 6.36 Cond = 0.587

DO = 1.15 Temp = 14.6°C ORP = -15

torb &gt; 1000

1240 - Helium test on 130043A-DPO5-SU08

OK - No He detected

F. L. M.



Wed  
Thurs 3/12/08

1250 Helium test on 130043A-DPO4-SU08

OK - No He detected

1300 - Installed - 130043A-DPO3-SU47

130043A-DPO3-SU25

130043A-DPO3-SU08

1340 - A+ Fedex dropped off 2 boxes

A8# 8619 2965 4/07

~~End of~~

Thurs 3/13/08

0625- F866ma on site

Weather: Cloudy 35

0645- Calibrated multi (see 1315 and

Hanna U-22 OK See cal sheet)

for details, Sharma (Dor) on site

0700- 130043A-DPO3 was put in the

wrong location, next designation will

be 130043A-DPO3A

0724 Start Supply 130043A-DPO3-SU25 ✓

(-28.5) 16.8 ppm

0730 Start Supply 130043A-DPO3-SU45 ✓

(-26.5) 130043A-DPO3-SU45 (Duplicate) ✓

(-28.5) 50.3 ppm

0734 Start Supply 130043A-DPO3-SU08 ✓

(&gt;30) 0.8 ppm

0730 Zebra on site {Sun + Lake

0752 Start Supply 130043A-DPO3-SU25 ✓

(&gt;30.0) 50.2 ppm

0803 Start Supply 130043A-DPO3-SU08

(-26.0) 1.4 ppm

0805 Start Supply 130043A-AH ✓

Ambient Air located near

DPO4

F. Schmitt

Thurs 3/13/68

0868 Start Supply 130043A-DP04-SU45 ✓

(-23.0) 562 ppm

0811-Stoppped Supply 130043A-DP05-SU45

(-9.0) Fast Regulator and 130043A-DP05-SU45

(-17.5) Duplicate of 1040

0830 Sampled 130043-DP01-GWS5

Gas Quality: pH=5.86 Cond=0.513

DO=2.99 Temp=12.02°C ORA-69

Turb &gt; 1000

0840 Collected Field Blank sample of chloride

Value 130043A-FB

0845 Installed 130043A-DP01-SU45

0855 Installed 130043A-DP01-SU25

0900 Installed 130043A-DP01-SU08

0907 Stoppped Supply 130043A-DP05-SU25

(-5.0)

0927 Start Supply 130043A-DP04-SU45

(-5.0)

0940 Resample of 130043A-DP04-SU08 ✓

due to slow regulator on original

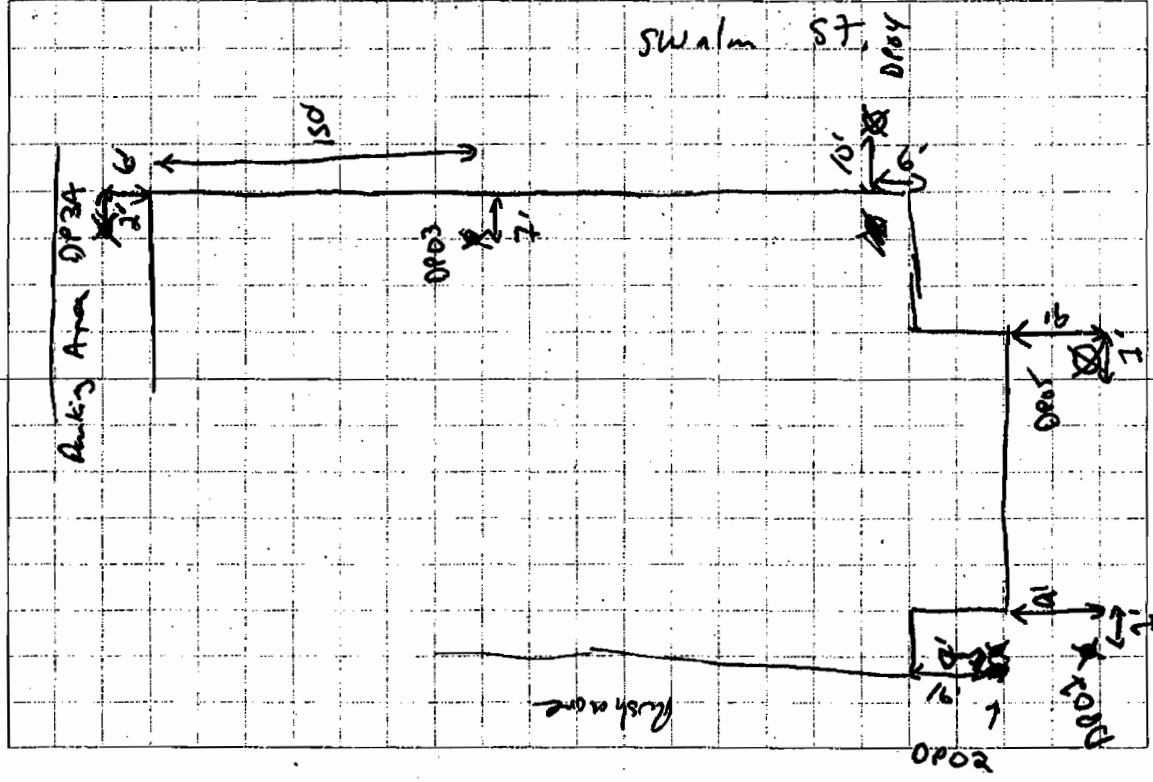
(-26.5)

0943 Stoppped Supply 130043A-DP05-AA

(-5.0) Am 5 wt Air

Turk Air

Thurs 3/13/68



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 130043-0P03A-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- Drained off 4 bars @ Kitchen  
 AB# 869 2965 4302  
 Shower at site w/ Zelnr cleaning up and  
 pulling SU tubing  
 1300- At Woodbury office picking up Cooler +  
 Summer Canisters.

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-0803A-SU25  
FAST Regular

0852 Started Supply 130043A-0803A-SU25 ✓  
(-29.5) 2.77 gal. 2nd Run

0900 Stopped Supply 130043A-0801-SU08  
(-4.5)

0903 Stopped Supply 130043A-0801-SU25  
(-4.0)

0921 Stopped Supply 130043A-0801-SU45  
(-4.5)

0923 Stopped Supply 130043A-0802-SU45  
(-4.0)

0925 Stopped Supply 130043A-0802-SU25  
(-4.5) 02 gal

0936 Stopped Supply 130043A-0802-SU08 (-4.5)

1006 Stopped Supply 130043A-0803A-SU08  
(-5.0)

1022 Stopped Supply 130043A-0803A-SU25 (-5.0)

1024 Stopped Supply 130043A-0803A-SU45 (-5.5)  
(including 2 HRS!!) Last supply - finished  
w/ site A.

1045 Zebra (Elev + Jove) on site C 0700, pulling out SV  
hoses and firing up grass area that was disturbed  
by George the mfg dog's top soil.

Frank M.

FRI 3/14/08

1055 Stopped off at sites V+C  
to Scope at location  
1145 At Feder dropping off 36000  
AB#: 8619 2965-4298

Frank M.



Mon 3/17/68

0650- KRBsun on sk 130043V  
 Weather: Clear 33  
 0635- Putting cows at SV locations. Spoke to Jim, bulby director/maintenance person, told US. Sean O'Brien (CDM) arrived @ the fire.  
 0730- Calibrated Moist-Rue Res and Horner U-22  $\rightarrow$  CC See cal sheet for details  
 0750- Zehn on sk. Sun + Luke  
 Site 130083V  
 0835- Setting up on DP05  
 0910- Sampled 130043V-DP05-6W55  
 Gas Quality: pH=5.65 and 0.176 DO=8.37  
 Temp=14.02°C OLP=12.9 Turb >1000  
 0920- Collected - Field Blank of Chick Utter  
 10043V- FB  
 0925- Installed 130043V-DP05-SV45  
 0940- Installed 130043V-DP05-SV25  
 0945- Installed 130043V-DP05-SV08  
 1035- Sampled 130043V-DP04-6W55 and Duplicate  
 130043V-DP06-6W55  
 Gas Quality: pH=5.95 and 0.176 DO=7.76  
 Temp=16.25°C OLP=9.1 Turb >1000  
 1050- Installed 130043V-DP04-SV45

Frank M.

Tues Mon 3/17/68

1105- Installed 130043V-DP04-SV25  
 1110- Installed 130043V-DP04-SV08  
 1150- Sampled 130043V-DP05-6W55  
 Gas Quality: pH=6.35 Cond=0.841  
 DO=7.50 Temp=15.51°C OLP=63  
 Turb >1000 (test OK)  
 1200 ~~Test~~ He test on 130043V-DP05-SV08  
 1215- Start Sampling 130043V-DP05-SV25 ✓  
 (-29.5) 3.5 ppm  
 1221 Start Sampling 130043V-DP05-SV08 ✓  
 (-23.0) 0.2 ppm  
 1222- Start Sampling 130043V-DP05-SV45 ✓  
 (-29.0) 0.9 ppm  
 1224- Start Sampling 130043V-DP05-AA ✓  
 Ambient Air Sample near to DP05  
 1225- Installed 130043V-DP05-SV45  
 130043V-DP03-SV25  
 130043V-DP05-SV08  
 135- Helium test on 130043V-DP04-SV08  
 O.L. No He test detected  
 1341- Stopped Sampling 130043V-DP05-SV08 (-4.5)  
 1347 Stopped Sampling 130043V-DP05-SV45 (-5.0)  
 1400- Stopped Sampling 130043V-DP05-SV25 (-5.0)  
 1405- Stopped Sampling 130043V-DP05-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 Olf = 94

Turbidity &gt; 1000

1435- Installed 130043U-D102-SU45

1450- Installed 130043U-D102-SU25

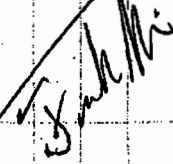
1500- Installed 130043U-D102-SU08

1510- Leaving the site: Sun dropping off  
1 color + 1 blue w/amine concn @ Redden

AB #:

2030- Chandrah delivers 3 boxes (12 and

110 Sen at his Hotel)



Tues 3/18/08

0625- 6 Redden on site

Weather: Partly Cloudy 37°

0705- Calibrated Multi Rec and

Hinder 0-22 successfully. See csl sheets  
for details

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

0722 Supply Supply 130043U-D104-SU08 ✓

(-29.5) 0.8 ppm

0724- Started Supply 130043U-D104-SU08 ✓

(7-30.0) 0.5 ppm

D103 JE

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

(7-30.0) 0.7 ppm

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

(7-30.0) 0.4 ppm

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

0800- Zebra on site

0759- Started Supply 130043U-D102-SU25 ✓

(-29.0) 0.5 ppm

0801- Started Supply 130043U-D102-SU45 ✓

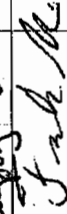
(-28.0) and Duplicate 130043U-D102-SU45 ✓

(-29.0) 0.4 ppm

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

(-27.2) 0.1 ppm

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



Tues 3/19/68

0846 Stopped Sampling 130043V-DP02-SV45 and

(-3.5)

130043V-DP02-SV45 (Dep. 45) (-11.5)

SV45 had first regulation

0855-Sampled 130043V-DP01-SV55

600 Quality: pH=5.53 Cond=0.870

DO=5.91 Temp=12.88°C ORP=127

Turbo DP00

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 ✓

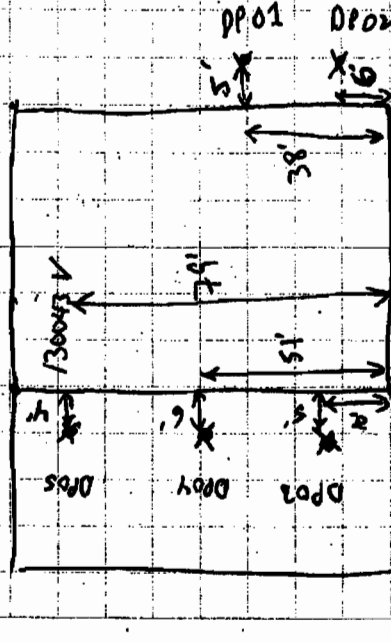
(-30.0) 0.4 ppm

1143 Start Sampling 130043V-DP01-SV45 ✓

(-29.5) 0.4 ppm

Fubk.

Tues 3/18/68



New York Ave



Tues 2/18/68

1415- No ambient air sample was collected

Today's Chartwell sheet is 1 Saming

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 to FedEx w/ 4 boxes of canisters

+1 cooler A.B.#: 3619 2965 4118

Wed 3/19/68

0630- F. Robinson on site

Weather: Rain 43°

0725 See (Cm) on site

0740- before on site

A+ Site 130043C

125 State Street.

0840 At 130043C-DP05

Retired at 46' (N.W. water)

setting SU45

0930 Installed 130043C-DP05-SU45

had to go down again with red

hole collapsed

0950 Installed 130043C-DP05-SU25

1000 Installed 130043C-DP05-SU03

1030- Calculated Abundance 0.22 OK

See Col Sheets for details.

1100 Sampled 130043C-DP05-GWST

+ MS/MSD

GW Quality: pH= 6.20 and= 0.156

DO= 4.33 Temp= 12.68°C OLR= 62

turns > 1000

1120 Collected Field Blank sample of

Check-overline 130043C-FB

Fish



Wed 3/26/08

1200 - Supply 1300V3C-DP04-6W5T  
and duplicate supply 1300V3C-DP06-6W5T  
6W supply, pH=5.58 cond=0.08Y  
D=4.34 temp=12.46°C ORP=136  
starting 7000  
1205 - Installed 1300V3C-DP04-SU45  
1315 - Installed 1300V3C-DP04-SU25 →  
1300V3C-DP04-SU08  
1330 - Raining heavy, 56 ppm, water for  
today  
1400 - leaving the site: Seen 500 to Federex  
to drop off code: Federex A6#  
8619 2965 4276

*Federex*

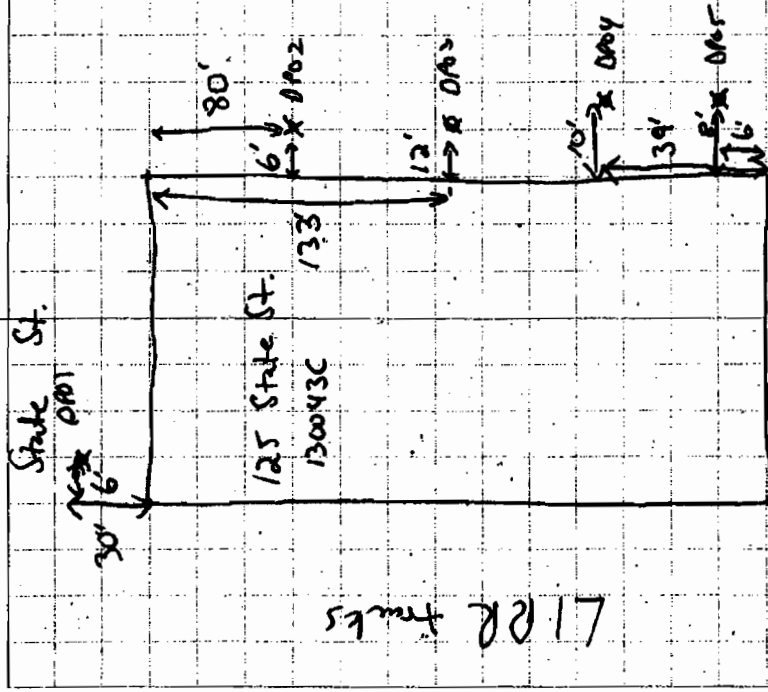
Thurs 3/26/08

0625 - L. Robinson on site  
Weather: Breeze 48  
0630 - Dave (Zelnr) called: Delay  
due to axle breaky on Geopike  
trailer while driving. Will call  
later with an update  
0700 - Sam (Carr) on site  
0730 - Cal, Scott's Multi-Rec Plus - OK  
See Cal sheets for details  
0745 - Conducted helium leak test on  
1300V3C-DP05-SU08 - OK, no  
He detected  
0813 - Start Supply 1300V3C-DP05-SU25 ✓  
(-29.5) 254pm  
0816 - Start Supply 1300V3C-DP05-SU08 ✓  
(-30.6) 3.5 ppm  
0821 - Start Supply 1300V3C-DP05-SU45 ✓  
(-27.5) 3.3 ppm  
0824 - Start Supply 1300V3C-AA ✓  
(-28.5) Ambient Air Sample next to  
1300V3C-DP05  
0840 - Start Supply 1300V3C-DP04-SU25 ✓  
(-29.5) 1.9 ppm  
*Federex*

Thurs 3/20/08

- 0845 Start Sampling 130043C-DP04-SU08 ✓  
 (>300) 2.9 ppm and Apphite of SU08  
 130043C-DP04-SU08 (-29.5) 2.9 ppm  
 0849 Start Sampling 130043C-DP04-SU08  
 (-20.0) 1.7 ppm  
 0908 Stopped Sampling 130043C-DP05-SU08  
 (-4.0) Fast Register  
 0915 Dave (Zebra) called: Driller will not  
 be on site today, track is totally shot and  
 Drill rig and drills were undamaged  
 will be here tomorrow 1st thing.  
 10045 Stopped Sampling 130043C-DP05-SU08  
 (-4.0)  
 0947 Stopped Sampling 130043C-AF (-5.0)  
 Ambient Air Sample  
 1000 Stopped Sampling 130043C-DP05-SU27 (-5.0)  
 1026 Stopped Sampling 130043C-DP04-SU08 (-4.0)  
 and 130043C-DP04-SU08 (-5.0) Asphalte  
 of SU08  
 1030 Stopped Sampling 130043C-DP04-SU25 (-4.5)  
 1100 Measure all Locations DP04-DP05  
 1110 Sam began 2 hrs of Gamma Counts  
 Q/Gelator A/B/H - 8596 4243 1688

Thurs 3/20/08



APR 3/20/08

0630 - R Brown on site

Weather: Clear, Windy 37°

0700 - Sam on site

0730 - Zebra 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-SU25

0815 - Sampled 130043C-DP03-SU08

GW Quality: pH = 5.77 Cond = 0.094 DO = 3.78

Temp = 11.94°C ORP = 95 Turb = &gt;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-SU08

GW Quality: pH = 5.77 Cond = 0.088

DO = 6.575 Temp = 14.16°C ORP = 73

Turbidity = &gt;1000

1000 - Installed 130043C-DP02-SU45

1005 - Overhead wires down too close to building

where DP01 should be hung to move it

Frank R.

APR 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 of

1058 - Starting Sampling 130043C-AA (-27.5)

Handed Air moved to DP03

1058 - Started Sampling 130043C-DP03-SU08 ✓

(-29.0) 0.8 ppm

1101 - Started Sampling 130043C-DP03-SU45 ✓

(&gt;-30.0) 1.1 ppm

1105 - Installed 130043C-DP01-SU25

1130 - Sampled 130043C-DP01-SU08

GW Quality: pH = 5.81 Cond = 0.282

DO = 6.49 Temp = 13.15°C ORP = 94

Turbidity = &gt;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 ✓

(&gt;-30.0) 0.6 ppm

Frank R.



FRI 3/21/08

1211 - Started to sample 130043C-DP02-SU45 ✓  
(7-30.0) 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)~~1254~~ - Stopped Sampling 130043C-DP02-SU25 (-5.5)

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

1350 - Stopped 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

@ FedEx A#8: 8619 29654254 for Sat

Delivery. Sem prematurely dropped off 1 cube

and 3 boxes of carrots: A#8:

8647 USS1 4953

8619 2965 4265

F. M.

MON 3/24/08

0620 - F. Bismar on site

Clear 32°

0630 - Monkey out location at

750 Sumner Ave site N

0745 - Bismar on site (Even + Jodi)

0750 - Calibrated notes - Place PWS and

Harris V-12 - O/C See Cal sheet

for details

0815 - Bismar Vee truck inside (Curry + Ruck)

0845 - DP05 Hand cleared with hand

cutter down to 5'

0850 - 130043W-DP05-SU08 installed

0900 - DP04 Hand cleared to 5' with hand

cutter

0905 - installed 130043W-DP05-SU25

0955 Sampled 130043W-DP05-GW55

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

Clark valve 130043W-DP05-SU45

1005 - installed 130043W-DP05-SU45

1020 - installed 130043W-DP04-SU08

1030 - 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 Sample 130043N-DP05-SU25 ✓

(-30.0) ~~1.2~~ 1.3 ppm

1211. Started Sample 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. Started 130043N-DP04-GW55 and Duplicate

130043N-DP06-GW55

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 tube sample tubing.

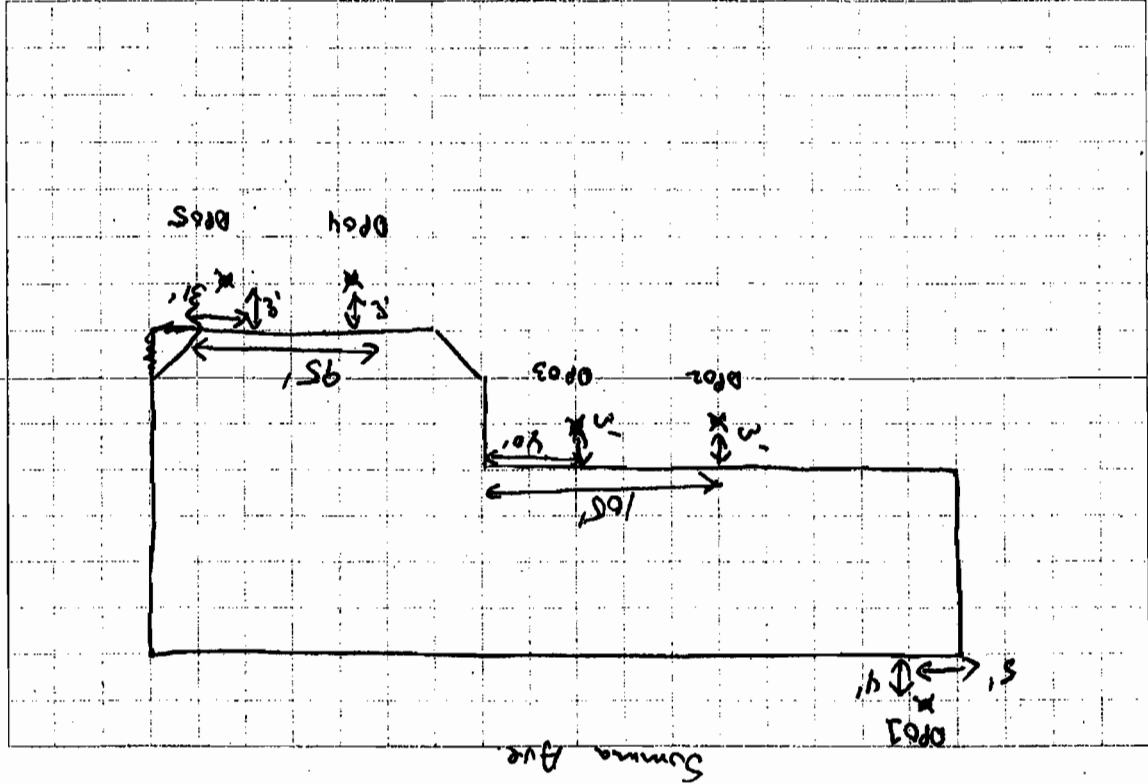
1310. Conducted Helium test on 130043N-DP04-SU08

OK, No leak, No He detected in SU tubing

1315. Installed 130043N-DP03-SU08

Frank M

Mon 3/24/08



Mon 3/24/68

1320- DPO1 Cleared to 5' dry barrel  
auger + vac truck (mud ground)

1330- Installed 130043W-DPO3-SU25

1330- Finished Supply 130043W-DPO5-SU45

(-5.0)

1333- Finished Supply 130043W-DPO5-SU25 (-5.0)

1355- Sanded 130043W-DPO3-6W5T

6W Quality: pH = 5.81 cond = 0089

DO = 8.81 Temp = 15.22°C ORP = 126

turbidity = 51000

1354- Finished Supply 130043W-DPO5-SU25 (-5.0)

1400- Finished Supply 120043W-AA

Ambient Air (-5.0)

1440- Long de sk - Sew going to Keder

w/1 canister + 1 box of Sennoc Canister

AB #5: 8619 2965 4162 and

8619 2965 4140

*Frank*

Tues 3/25/68

0625- F 16mm on sk

Check 33°

0640- Collected no H<sub>2</sub>O Au and 1 Lk

U-22 successfully. See Oil J Lactis for details

0727- Started Supply 130043W-DPO4-SU25

(-30.0) 0.8 ppm

0731- Started Supply 130043W-DPO4-SU25 ✓

(-30.0) 1.1 ppm

0734- Started Supply 130043W-DPO4-SU45 ✓

(-30.0) 0.5 ppm and Replicate

130043W-DPO4-SU45 (-30.0) 0.5 ppm

0735- Techn on sk (Even + Jose)

0744- Started Supply 130043W-DPO3-SU25 ✓

(-30.0) 0.4 ppm

0754- Started Supply 130043W-DPO3-SU25 ✓

(-30.0) 1.6 ppm

0756- Started Supply 130043W-DPO3-SU45 ✓

(-32.0) 0.6 ppm

0805- Installed 130043W-DPO2-SU25

0812- Finished Supply 130043W-DPO4-SU25

(-3.5) only 45 min. fast Regulator

0815- Installed 130043W-DPO2-SU25

0900- Finished Supply 130043W-DPO4-SU25 (-5.0)

*Frank*

Tues 3/26/08

0905- Sampled 130043W-0802-845 6W55

6W Quality: pH= 6.30 Cond= 0.205

DO= 6.55 Temp= 11.36°C ORP= 90

turb= &gt;1000

0915- Collected field black sample of check valve

130043W- FB

0916- Finished Supply 130043W-0804-SU45 (-5.0)

and duplicate 130043W-0804-SU45 (-5.0)

0920- Installed ~~130043W-0802-SU25 (-5.0)~~

130043W-0802-SU45

0923- Finished Supply 130043W-0803-SU25

0928- Finished Supply 130043W-0803-SU08 (-5.0)

0941 Finished Supply 130043W-0803-SU45 (-5.0)

0955- Installed 130043W-0801-SU08

1010 Installed 130043W-0801-SU25

1045- Sampled 130043W-0801-6W55

6W Quality: pH= 5.70 Cond= 0.055

DO= 9.65 Temp= 12.94°C ORP= 136

turb= 565

1100- Installed 130043W-0801-SU45

1114- Started Supply 130043W- AA Ambient Air ✓

located by DP02

1120 Started Supply 130043W-0802-SU25 ✓

(-30.0) 0.8 ppm

Fahk

Tues 3/26/08

1124- Started Supply 130043W-0802-SU08

(-30.0) 0.4 ppm

1126- Started Supply 130043W-0802-SU45

(-22.5) 0.7 ppm

1210- Stopped Supply 130043W-0802-SU08 (-5.0)

F<sub>02</sub> Regulator 45 minutes

1259- Start Supply 130043W-0801-SU25 ✓

(-30.0) 0.8 ppm

1303 Start Supply 130043W-0801-SU08 ✓

(-30.0) 0.4 ppm

1305- Start Supply 130043W-0801-SU45 ✓

(-29.7) 1.8 ppm

1302 End Supply 130043W- AA Ambient Air

(-5.0)

1312- End Supply 130043W-0802-SU45 (-5.0)

1320- End Supply 130043W-0802-SU25 (-6.5)

1430- End Supply 130043W-0801-SU45 (-4.5)

1432- End Supply 130043W-0801-SU25 (-5.0)

1434- End Supply 130043W-0801-SU08 (-5.0)

1500- Sewer at feeder dropped off I cooler and

4 boxes of Summa canisters: AB 45

8619 2965 3486 8619 2965 4151

8619 2965 4129 8619 2965 3497

8619 2965 4130

Fahk

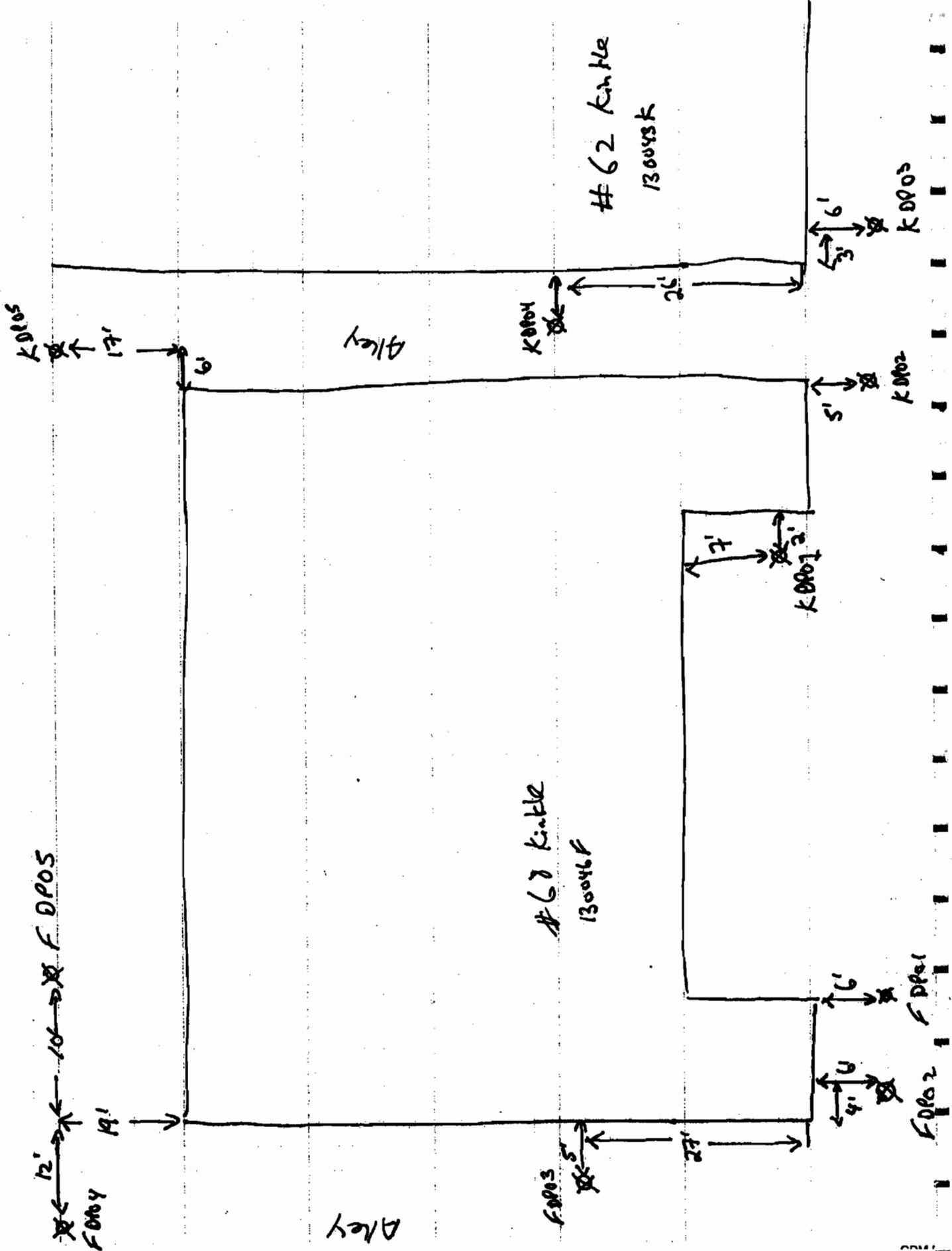
MON 3/31/08

0650- At New Canal Sides to take  
Digital photos of sides C, N, K, F, A  
and B.

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

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

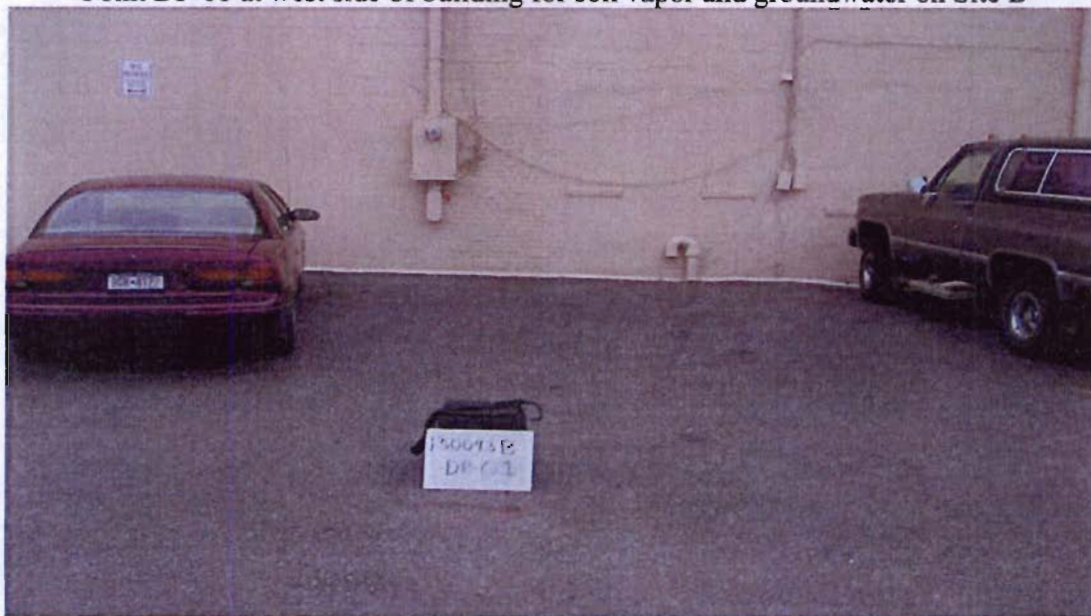


Across the road view of the parking lot where DP-04 will be installed



## **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

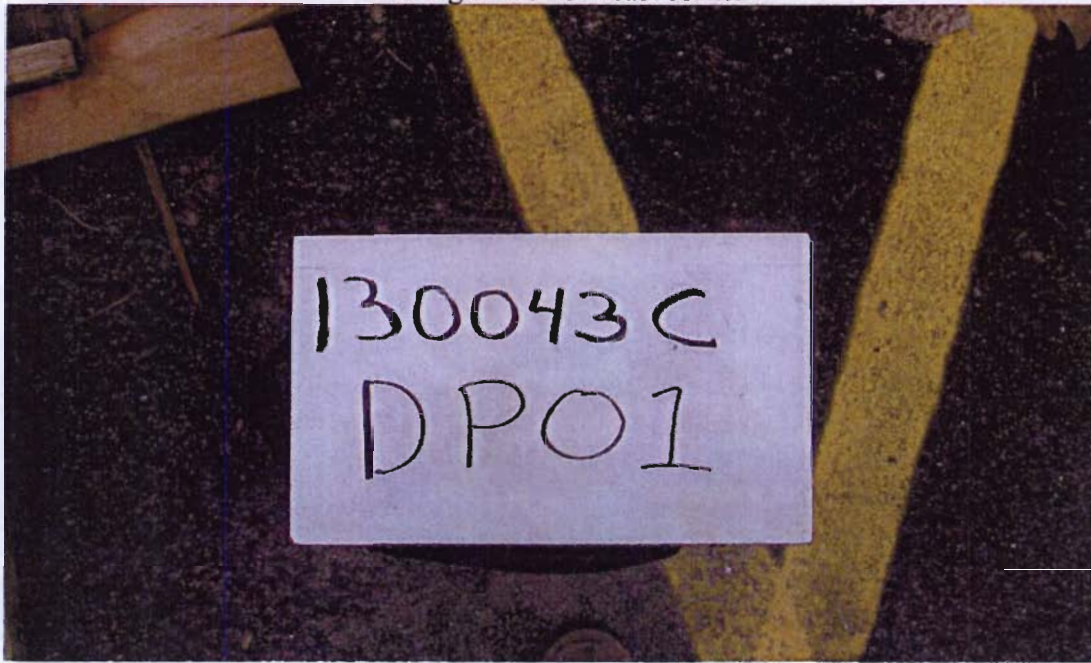


Display of south side of building



**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



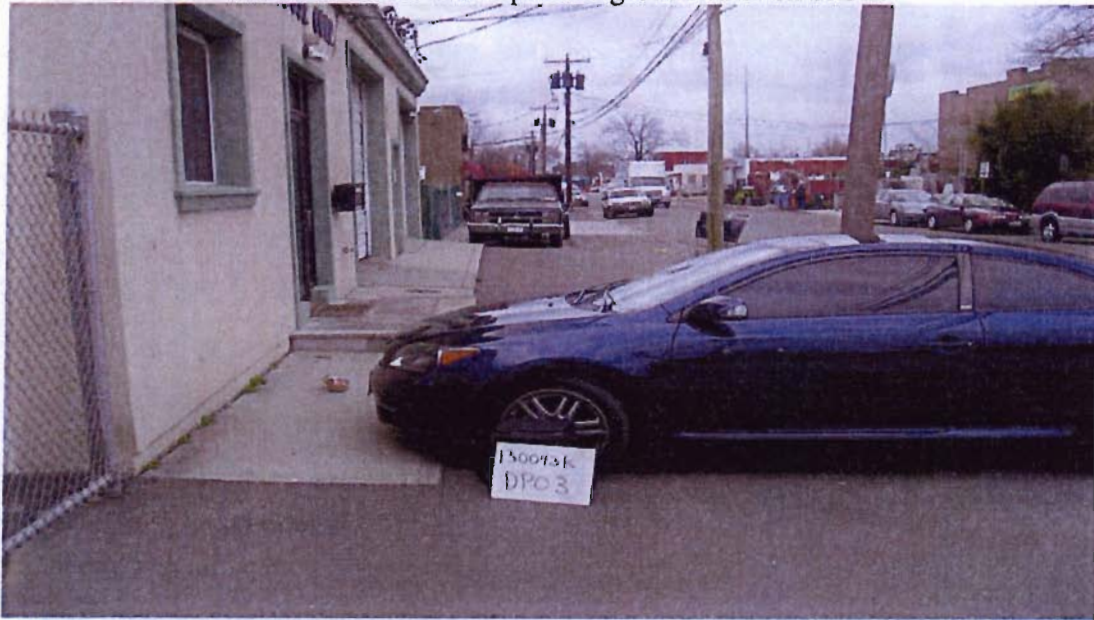
Point DP-02 for soil vapor and groundwater located on driveway between two buildings on Site K





## **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



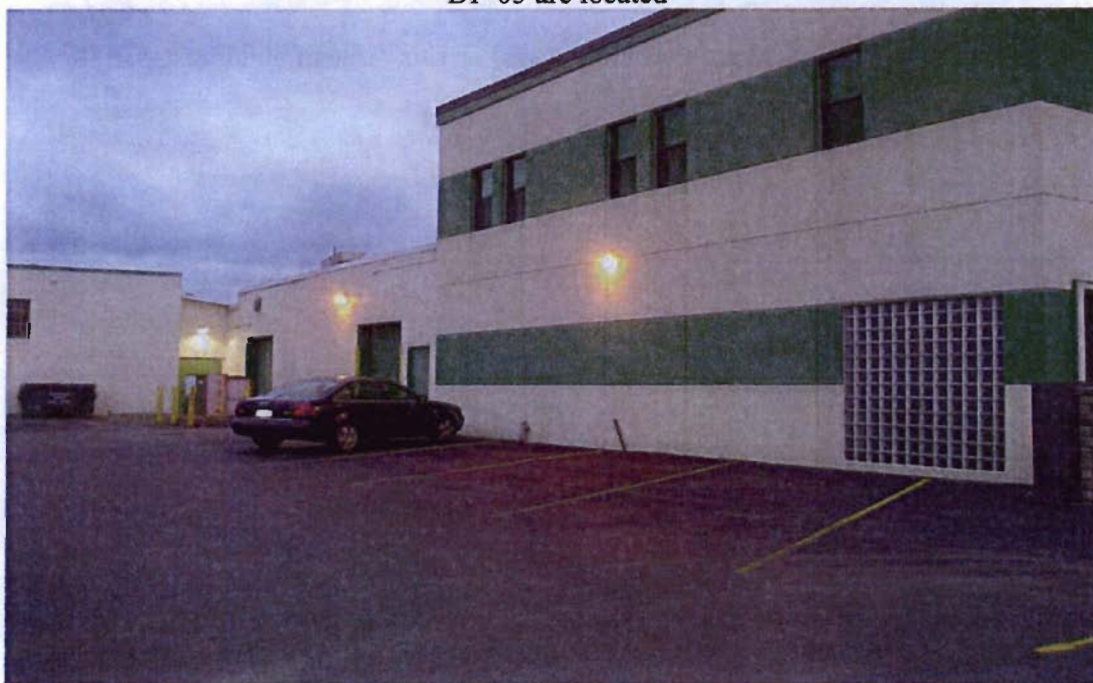


## **New Cassel Industrial Area Soil Vapor and Groundwater Investigation**

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

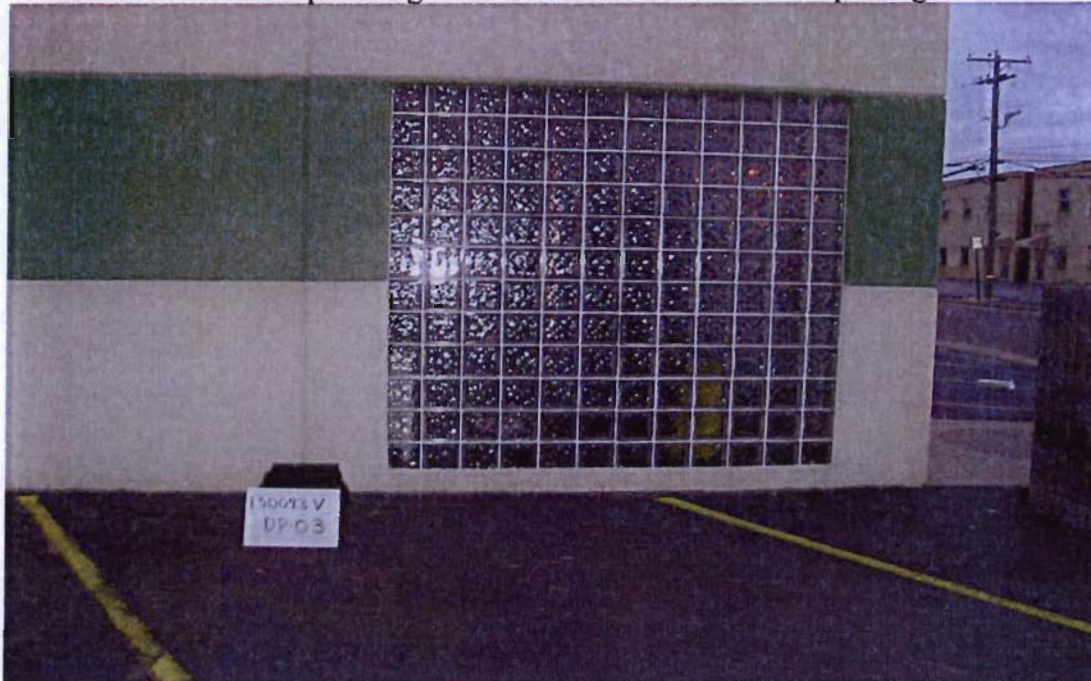


Point DP-02 for soil vapor and groundwater located on same side of building as DP-01 on Site V



## **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

