

# **Investigation Summary Report**

Subsurface Investigation Report

November 28, 2006

## **06-210**

*conducted at:*

**NYSDEC Spill# 95-06588**

**169 3rd Avenue**

**Brooklyn, New York**

**New York City Tax Map Designation: Block 407; Lot 1**

*prepared for:*

**Asti Holding Corp.**

**556 Central Avenue**

**Bethpage, New York**

*report user:*

**New York State Department of Environmental Conservation**

**100 Hunters Point Plaza**

**47-40 21<sup>st</sup> Street**

**Long Island City, New York 11101-5401**

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**IMPACT ENVIRONMENTAL**



## TABLE OF CONTENTS

Section	Topic	Page
<b>1</b>	<b>Purpose &amp; Scope</b>	<b>4</b>
<b>2</b>	<b>Site Description</b>	<b>5</b>
2.1	Topography	5
2.2	Land Use	5
<b>3</b>	<b>Sampling and Analysis Plan</b>	<b>6</b>
3.1	Subsurface Soil Sampling	6
3.1.1	<i>Subsurface Probe Installation</i>	6
3.2	Field Headspace Analysis	8
3.2.1	<i>Headspace Analysis Procedure</i>	8
3.3	Sample Characterization	8
3.4	Groundwater Sampling	9
3.4.1	<i>Monitoring Well Installation</i>	9
3.4.2	<i>Monitoring Well Development and Sampling Procedure</i>	10
3.5	Groundwater Elevation Survey	10
3.6	Laboratory Sample Location and Frequency	11
<b>4</b>	<b>Quality Assurance and Quality Control Procedures (QA/QC)</b>	<b>12</b>
4.1	Sampling Personnel	12
4.2	Sampling Equipment	12
4.2.1	<i>Geoprobe</i>	12
4.2.2	<i>Photo Ionization Detector</i>	12
4.2.3	<i>Sample Vessels</i>	13
4.3	Sample Documentation	13
4.3.1	<i>Sample Identification</i>	13
4.3.2	<i>Chain-of-Custody Procedures</i>	13
4.3.3	<i>Laboratory-Custody Procedures</i>	14
<b>5</b>	<b>Laboratory Analysis</b>	<b>15</b>
5.1	Analytical Test Methods	15
5.2	Analytical Results	15
<b>6</b>	<b>Evaluation of Results</b>	<b>17</b>

## PLATES

- Plate 1:** Project Location Map, *Brooklyn, New York*  
**Plate 2:** Sample Acquisition Plan, *Brooklyn, New York*  
**Plate 3:** Groundwater Potentiometric Map, *Brooklyn, New York*

## TABLES

- Table 1:** Groundwater Survey Result, *Brooklyn, New York*  
**Table 2:** Detected Analytes in Soil, *Brooklyn, New York*  
**Table 3:** Detected Analytes in Groundwater, *Brooklyn, New York*

## FIGURE

- Figure 1:** Geoprobe Operating System

## APPENDICES

- Appendix A:** Soil Probe Logs, *Brooklyn, New York*  
**Appendix B:** Laboratory Report, JMS Environmental Services, Inc.

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## 1 Purpose & Scope

This investigation was conducted to define what, if any, contaminants have impacted the environmental quality of the property located at 169 3rd Avenue, Brooklyn, New York, herein identified as the Site. The scope of this investigation is based upon the Investigation Work Plan, dated August 8, 2006 prepared by Impact Environmental and approved by the New York State Department of Environmental Conservation (NYSDEC). The NYSDEC requirements were outlined in a letter, dated August 28, 2006. The objectives of this investigation are: 1) to determine the extent of any gasoline-related soil or groundwater contamination associated with the NYSDEC Spill# 95-06588 and; 2) to determine the site-specific groundwater flow direction.

The investigative protocols for this investigation were based, in part, upon the following documents: 1) the New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum (TAGM) #4046, Determination of Soil Cleanup Objectives; 2) the New York State Department of Environmental Conservation, Technical Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Limitations; 3) the New York State Department of Environmental Conservation, Sampling Guidelines and Protocols, Technical Background and Quality Control Assurance for the New York State Department of Environmental Conservation Spill Response Program, dated September 1992; and 4) the New York State Department of Environmental Conservation, Division of Environmental Remediation, Draft DER-10 Technical Guidance For Site Investigation and Remediation, dated December 25, 2002. The activities performed under the scope of this investigation have been summarized in this report in the following sections.

- **Site Description**
- **Sampling and Analysis Plan**
- **Quality Assurance and Control Procedures (QA/QC)**
- **Laboratory Analysis**
- **Evaluation of Results**

Presented herein are the results of the Subsurface Investigation conducted by Impact Environmental on the Site [see **Plate 1:** Project Location Map, *Brooklyn, New York*].

## **2 Site Description**

### **2.1 Topography**

The areal extent of the Site is approximately 11,661 square feet. The Site contains one one-story masonry building with an approximate footprint of 2,613 square feet utilized as a car wash, and one one-story masonry building with an approximate footprint of 346 square feet utilized as an attendants kiosk. The surface area of the Site consists of asphalt parking areas and concrete walkways. The Site exhibits low topographic relief (less than three percent slopes).

### **2.2 Land Use**

The site is currently utilized as a gasoline service station. According to NYSDEC Petroleum Bulk Storage records, two (2) 4,000-gallon underground gasoline storage tanks (USTs) were installed on the Site on December 1, 1972. Said USTs passed the tightness-testing in February 2006. In addition, one (1) 550-gallon fuel oil UST was installed on the Site on March 1, 1974. Said UST was converted to non-regulated uses on August 1, 1996.

On August 17, 1995, the NYSDEC performed a routine site inspection at the Site. As a result of said inspection, NYSDEC Spill# 95-06588 was assigned to the Site for the soil contamination noted around the gasoline tanks and the remote fills. On August 19, 1996, soil and groundwater contamination were detected on the Site. NYSDEC Spill# 96-07280 was assigned to the Site. NYSDEC Spill# 95-06588 was closed on November 26, 2003 to be investigated and remediated under Spill# 96-07280.

In a letter, dated August 28, 2006 from the NYSDEC, " ...it should be noted that Spill# 95-06588 was issued for this site (169 Third Avenue), while Spill# 96-07280 was issued for another site (156-170 Third Avenue). The two sites are across the street from each other. Spill# 95-06588 was inadvertently closed on 11/26/03 and was referred to Spill# 96-07280. The Department has now reopened Spill# 95-06588 to investigate the contamination at 169 Third Avenue."

### 3 Sampling and Analysis Plan

A survey, sampling and analysis program was developed in accordance with the requirements of the NYSDEC. The plan included: 1) an investigation to sample subsurface soil and groundwater and; 2) an investigation to determine the site-specific groundwater flow direction. All sampling locations can be referenced with **Plate 2**. The result of the groundwater elevation survey can be referenced with **Plate 3**.

#### 3.1 Subsurface Soil Sampling

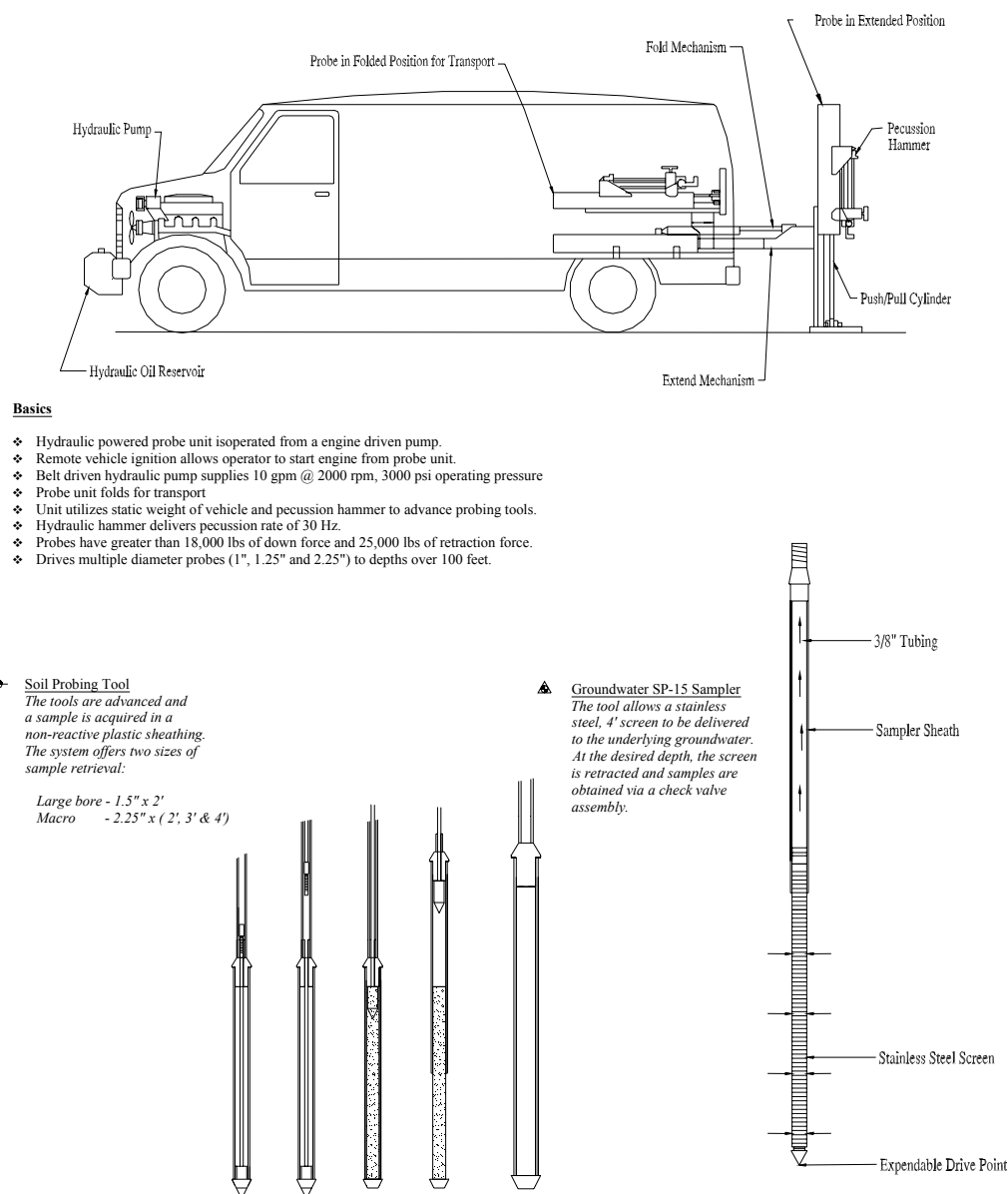
On November 9 & 10, 2006, Impact Environmental installed four (4) soil probes, identified as SP-1 through SP-4, on the Site as part of this investigation.

Soil probes SP-1 and SP-2 were installed proximal to the locations of the existing pump islands. Soil Probes SP-3 and SP-4 were installed proximal to the location of the two (2) existing 4,000-gallon gasoline USTs. Subsurface soil samples were secured from SP-1 through SP-4 at depth intervals ranging from grade to fifteen (15) feet below existing grade (BEG), at which point the water table was encountered.

##### 3.1.1 Subsurface Probe Installation

Subsurface probes were sited using a Geoprobe hydraulically powered probing tool (see **Figure 1: Geoprobe Operating System**). Mechanized, vehicle mounted probe systems apply both static force and hydraulically powered percussion hammers for tool placement (static down forces up to 18,000 pounds combined with percussion hammers of eight horsepower continuous output). Recovery of large sample volumes was facilitated with a probe-driven sampler. The probe-driven sampler consisted of a hollow probe that opened via a remote control mechanism at the selected sampling depth in the soil profile to allow soil to enter as it was advanced. Discrete media samples were secured at the desired depths and were contained within a non-reactive transparent plastic sleeve that lined the hollow probe. The plastic sleeves were removed for subsequent inspection and sample aliquot acquisition.

**Figure 1: Geoprobe Operating System**



## 3.2 Field Headspace Analysis

Headspace analysis was performed on each subsurface soil sample acquired from probes SP-1 through SP-4 to provide precursory data regarding contamination. Results of the analysis were used to adjust the sample and analysis program to yield the most accurate and representative results. The results of the field analysis are presented in **Appendix A: Soil Probe Logs**.

### *3.2.1 Headspace Analysis Procedure*

Headspace analysis was performed on each of the acquired samples utilizing a portable photo ionization detection meter to measure what, if any, hydrocarbon concentrations were present in isolated portions of the secured samples. Headspace analysis was conducted by partially filling a wide-mouth glass container with sample aliquot and sealing the top with aluminum foil, thereby creating a void. This void is referred to as the sample headspace.

To facilitate the detection of any hydrocarbons contained within the head space, the container was agitated for a period of thirty (30) seconds. The probe of the vapor analyzer was then injected through the foil into the headspace to measure the hydrocarbon concentrations present. A Photovac Micro-Tip, photo ionization detection meter (PID) was the organic vapor analyzer selected for the head space analysis. A PID utilizes the principle of photo ionization for detection and measurement of hydrocarbon compounds. A PID does not respond to all compounds similarly; rather, each compound has its own response factor relative to its calibration. For this investigation, the PID was calibrated to isobutylene. Hydrocarbon relative response factors for a PID calibrated to isobutylene are published by the manufacturer.

## 3.3 Sample Characterization

A visual inspection of all samples recovered during the installation of each of the soil probes was conducted to identify any gross signs of chemical contamination and to classify the sample media. Color classifications were made in accordance with the Munsell Classification System. Gradation classifications were made in accordance with the Unified Soil Classification System.

In general, the soil samples obtained from soil probes SP-1, SP-2, SP-3 and SP-4 installed on the Site were found to consist of brown silty sand and trace gravel mixed with urban fill (including brick and



concrete) from approximately one foot (1') to seven feet (7') BEG. No significant odor or staining was noted at this depth range. The soil samples obtained from soil probes SP-1, SP-2, SP-3 and SP-4 at the seven foot (7') to fifteen foot (15') depth range were found to consist of dark gray to black silty sand and trace gravel mixed with urban fill, down to the soil-groundwater interface at approximately fifteen feet (15') BEG. Significant petrochemical odor and staining was noted at this depth range. The soil probe logs presented in **Appendix A** provide a classification of each sample for color, odors, PID readings and gradation.

### 3.4 Groundwater Sampling

On November 9, 2006 and November 10, 2006, Impact Environmental installed four (4) groundwater monitoring wells, identified as MW-1 through MW-4, on the Site as part of this investigation. The monitoring wells were gauged for the presence and thickness of free phase product and depth to water with an oil-water interface meter. No free phase product was observed in any of the wells. The results of the field measurements gauging and surveying the monitoring wells are presented in **Table 1**. Four (4) monitoring wells (MW-1 through MW-4) were developed and sampled as part of this investigation. One groundwater sample was secured from each of these monitoring wells for laboratory analysis.

#### 3.4.1 Monitoring Well Installation

Four (4) 1-inch monitoring wells (MW-1 through MW-4) were installed on the Site. The monitoring wells were installed on the Site using a Geoprobe operating system. The wells were constructed of fifteen (15) linear feet of one (1") inch diameter slotted (0.020 inch) schedule 40 PVC screen. The screens were installed at a depth straddling the water table, from 7.5 ft below to 7.5 ft above water table. The balance of the well, approximately seven feet (7'), as the total depth of the wells are approximately twenty-two feet (22') BEG, was constructed with one (1") inch diameter schedule 40 PVC riser. The outside of the well from its base to a point one foot above the highest screen section was packed with clean filtration media (Morie sand). A two-foot bentonite seal was packed around the casing above the filtration media. Drill cutting media was placed above the bentonite seal to a point six inches below existing grade. Concrete was used to fill the remaining six inches of open well casing in conjunction with the installation of a cast iron manhole with an access cover.

### 3.4.2 Monitoring Well Development and Sampling Procedure

The development and sampling procedures conformed to NYSDEC protocols. A field log protocol was conducted to record sampling data including; date, time, location, sample identification code, depth to water, total depth of the well, method of well development, and sampling technique. The monitoring wells were developed by purging a minimum of three (3) static well volumes utilizing a mini pump. A static well volume is defined as:

$$\text{Static well volume} = \text{height of water column} \times (\text{well radius})^2 \times \pi \times 7.48$$

where 7.48 is the conversion factor for cubic feet to gallons

Field measurements were secured from each monitoring well during the development process to provide data regarding physical groundwater characteristics. The development water was field analyzed for pH, specific conductivity and temperature. Results of the field measurements were utilized to establish steady state conditions within the groundwater aquifer. Following development, one water sample was acquired from each of the monitoring wells utilizing a dedicated disposable bailer to prevent cross-contamination. All of the samples were transferred with minimal disturbance into the appropriate vessels.

## 3.5 Groundwater Elevation Survey

On November 11, 2006, a groundwater elevation survey was performed on the Site to determine groundwater flow direction. The elevation of groundwater was gauged at each monitoring well and recorded. The elevations were used to graphically define the planimetric surface of the water table. The elevations of the top of the casings were represented with respect to each other and based on a benchmark elevation or approximate elevation above mean sea level. The groundwater elevations were based as a function of the depth to water and these elevations. The groundwater elevation survey results are represented in **Table 1** and **Plate 3**. Based on the survey results, the groundwater flow direction at the Site is in an East-Northeast direction.

### 3.6 Laboratory Sample Location and Frequency

The samples secured from soil probes SP-1 through SP-4 were subjected to headspace analysis. The headspace analysis detected concentrations of hydrocarbons within the representative samples. Based on the results of the headspace analysis and sample characterization, two (2) samples from each probe were selected for certified laboratory analysis.

The selected soil samples were labeled for identification purposes as 06-210 SP-1 [4'], 06-210 SP-1 [11'], 06-210 SP-2 [6'], 06-210 SP-2 [11'], 06-210 SP-3 [4'], 06-210 SP-3 [12'], 06-210 SP-4 [4'], and 06-210 SP-4 [12'], respectively. The groundwater samples secured from probes MW-1 through MW-4 were labeled for identification purposes as 06-210; MW-1, 06-210; MW-2, 06-210; MW-3 and 06-210; MW-4 respectively.

The soil and groundwater samples selected for laboratory analysis were containerized in the appropriate vessels, preserved at 4°C in a cooler and transported under proper chain-of-custody procedures to a NYS-DOH certified commercial laboratory for analysis.

## **4 Quality Assurance and Quality Control Procedures (QA/QC)**

The following sampling QA/QC protocol is in accordance with the United States Environmental Protection Agency's (USEPA) accepted sampling procedures for hazardous waste streams [Municipal Research Laboratory, 1980, Sampling and Analysis Procedures for Hazardous Material Waste Streams, Office of Emergency and Remedial Response, Cincinnati, Ohio. EPA-600/280-018] and American Society of Testing and Material's (ASTM's) Sampling Procedures.

### **4.1 Sampling Personnel**

The activities associated with the survey, sampling and analysis plan were performed by or under the auspices of a USEPA Office of Emergency and Remedial Response, Certified Sampler for Hazardous Materials. The sample staff (samplers) possessed a minimum of a B.A. Degree in the Earth, Space or Biological Sciences or a B.S. Degree in Engineering. Samplers had a minimum of one (1) year experience in environmental/geological field work. Additionally, all samplers had received mandatory forty-hour Occupational Safety and Health Administration (OSHA) training on working with potentially hazardous materials and appropriate Hazard Communication Program and "Right-To-Know" training.

### **4.2 Sampling Equipment**

Separate QA/QC measures were implemented for each of the instruments used in the performance of the SAP.

#### *4.2.1 Geoprobe*

Prior to arrival on the Site and between sample locations, the probes were decontaminated by washing them with a detergent (Alconox) and potable water solution and rinsing them with distilled water.

#### *4.2.2 Photo Ionization Detector*

Calibration of the PID was conducted prior to sampling using a span gas of known concentration. The PID was a RAE Systems MiniRAE 2000, photo ionization detection meter.

#### *4.2.3 Sample Vessels*

All sample vessels were "level A" certified decontaminated containers supplied by a New York State Certified Commercial Laboratory. Samples analyzed for hydrocarbons were placed in containers with Teflon lined caps. All samples were preserved by cooling them to a temperature of approximately four degrees Celsius.

### **4.3 Sample Documentation**

A sample represents physical evidence. An essential part of liability reduction is the proper control of gathered evidence. To establish proper control, the following sample identification and chain-of custody procedures were followed.

#### *4.3.1 Sample Identification*

Sample identification was executed by use of a sample tag, log book and chain-of-custody form. Said documentation provided the following information: 1) the project code; 2) the sample laboratory number; 3) the sample preservation; 4) instrument used for source sample grabs; 5) the composite medium used for source sample grabs; 6) the date the sample was secured from the source media; 7) the time the sample was secured from the source media; and 8) the person who secured the sample from the source media.

#### *4.3.2 Chain-of-Custody Procedures*

Due to the evidential nature of samples, possession was traceable from the time the samples were collected until they were received by the testing laboratory. A sample was considered under custody if it: was in a person's possession; it was in a person's view, after being in possession; if it was in a person's possession and they locked it up; or, it was in a designated secure area. When transferring custody, the individuals relinquishing and receiving the samples signed, dated and noted the time on the Chain-of-Custody Form.

#### *4.3.3 Laboratory-Custody Procedures*

A designated sample custodian accepted custody of the shipped samples and verified that the information on the sample tags matched that on the Chain-of-Custody Records. Pertinent information as to shipment, pick-up, courier, etc., were entered in the "remarks" section. The custodian entered the sample tag data into a bound logbook.

The laboratory custodian used the sample tag number, or assigned a unique laboratory number to each sample tag, and assured that all samples were transferred to the proper analyst or stored in the appropriate source area. The laboratory custodian distributed samples to the appropriate analysts. Laboratory personnel were responsible for the care and custody of samples, from the time they were received, until the sample was exhausted or returned to the sample custodian. All identifying data sheets and laboratory records were retained as part of the permanent documentation. Samples received by the laboratory were retained until after analysis and quality assurance checks were completed.

## 5 Laboratory Analysis

### 5.1 Analytical Test Methods

The samples were transported to a New York State Certified Commercial Laboratory for analysis. Selection of the analytical test methods was based on the New York State Department of Environmental Conservation Technical and Administrative Guidance Memorandum (TAGM) #4046, Determination of Soil Cleanup Objectives; and the New York State Department of Environmental Conservation Technical Operational Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Limitations.

The laboratory analysis performed on all the subsurface soil samples consisted of United States Environmental Protection Agency (USEPA) Test Method 8260 (plus MTBE) and 8270 (STARS) for target volatile and semi-volatile organic analytes.

The laboratory analysis performed on the groundwater samples consisted of USEPA Test Method 8260 (plus MTBE) and 8270 (STARS) for target volatile and semi-volatile organic analytes.

### 5.2 Analytical Results

The laboratory analysis performed on the subsurface soil samples SP-1 [4'], SP-1 [11'], SP-2 [6'], SP-2 [11'], SP-3 [4'], SP-4 [4'], and SP-4 [12'] failed to detect any concentrations of target volatile organic analytes. However, the laboratory analysis performed on the subsurface soil sample SP-3 [12'] detected concentrations of one target volatile organic analyte, benzene.

The laboratory analysis performed on the subsurface soil samples SP-3 [12'] failed to detect any concentrations of target semi-volatile organic analytes. However, the laboratory analysis performed on the subsurface soil samples SP-1 [4'], SP-1 [11'], SP-2 [6'], SP-2 [11'], SP-3 [4'], SP-4 [4'], and SP-4 [12'] detected concentrations of several target semi-volatile organic analytes.

The laboratory analysis performed on the groundwater samples MW-1 and MW-2 failed to detect any concentrations of target volatile or semi-volatile organic analytes. However, the laboratory analysis performed on the groundwater samples MW-3 and MW-4 detected concentrations of several target

volatile organic analytes. The laboratory analysis performed on the groundwater samples MW-3 also detected concentrations of one target volatile organic analyte, naphthalene.

**Table 2** and **Table 3** presents a summary of the detected concentrations versus the relevant guidance values that apply in New York State. The original laboratory analysis report as prepared by JMS Environmental Services, Inc. is presented in **Appendix B** of this document.



## 6 Evaluation of Results

Impact Environmental has performed a Limited Subsurface Investigation on the Site in accordance with good commercial and customary practice and generally accepted protocols within the consulting industry. The investigation consisted of the sampling and analysis of subsurface soil and groundwater to define the extent of contamination associated with NYSDEC Spill# 95-06588. The scope of this investigation is based upon the Investigation Work Plan, dated August 8, 2006 prepared by Impact Environmental and approved by the NYSDEC.

On November 9 & 10, 2006, Impact Environmental installed four (4) soil probes and four (4) groundwater-monitoring wells on the Site as part of this investigation. Subsurface soil samples were secured at depth intervals ranging from grade to fifteen (15) feet below existing grade (BEG). The soil samples obtained from soil probes SP-1, SP-2, SP-3 and SP-4 at one foot (1') to seven (7') feet BEG were found to consist of brown silty sand and trace gravel mixed with urban fill (including brick and concrete). No significant odor or staining was noted at this depth range. The soil samples obtained from soil probes SP-1, SP-2, SP-3 and SP-4 at seven foot (7') to fifteen foot (15') BEG were found to consist of dark gray to black silty sand and trace gravel mixed with urban fill, down to the soil-groundwater interface. Significant petrochemical odor and staining was noted at this depth range.

The laboratory analysis performed on the subsurface soil samples SP-1 [4'], SP-1 [11'], SP-2 [6'], SP-2 [11'], SP-3 [4'], SP-4 [4'], and SP-4 [12'] failed to detect any concentrations of target volatile organic analytes. The laboratory analysis performed on the subsurface soil sample SP-3 [12'] detected concentrations of one target volatile organic analyte, benzene. The detected concentration of benzene in the subsurface soil sample SP-3 [12'] was below the applicable guidance criteria.<sup>1</sup>

The laboratory analysis performed on the subsurface soil samples SP-1 [4'], SP-1 [11'], SP-2 [6'], SP-2 [11'], SP-3 [4'], SP-4 [4'], and SP-4 [12'] detected concentrations of several target semi-volatile organic analytes. The detected concentrations of several target semi-volatile organic analytes found in subsurface soil samples SP-1 [4'], SP-1 [11'], SP-2 [6'], SP-2 [11'], SP-3 [4'] and SP-4 [4'] were above the applicable guidance criteria.<sup>2</sup> The laboratory analysis performed on the subsurface soil samples SP-3 [12'] failed to detect any concentrations of target semi-volatile organic analytes. No significant source of gasoline related soil contamination was identified under the scope of this investigation.

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<sup>1</sup> NYSDEC, Technical and Administrative Guidance Memorandum (TAGM) #4046, Determination of Soil Cleanup Objectives.

<sup>2</sup> NYSDEC, Technical and Administrative Guidance Memorandum (TAGM) #4046, Determination of Soil Cleanup Objectives.

On November 10, 2006, a groundwater elevation survey was performed on the Site to determine site-specific groundwater flow direction. Based on the survey results, the groundwater flow direction at the Site is toward an East-Northeast direction. The monitoring wells were gauged for the presence and thickness of free phase product and depth to water with an oil-water interface meter. No free phase product was observed in any of the wells. The monitoring wells (MW-1 through MW-4) were developed and sampled as part of this investigation. One groundwater sample was secured from each of these monitoring wells for laboratory analysis.

The laboratory analysis performed on the groundwater samples MW-1 and MW-2 failed to detect any concentrations of target volatile or semi-volatile organic analytes. The laboratory analysis performed on the groundwater samples MW-3 and MW-4 detected concentrations of several target volatile organic analytes. The detected concentrations of several target volatile organic analytes were above the applicable guidance criteria.<sup>3</sup> The laboratory analysis performed on the groundwater sample MW-3 and MW-4 also detected concentrations of one target volatile organic analyte, naphthalene. The detected concentration of naphthalene in groundwater sample MW-3 was above the applicable guidance criteria.<sup>4</sup> The results of the groundwater analyses from the Site indicate the presence of BTEX concentrations ranging from non-detect to 1,740 µg/L, and MTBE concentrations from non-detect to 2,600 µg/L. The extent of the dissolved phase gasoline groundwater contamination has not been fully delineated under the scope of this investigation. Accordingly, it is recommended that monitoring wells be installed hydraulically down gradient of existing monitoring wells MW-3 and MW-4 to delineate the extent of groundwater contamination emanating from the Site. Further, it is proposed that a Monitored Natural Attenuation (MNA) program be implemented with respect to NYSDEC Spill# 95-06588 in accordance with NYSDEC requirements.

## **IMPACT ENVIRONMENTAL**

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John Herbig  
*Operations Supervisor*

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Kevin Kleaka  
*Project Manager*

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<sup>3</sup> NYSDEC, Technical Operational Guidance Series (TOGS) 1.1.1 Ambient Water Quality Standards and Limitation

<sup>4</sup> Ibid.

## **DISCLAIMER FOR SUBSURFACE INVESTIGATION**

The observations described in this report were made under the conditions stated therein. The conclusions presented in the report were based solely upon the services described therein, and not on scientific tasks or procedures beyond the scope of described services or the time and budgetary constraints imposed by the Client.

In preparing this report, Impact Environmental may have relied on certain information provided by state and local officials and other parties referenced therein, and on information contained in the files of state and/or local agencies available to Impact Environmental at the time of the Site assessment. Although there may have been some degree of overlap in the information provided by these various sources, Impact Environmental did not attempt to independently verify the accuracy or completeness of all information reviewed or received during the course of this Site assessment.

Observations were made of the Site and of structures on the Site as indicated within the report. Where access to portions of the Site or to structures on the Site was unavailable or limited, Impact Environmental renders no opinion as to the presence of non-hazardous or hazardous materials, or to the presence of indirect evidence relating to non-hazardous or hazardous materials, in that portion of the Site or structure. In addition, Impact Environmental renders no opinion as to the presence of hazardous materials, or the presence of indirect evidence relating to hazardous materials, where direct observation of the interior walls, floor, or ceiling of a structure on a Site was obstructed by objects or coverings on or over these surfaces.

Impact Environmental did not perform testing or analyses to determine the presence or concentration of asbestos at the Site or in the environment of the Site under the scope of the services performed.

The conclusions and recommendations contained in this report are based in part, where noted, upon the data obtained from a limited number of soil samples obtained from widely spaced subsurface explorations. The nature and extent of variations between these explorations may not become evident until further exploration. If variations or other latent conditions then appear evident, it will be necessary to reevaluate the conclusions and recommendations of this report.

Any water level readings made in test pits, borings, and/or observation wells were made at the times and under the conditions stated in the report. However, it must be noted that fluctuations in the level of groundwater may occur due to variations in rainfall and other factors different from those prevailing at the time measurements were made.

Except as noted within the text of the report, no qualitative laboratory testing was performed as part of the Site assessment. Where such analyses have been conducted by an outside laboratory, Impact Environmental has relied upon the data provided, and has not conducted an independent evaluation of the reliability of the data.

The conclusions and recommendations contained in this report are based in part, where noted, upon various types of chemical data and are contingent upon their validity. The data have been reviewed and interpretations were made in the report. As indicated within the report, some of the data may be preliminary "screening" level data, and should be confirmed with quantitative analyses if more specific information is necessary. Moreover, it should be noted that variations in the types and concentrations of contaminants and variations in their flow paths may occur due to seasonal water table fluctuations, past disposal practices, the passage of time, and other factors. Should additional chemical data become available in the future, the data should be reviewed, and the conclusions and recommendations presented herein modified accordingly.

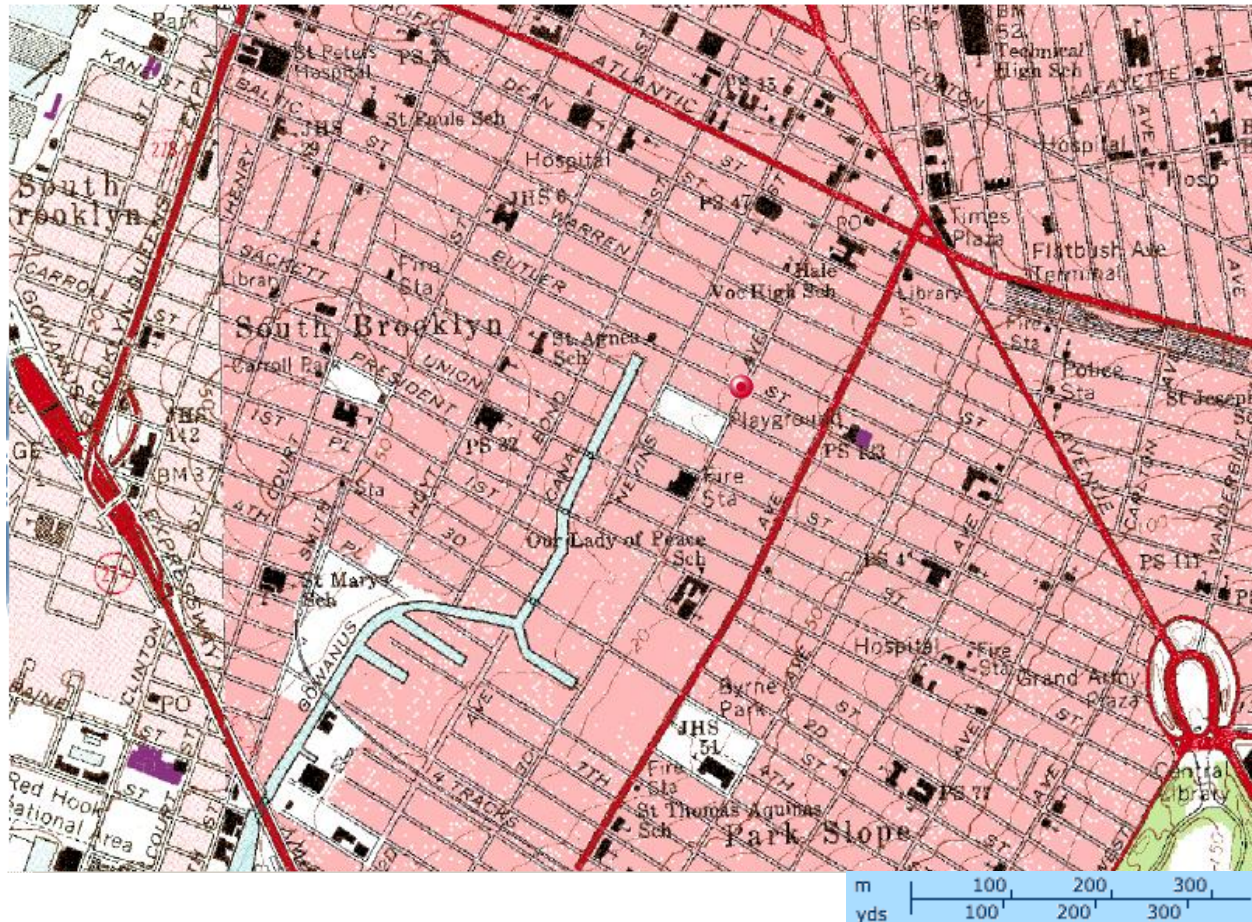
Chemical analyses have been performed for specific constituents during the course of this Site assessment, as described in the text. However, it should be noted that additional chemical constituents not searched for during the current study may be present in soil and/or groundwater at the Site.

## Plates

*Brooklyn, New York*

*06-210*

**Plate 1: Project Location Map**  
*Brooklyn, New York*



Scale 1:12000

**CONTOUR INTERVAL 10 FEET**

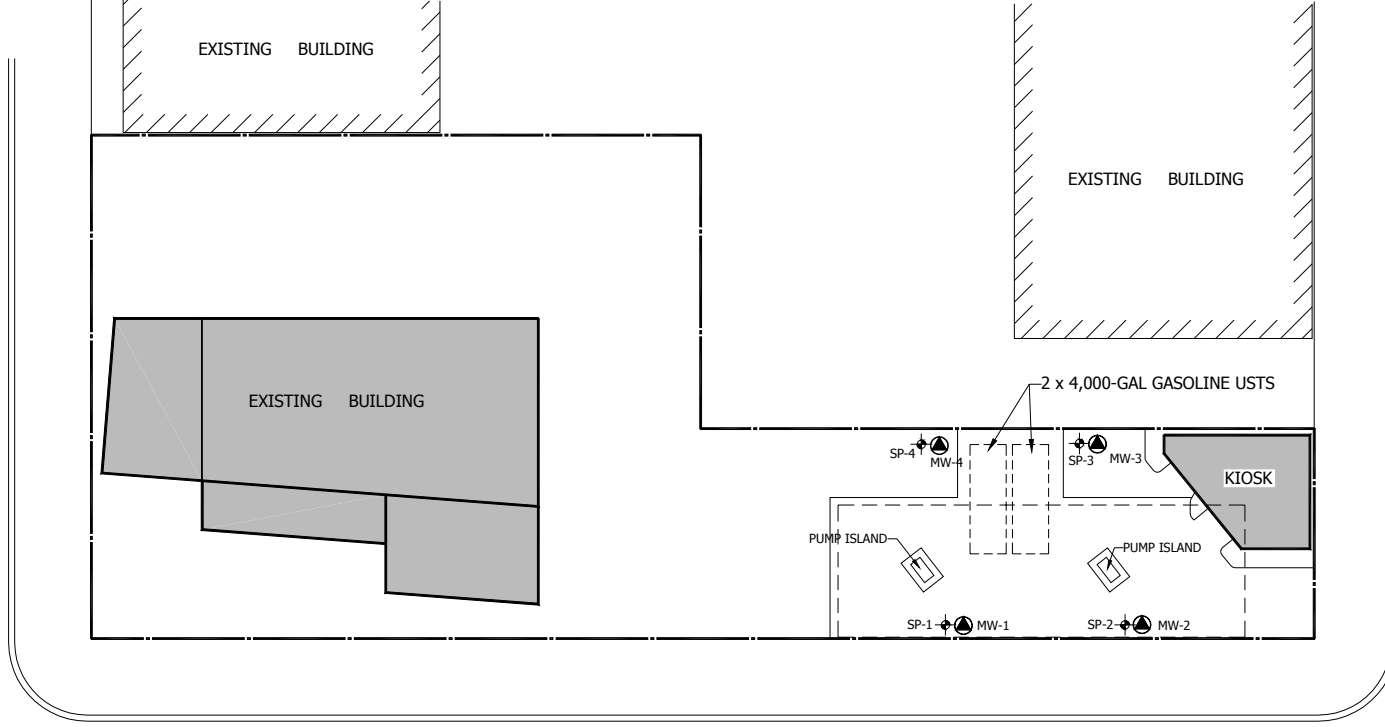
DASHED LINES REPRESENT 5 - FOOT CONTOURS

DATUM IS MEAN SEA LEVEL

DEPTH CURVES AND SOUNDINGS IN FEET - DATUM IS MEAN LOW WATER



BALTIC AVENUE



IMPACT ENVIRONMENTAL



170 KEYLAND COURT  
BOHEMIA, NEW YORK 11716  
631.289.8800 TELEPHONE  
631.289.1699 FACSIMILE

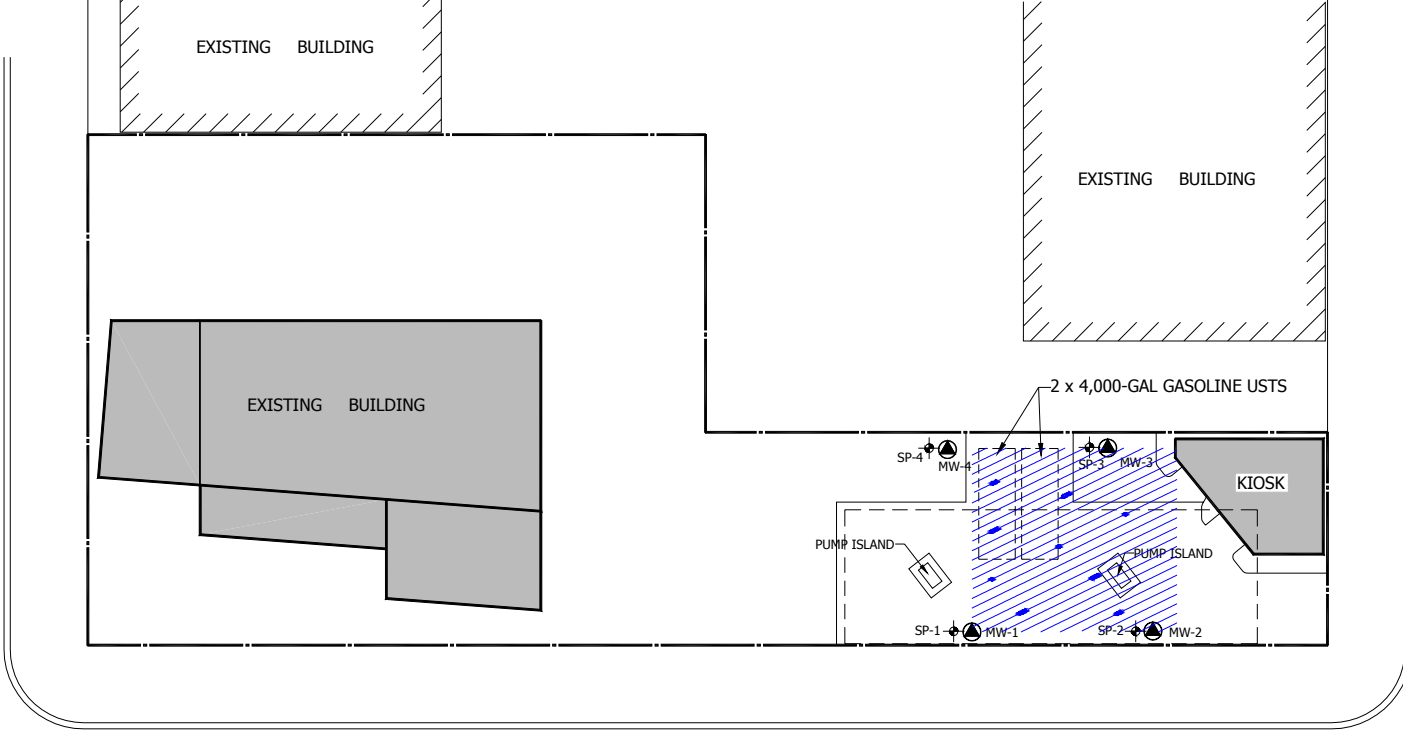
Legend

- Monitoring Well
- Soil Probe

**06-210**  
**Plate 2: Sample Acquisition Plan**  
Brooklyn, New York

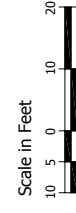


BALTIC AVENUE



THIRD AVENUE

BUTLER STREET

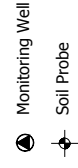


IMPACT ENVIRONMENTAL



170 KEYLAND COURT  
BOHEMIA, NEW YORK 11716  
631.269.6600 TELEPHONE  
631.269.1599 FACSIMILE

Legend



**06-210**  
**Plate 3: Groundwater Contour**  
Brooklyn, New York

Tables  
*Brooklyn, New York*  
*06-210*



**Table 1:** Groundwater Survey Results  
*Brooklyn, New York*

MW ID	MW Case Elevation	Rod Interception	DTW (6/20/06)	WT Elevation 6/20/06	Temp	pH	Conductivity	Dissolved Oxygen
MW-1	20.00	4.01	13.98	6.02	57.50	7.43	2360.00	1.45
MW-2	20.18	3.83	13.17	7.01	50.20	7.11	1890.00	2.12
MW-3	20.20	3.81	14.83	5.37	56.10	7.01	2160.00	5.56
MW-4	20.27	3.74	14.70	5.57	57.10	7.20	1800.00	5.82

Note: An arbitrary case elevation of 20.00 above mean sea level was assigned for MW-1. Said number was obtained from the USGS Topographic Map for Brooklyn.

**Table 2: Detected Analytes in Soil**  
Brooklyn, New York

Sample ID	SP-1 (4')	SP-1 (11')	SP-2 (6')	SP-2 (11')	SP-3 (4')	SP-3 (12')	SP-4 (4')	SP-4 (12')	NYSDEC TAGM # 4046 Recommended Soil Cleanup Objectives
Unit	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
<b>Volatile Organic Analytes</b>									
Methyl-tert-butyl-ether	<5	<5	<5	<5	<5	<5	<5	<5	120
Total Xylenes	<5	<5	<5	<5	<5	<5	<5	<5	1,200
1,2,4-Trimethylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	sum<10,000
1,3,5-Trimethylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	3,300
Toluene	<5	<5	<5	<5	<5	<5	<5	<5	1,500
n-Propylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	3,700
p-Isopropyltoluene	<5	<5	<5	<5	<5	<5	<5	<5	sum<10,000
Isopropylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	2,300
Ethylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	5,500
sec-Butylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	sum < 10,000
n-Butylbenzene	<5	<5	<5	<5	<5	<5	<5	<5	sum <10,000
Benzene	<5	<5	<5	<5	<5	6.6	<5	<5	60 or MDL
<b>Semi-Volatile Organic Analytes</b>									
Benzo-g,h,i-Perylene	520	<330	2,400	114	224	<330	109	<330	50,000
Dibenzo-a,h-Anthracene	<330	<330	<330	<330	<330	<330	<330	<330	14.3 or MDL
Indeno(1,2,3-c,d)Pyrene	660	<330	3,000	167	297	<330	<330	<330	3,200
Benzo-a-Pyrene	850	<330	4,200	152	420	<330	126	<330	61 or MDL
Benzo-k-Fluoroanthene	610	<330	3,000	<330	<330	<330	220	<330	220 or MDL
Benzo-b-Fluoroanthene	910	<330	4,000	225	730	<330	<330	<330	220 or MDL
Chrysene	1,140	<330	5,300	174	640	<330	188	<330	400
Benzo-a-Anthracene	1,030	<330	5,540	144	635	<330	153	<330	224 or MDL
Pyrene	2,150	<330	9,100	278	1,180	<330	306	212	50,000
Fluoranthene	2,140	<330	8,100	247	1,200	<330	261	171	50,000
Anthracene	420	<330	2,050	<330	248	<330	<330	<330	50,000
Phenanthrene	1,060	<330	5,150	<330	490	<330	<330	<330	50,000
Fluorene	<330	<330	560	<330	<330	<330	<330	<330	50,000
Acenaphthene	<330	<330	400	<330	<330	<330	<330	<330	50,000
Acenaphthylene	<330	<330	380	<330	107	<330	<330	<330	41,000
Naphthalene	<330	<330	<330	<330	48	<330	<330	<330	13,000

**Table 3: Detected Analytes in Groundwater  
Brooklyn, New York**

Sample ID	MW-1	MW-2	MW-3	MW-4	NYSDEC TOGS 1.1.1 Ambient Water Quality Standards & Guidance Values
Unit	ppb	ppb	ppb	ppb	ppb
<b><i>Volatile Organic Analytes</i></b>					
Methyl-tert-butyl-ether	<5	<5	2,600	<5	10
Total Xylenes	<5	<5	1,740	228	5
1,2,4-Trimethylbenzene	<5	<5	234	39	5
1,3,5-Trimethylbenzene	<5	<5	200	32	5
Toluene	<5	<5	650	50	5
n-Propylbenzene	<5	<5	28	<5	5
p-Isopropyltoluene	<5	<5	<5	<5	5
Isopropylbenzene	<5	<5	14	<5	5
Ethylbenzene	<5	<5	420	50	5
sec-Butylbenzene	<5	<5	<5	<5	5
n-Butylbenzene	<5	<5	<5	<5	5
Benzene	<5	<5	1,600	54	1
<b><i>Semi-Volatile Organic Analytes</i></b>					
Benzo-g,h,i-Perylene	<10	<10	<10	<10	NA
Dibenzo-a,h-Anthracene	<10	<10	<10	<10	NA
Indeno(1,2,3-c,d)Pyrene	<10	<10	<10	<10	0.002
Benzo-a-Pyrene	<10	<10	<10	<10	MDL
Benzo-k-Fluoroanthene	<10	<10	<10	<10	0.002
Benzo-b-Fluoroanthene	<10	<10	<10	<10	0.002
Chrysene	<10	<10	<10	<10	0.002
Benzo-a-Anthracene	<10	<10	<10	<10	0.002
Pyrene	<10	<10	<10	<10	50
Fluoranthene	<10	<10	<10	<10	50
Anthracene	<10	<10	<10	<10	50
Phenanthrene	<10	<10	<10	<10	50
Fluorene	<10	<10	<10	<10	50
Acenaphthene	<10	<10	<10	<10	20
Acenaphthylene	<10	<10	<10	<10	NA
Naphthalene	<10	<10	44	18	10

APPENDIX A:  
Soil Probe Logs  
*Brooklyn, New York*  
*06-210*

Probe Log		Impact Environmental		Sample ID: SP-1	
Site Location:		169 3rd Ave., Brooklyn, NY		Installer:	
Job Number:		06-210		TU/JM	
Client:		Asti Holding Corp.		Installation Method:	
Location Description:		Near Pump Islands		Geoprobe	
Geologist:				Date Begin/End:	
				11/9/2006	
				Depth to Water:	
				15'	
				Total Depth:	
				15'	

<i>Sample Depth BEG</i>	<i>Media Composition</i>	<i>PID (ppm)</i>	<i>Color</i>	<i>Comments</i>
0' - 1'	concrete	NA	grey	NA
1' - 7'	urban fill / medium to fine silty sand	0.0	brown	no stains or odors
7' - 11'	medium to fine silty sand	13.7	brown / black	petrochemical odor
11' - 15'	medium to fine silty sand	NA	black	petrochemical odor
				water encountered at 13' to 15' BEG

Probe Log		Impact Environmental		Sample ID: SP-2	
Site Location:	169 3rd Ave., Brooklyn, NY	Installer:	TU/JM		
Job Number:	06-210	Installation Method:	Geoprobe		
Client:	Asti Holding Corp.	Date Begin/End:	11/9/2006		
Location Description:	Near Pump Islands	Depth to Water:	15'		
Geologist:		Total Depth:	15'		

<i>Sample Depth BEG</i>	<i>Media Composition</i>	<i>PID (ppm)</i>	<i>Color</i>	<i>Comments</i>
0' - 1'	concrete	NA	grey	NA
1' - 7'	urban fill / medium to fine silty sand w/ small gravel	0.0	grey	no stains or odors
7' - 12'	urban fill / medium to fine silty sand w/ small gravel	30.1	black	petrochemical odor
12' - 15'	medium to fine silty sand	NA	black	petrochemical odor
				water encountered at 13' to 15' BEG

Probe Log		Impact Environmental		Sample ID: SP-3	
Site Location:	169 3rd Ave., Brooklyn, NY	Installer:	TU/JM		
Job Number:	06-210	Installation Method:	Geoprobe		
Client:	Asti Holding Corp.	Date Begin/End:	11/9/2006		
Location Description:	Near USTs	Depth to Water:	15'		
Geologist:		Total Depth:	15'		

<i>Sample Depth BEG</i>	<i>Media Composition</i>	<i>PID (ppm)</i>	<i>Color</i>	<i>Comments</i>
0' - 1'	concrete	NA	grey	NA
1' - 7'	urban fill / medium to fine silty sand	0.0	brown / dark brown	no stains or odors
7' - 12'	medium to fine silty sand	39.2	black	petrochemical odor
12' - 15'	medium to fine silty sand	NA	black	petrochemical odor
				water encountered at 13' to 15' BEG

Probe Log		Impact Environmental		Sample ID: SP-4	
Site Location:	169 3rd Ave., Brooklyn, NY	Installer:	TU/JM		
Job Number:	06-210	Installation Method:	Geoprobe		
Client:	Asti Holding Corp.	Date Begin/End:	11/9/2006		
Location Description:	Near Pump USTs	Depth to Water:	15'		
Geologist:		Total Depth:	15'		

<i>Sample Depth BEG</i>	<i>Media Composition</i>	<i>PID (ppm)</i>	<i>Color</i>	<i>Comments</i>
0' - 1'	concrete	NA	grey	NA
1' - 6'	urban fill / medium to fine silty sand	0.0	brown	no stains or odors
6' - 12'	medium to fine silty sand	13.8	dark brown / black	petrochemical odor
12' - 15'	medium to fine silty sand	NA	dark brown / black	petrochemical odor
				water encountered at 13' to 15' BEG



**APPENDIX B:**  
**Laboratory Report, JMS Environmental Services , Inc.**  
*Brooklyn, New York*  
*06-210*

# Analytical Report

**Impact Environmental: 06-210**

170 Keyland Ct  
Bohemia, NY 11716

Report Date: 11/15/2006

## Impact Environmental: 06-210

### Mailing Information:

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Phone:** (631) 269-8800

**Zip:** 11716

**Fax:** (631) 269-1599

### Collector's Information:

**Name:** John Morgan

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Phone:**

**Zip:**

**JMS ID:** 007830

### Sample's Information:

**Sample ID:** MW-1

**Site:** MW-1

**Date Collected:** 11/10/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

**Lab No.:** J0610713

**Matrix:** Water

Date Analyzed	Test Name	Result	Method
11/13/06	1,2,4-Trimethylbenzene	<5 ppb	E 8260
11/13/06	1,3,5-Trimethylbenzene	<5 ppb	E 8260
11/13/06	Benzene	<5 ppb	E 8260
11/13/06	Ethylbenzene	<5 ppb	E 8260
11/13/06	Isopropylbenzene	<5 ppb	E 8260
11/13/06	m&p-Xylene	<5 ppb	E 8260
11/13/06	MTBE	<5 ppb	E 8260
11/13/06	Naphthalene	<5 ppb	E 8260
11/13/06	n-Butylbenzene	<5 ppb	E 8260
11/13/06	n-Propylbenzene	<5 ppb	E 8260
11/13/06	o-Xylene	<5 ppb	E 8260
11/13/06	p-Isopropyltoluene	<5 ppb	E 8260
11/13/06	sec-Butylbenzene	<5 ppb	E 8260
11/13/06	tert-Butyl Benzene	<5 ppb	E 8260
11/13/06	Toluene	<5 ppb	E 8260
11/13/06	Total Xylenes	<5 ppb	E 8260
11/14/06	Acenaphthene	<10 ppb	E 8270
11/14/06	Acenaphthylene	<10 ppb	E 8270
11/14/06	Anthracene	<10 ppb	E 8270
11/14/06	Benzo(a)anthracene	<10 ppb	E 8270
11/14/06	Benzo(a)pyrene	<10 ppb	E 8270
11/14/06	Benzo(b)fluoranthene	<10 ppb	E 8270
11/14/06	Benzo(g,h,i)perylene	<10 ppb	E 8270
11/14/06	Benzo(k)fluoranthene	<10 ppb	E 8270
11/14/06	Chrysene	<10 ppb	E 8270
11/14/06	Dibenz(a,h)anthracene	<10 ppb	E 8270
11/14/06	Fluoranthene	<10 ppb	E 8270
11/14/06	Fluorene	<10 ppb	E 8270
11/14/06	Indeno(1,2,3-cd)pyrene	<10 ppb	E 8270
11/14/06	Naphthalene	<10 ppb	E 8270

CONNECTICUT, NEW YORK AND NELAP CERTIFIED

### Impact Environmental: 06-210

**Mailing Information:**

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Zip:** 11716

**Phone:** (631) 269-8800

**Fax:** (631) 269-1599

**Collector's Information:**

**Name:** John Morgan

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Zip:**

**Phone:**

**JMS ID:** 007830

---

**Sample's Information:**

**Sample ID:** MW-1

**Site:** MW-1

**Date Collected:** 11/10/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

**Lab No.:** J0610713

**Matrix:** Water

---

Date Analyzed	Test Name	Result	Method
11/14/06	Phenanthrene	<10 ppb	E 8270
11/14/06	Pyrene	<10 ppb	E 8270

ppb = micrograms

**Signature:**



Michael Lapman  
President

**Reviewed By:**



Sharon Houlahan, Director

**State #:** PH-0218 **ELAP #:** 11715

**Ref Lab:** PH0618

## Impact Environmental: 06-210

### Mailing Information:

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Phone:** (631) 269-8800

**Zip:** 11716

**Fax:** (631) 269-1599

### Collector's Information:

**Name:** John Morgan

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Phone:**

**Zip:**

**JMS ID:** 007831

### Sample's Information:

**Sample ID:** MW-2

**Site:** MW-2

**Date Collected:** 11/10/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

**Lab No.:** J0610714

**Matrix:** Water

Date Analyzed	Test Name	Result	Method
11/13/06	1,2,4-Trimethylbenzene	<5 ppb	E 8260
11/13/06	1,3,5-Trimethylbenzene	<5 ppb	E 8260
11/13/06	Benzene	<5 ppb	E 8260
11/13/06	Ethylbenzene	<5 ppb	E 8260
11/13/06	Isopropylbenzene	<5 ppb	E 8260
11/13/06	m&p-Xylene	<5 ppb	E 8260
11/13/06	MTBE	<5 ppb	E 8260
11/13/06	Naphthalene	<5 ppb	E 8260
11/13/06	n-Butylbenzene	<5 ppb	E 8260
11/13/06	n-Propylbenzene	<5 ppb	E 8260
11/13/06	o-Xylene	<5 ppb	E 8260
11/13/06	p-Isopropyltoluene	<5 ppb	E 8260
11/13/06	sec-Butylbenzene	<5 ppb	E 8260
11/13/06	tert-Butyl Benzene	<5 ppb	E 8260
11/13/06	Toluene	<5 ppb	E 8260
11/13/06	Total Xylenes	<5 ppb	E 8260
11/13/06	Acenaphthene	<10 ppb	E 8270
11/13/06	Acenaphthylene	<10 ppb	E 8270
11/13/06	Anthracene	<10 ppb	E 8270
11/13/06	Benzo(a)anthracene	<10 ppb	E 8270
11/13/06	Benzo(a)pyrene	<10 ppb	E 8270
11/13/06	Benzo(b)fluoranthene	<10 ppb	E 8270
11/13/06	Benzo(g,h,i)perylene	<10 ppb	E 8270
11/13/06	Benzo(k)fluoranthene	<10 ppb	E 8270
11/13/06	Chrysene	<10 ppb	E 8270
11/13/06	Dibenz(a,h)anthracene	<10 ppb	E 8270
11/13/06	Fluoranthene	<10 ppb	E 8270
11/13/06	Fluorene	<10 ppb	E 8270
11/13/06	Indeno(1,2,3-cd)pyrene	<10 ppb	E 8270
11/13/06	Naphthalene	<10 ppb	E 8270

CONNECTICUT, NEW YORK AND NELAP CERTIFIED

## Impact Environmental: 06-210

### Mailing Information:

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Zip:** 11716

**Phone:** (631) 269-8800

**Fax:** (631) 269-1599

### Collector's Information:

**Name:** John Morgan

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Zip:**

**Phone:**

**JMS ID:** 007831

### Sample's Information:

**Sample ID:** MW-2

**Site:** MW-2

**Date Collected:** 11/10/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

**Lab No.:** J0610714

**Matrix:** Water

Date Analyzed	Test Name	Result	Method
11/13/06	Phenanthrene	<10 ppb	E 8270
11/13/06	Pyrene	<10 ppb	E 8270

ppb = micrograms

**Signature:**

*Michael Lapman*

Michael Lapman  
President

**Reviewed By:**

*Sharon Houlahan*

Sharon Houlahan, Director

**State #:** PH-0218

**ELAP #:** 11715

**Ref Lab:** PH0618

## Impact Environmental: 06-210

### Mailing Information:

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Phone:** (631) 269-8800

**Zip:** 11716

**Fax:** (631) 269-1599

### Collector's Information:

**Name:** John Morgan

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Phone:**

**Zip:**

**JMS ID:** 007832

### Sample's Information:

**Sample ID:** MW-3

**Site:** MW-3

**Date Collected:** 11/10/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

**Lab No.:** J0610715

**Matrix:** Water

Date Analyzed	Test Name	Result	Method
11/13/06	1,2,4-Trimethylbenzene	234 ppb	E 8260
11/13/06	1,3,5-Trimethylbenzene	200 ppb	E 8260
11/13/06	Benzene	1600 ppb	E 8260
11/13/06	Ethylbenzene	420 ppb	E 8260
11/13/06	Isopropylbenzene	14 ppb	E 8260
11/13/06	m&p-Xylene	1170 ppb	E 8260
11/13/06	MTBE	2600 ppb	E 8260
11/13/06	Naphthalene	25 ppb	E 8260
11/13/06	n-Butylbenzene	<5 ppb	E 8260
11/13/06	n-Propylbenzene	28 ppb	E 8260
11/13/06	o-Xylene	570 ppb	E 8260
11/13/06	p-Isopropyltoluene	<5 ppb	E 8260
11/13/06	sec-Butylbenzene	<5 ppb	E 8260
11/13/06	tert-Butyl Benzene	<5 ppb	E 8260
11/13/06	Toluene	650 ppb	E 8260
11/13/06	Total Xylenes	1740 ppb	E 8260
11/14/06	Acenaphthene	<10 ppb	E 8270
11/14/06	Acenaphthylene	<10 ppb	E 8270
11/14/06	Anthracene	<10 ppb	E 8270
11/14/06	Benzo(a)anthracene	<10 ppb	E 8270
11/14/06	Benzo(a)pyrene	<10 ppb	E 8270
11/14/06	Benzo(b)fluoranthene	<10 ppb	E 8270
11/14/06	Benzo(g,h,i)perylene	<10 ppb	E 8270
11/14/06	Benzo(k)fluoranthene	<10 ppb	E 8270
11/14/06	Chrysene	<10 ppb	E 8270
11/14/06	Dibenz(a,h)anthracene	<10 ppb	E 8270
11/14/06	Fluoranthene	<10 ppb	E 8270
11/14/06	Fluorene	<10 ppb	E 8270
11/14/06	Indeno(1,2,3-cd)pyrene	<10 ppb	E 8270
11/14/06	Naphthalene	44 ppb	E 8270

CONNECTICUT, NEW YORK AND NELAP CERTIFIED

## Impact Environmental: 06-210

**Mailing Information:**

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Zip:** 11716

**Phone:** (631) 269-8800

**Fax:** (631) 269-1599

**Collector's Information:**

**Name:** John Morgan

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Zip:**

**Phone:**

**JMS ID:** 007832

**Sample's Information:**

**Sample ID:** MW-3

**Site:** MW-3

**Date Collected:** 11/10/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

**Lab No.:** J0610715

**Matrix:** Water

Date Analyzed	Test Name	Result	Method
11/14/06	Phenanthrene	<10 ppb	E 8270
11/14/06	Pyrene	<10 ppb	E 8270


ppb = micrograms

**Signature:**



Michael Lapman  
President

**Reviewed By:**



Sharon Houlahan, Director

**State #:** PH-0218

**ELAP #:** 11715

**Ref Lab:** PH0618



## Impact Environmental: 06-210

### Mailing Information:

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Phone:** (631) 269-8800

**Zip:** 11716

**Fax:** (631) 269-1599

### Collector's Information:

**Name:** John Morgan

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Phone:**

**Zip:**

**JMS ID:** 007833

### Sample's Information:

**Sample ID:** MW-4

**Site:** MW-4

**Date Collected:** 11/10/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

**Lab No.:** J0610716

**Matrix:** Water

Date Analyzed	Test Name	Result	Method
11/13/06	1,2,4-Trimethylbenzene	39 ppb	E 8260
11/13/06	1,3,5-Trimethylbenzene	32 ppb	E 8260
11/13/06	Benzene	54 ppb	E 8260
11/13/06	Ethylbenzene	50 ppb	E 8260
11/13/06	Isopropylbenzene	<5 ppb	E 8260
11/13/06	m&p-Xylene	158 ppb	E 8260
11/13/06	MTBE	<5 ppb	E 8260
11/13/06	Naphthalene	18 ppb	E 8260
11/13/06	n-Butylbenzene	<5 ppb	E 8260
11/13/06	n-Propylbenzene	<5 ppb	E 8260
11/13/06	o-Xylene	70 ppb	E 8260
11/13/06	p-Isopropyltoluene	<5 ppb	E 8260
11/13/06	sec-Butylbenzene	<5 ppb	E 8260
11/13/06	tert-Butyl Benzene	<5 ppb	E 8260
11/13/06	Toluene	50 ppb	E 8260
11/13/06	Total Xylenes	228 ppb	E 8260
11/14/06	Acenaphthene	<10 ppb	E 8270
11/14/06	Acenaphthylene	<10 ppb	E 8270
11/14/06	Anthracene	<10 ppb	E 8270
11/14/06	Benzo(a)anthracene	<10 ppb	E 8270
11/14/06	Benzo(a)pyrene	<10 ppb	E 8270
11/14/06	Benzo(b)fluoranthene	<10 ppb	E 8270
11/14/06	Benzo(g,h,i)perylene	<10 ppb	E 8270
11/14/06	Benzo(k)fluoranthene	<10 ppb	E 8270
11/14/06	Chrysene	<10 ppb	E 8270
11/14/06	Dibenz(a,h)anthracene	<10 ppb	E 8270
11/14/06	Fluoranthene	<10 ppb	E 8270
11/14/06	Fluorene	<10 ppb	E 8270
11/14/06	Indeno(1,2,3-cd)pyrene	<10 ppb	E 8270
11/14/06	Naphthalene	<10 ppb	E 8270

CONNECTICUT, NEW YORK AND NELAP CERTIFIED

## Impact Environmental: 06-210

### Mailing Information:

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Zip:** 11716

**Phone:** (631) 269-8800

**Fax:** (631) 269-1599

### Collector's Information:

**Name:** John Morgan

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Zip:**

**Phone:**

**JMS ID:** 007833

### Sample's Information:

**Sample ID:** MW-4

**Site:** MW-4

**Date Collected:** 11/10/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

**Lab No.:** J0610716

**Matrix:** Water

Date Analyzed	Test Name	Result	Method
11/14/06	Phenanthrene	<10 ppb	E 8270
11/14/06	Pyrene	<10 ppb	E 8270


ppb = micrograms

**Signature:**



Michael Lapman  
President

**Reviewed By:**



Sharon Houlahan, Director

**State #:** PH-0218 **ELAP #:** 11715

**Ref Lab:** PH0618

# Analytical Report

**Impact Environmental: 06-210**

170 Keyland Ct  
Bohemia, NY 11716

Report Date: 11/15/2006

## Impact Environmental: 06-210

### Mailing Information:

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Phone:** (631) 269-8800

**Zip:** 11716

**Fax:** (631) 269-1599

### Collector's Information:

**Name:** Ted Veno

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Phone:**

**Zip:**

**JMS ID:** 007834

### Sample's Information:

**Sample ID:** SP-1

**Site:** 4'

**Date Collected:** 11/9/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

**Lab No.:** J0610717

**Matrix:** Soil

Date Analyzed	Test Name	Result	Method
11/14/06	1,2,4-Trimethylbenzene	<5 ppb	8260
11/14/06	1,3,5-Trimethylbenzene	<5 ppb	8260
11/14/06	Benzene	<5 ppb	8260
11/14/06	Ethylbenzene	<5 ppb	8260
11/14/06	Isopropylbenzene	<5 ppb	8260
11/14/06	m&p-Xylene	<5 ppb	8260
11/14/06	MTBE	<5 ppb	8260
11/14/06	Naphthalene	<5 ppb	8260
11/14/06	n-Butylbenzene	<5 ppb	8260
11/14/06	n-Propylbenzene	<5 ppb	8260
11/14/06	o-Xylene	<5 ppb	8260
11/14/06	p-Isopropyltoluene	<5 ppb	8260
11/14/06	sec-Butylbenzene	<5 ppb	8260
11/14/06	tert-Butyl Benzene	<5 ppb	8260
11/14/06	Toluene	<5 ppb	8260
11/14/06	Total Xylenes	<5 ppb	8260

## Impact Environmental: 06-210

### Mailing Information:

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Phone:** (631) 269-8800

**Zip:** 11716

**Fax:** (631) 269-1599

### Collector's Information:

**Name:** Ted Veno

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Phone:**

**Zip:**

**JMS ID:** 007834

### Sample's Information:

**Sample ID:** SP-1

**Site:** 4'

**Date Collected:** 11/9/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

**Lab No.:** J0610717

**Matrix:** Soil

Date Analyzed	Test Name	Result	Method
11/14/06	Acenaphthene	<330 ppb	8270
11/14/06	Acenaphthylene	<330 ppb	8270
11/14/06	Anthracene	420 ppb	8270
11/14/06	Benzo(a)anthracene	1030 ppb	8270
11/14/06	Benzo(a)pyrene	850 ppb	8270
11/14/06	Benzo(b)fluoranthene	910 ppb	8270
11/14/06	Benzo(g,h,i)perylene	520 ppb	8270
11/14/06	Benzo(k)fluoranthene	610 ppb	8270
11/14/06	Chrysene	1140 ppb	8270
11/14/06	Dibenz(a,h)anthracene	<330 ppb	8270
11/14/06	Fluoranthene	2140 ppb	8270
11/14/06	Fluorene	<330 ppb	8270
11/14/06	Indeno(1,2,3-cd)pyrene	660 ppb	8270
11/14/06	Naphthalene	<330 ppb	8270
11/14/06	Phenanthrene	1060 ppb	8270
11/14/06	Pyrene	2150 ppb	8270

ppb = micrograms

**Signature:**

*Michael Lapman*

Michael Lapman  
President

**Reviewed By:**

*Sharon Houlahan*

Sharon Houlahan, Director

**State #:** PH-0218 **ELAP #:** 11715

**Ref Lab:** PH0618

## Impact Environmental: 06-210

### Mailing Information:

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Phone:** (631) 269-8800

**Zip:** 11716

**Fax:** (631) 269-1599

### Collector's Information:

**Name:** Ted Veno

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Phone:**

**Zip:**

**JMS ID:** 007835

### Sample's Information:

**Sample ID:** SP-1

**Site:** 11'

**Date Collected:** 11/9/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

**Lab No.:** J0610718

**Matrix:** Soil

Date Analyzed	Test Name	Result	Method
11/14/06	1,2,4-Trimethylbenzene	<5 ppb	8260
11/14/06	1,3,5-Trimethylbenzene	<5 ppb	8260
11/14/06	Benzene	<5 ppb	8260
11/14/06	Ethylbenzene	<5 ppb	8260
11/14/06	Isopropylbenzene	<5 ppb	8260
11/14/06	m&p-Xylene	<5 ppb	8260
11/14/06	MTBE	<5 ppb	8260
11/14/06	Naphthalene	<5 ppb	8260
11/14/06	n-Butylbenzene	<5 ppb	8260
11/14/06	n-Propylbenzene	<5 ppb	8260
11/14/06	o-Xylene	<5 ppb	8260
11/14/06	p-Isopropyltoluene	<5 ppb	8260
11/14/06	sec-Butylbenzene	<5 ppb	8260
11/14/06	tert-Butyl Benzene	<5 ppb	8260
11/14/06	Toluene	<5 ppb	8260
11/14/06	Total Xylenes	<5 ppb	8260

## Impact Environmental: 06-210

**Mailing Information:**

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Zip:** 11716

**Phone:** (631) 269-8800

**Fax:** (631) 269-1599

**Collector's Information:**

**Name:** Ted Veno

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Zip:**

**Phone:**

**JMS ID:** 007835

**Sample's Information:**

**Sample ID:** SP-1

**Site:** 11'

**Date Collected:** 11/9/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

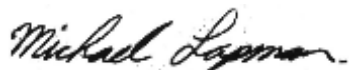
**Lab No.:** J0610718

**Matrix:** Soil

Date Analyzed	Test Name	Result	Method
11/14/06	Acenaphthene	<330 ppb	8270
11/14/06	Acenaphthylene	<330 ppb	8270
11/14/06	Anthracene	<330 ppb	8270
11/14/06	Benzo(a)anthracene	<330 ppb	8270
11/14/06	Benzo(a)pyrene	<330 ppb	8270
11/14/06	Benzo(b)fluoranthene	<330 ppb	8270
11/14/06	Benzo(g,h,i)perylene	<330 ppb	8270
11/14/06	Benzo(k)fluoranthene	<330 ppb	8270
11/14/06	Chrysene	<330 ppb	8270
11/14/06	Dibenz(a,h)anthracene	<330 ppb	8270
11/14/06	Fluoranthene	<330 ppb	8270
11/14/06	Fluorene	<330 ppb	8270
11/14/06	Indeno(1,2,3-cd)pyrene	<330 ppb	8270
11/14/06	Naphthalene	<330 ppb	8270
11/14/06	Phenanthrene	<330 ppb	8270
11/14/06	Pyrene	<330 ppb	8270

ppb = micrograms

**Signature:**



Michael Lapman  
President

**Reviewed By:**



Sharon Houlahan, Director

**State #:** PH-0218 **ELAP #:** 11715

**Ref Lab:** PH0618

## Impact Environmental: 06-210

### Mailing Information:

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Phone:** (631) 269-8800

**Zip:** 11716

**Fax:** (631) 269-1599

### Collector's Information:

**Name:** Ted Veno

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Phone:**

**Zip:**

**JMS ID:** 007836

### Sample's Information:

**Sample ID:** SP-2

**Site:** 6'

**Date Collected:** 11/9/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

**Lab No.:** J0610719

**Matrix:** Soil

Date Analyzed	Test Name	Result	Method
11/14/06	1,2,4-Trimethylbenzene	<5 ppb	8260
11/14/06	1,3,5-Trimethylbenzene	<5 ppb	8260
11/14/06	Benzene	<5 ppb	8260
11/14/06	Ethylbenzene	<5 ppb	8260
11/14/06	Isopropylbenzene	<5 ppb	8260
11/14/06	m&p-Xylene	<5 ppb	8260
11/14/06	MTBE	<5 ppb	8260
11/14/06	Naphthalene	<5 ppb	8260
11/14/06	n-Butylbenzene	<5 ppb	8260
11/14/06	n-Propylbenzene	<5 ppb	8260
11/14/06	o-Xylene	<5 ppb	8260
11/14/06	p-Isopropyltoluene	<5 ppb	8260
11/14/06	sec-Butylbenzene	<5 ppb	8260
11/14/06	tert-Butyl Benzene	<5 ppb	8260
11/14/06	Toluene	<5 ppb	8260
11/14/06	Total Xylenes	<5 ppb	8260



## Impact Environmental: 06-210

**Mailing Information:**

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Zip:** 11716

**Phone:** (631) 269-8800

**Fax:** (631) 269-1599

**Collector's Information:**

**Name:** Ted Veno

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Zip:**

**Phone:**

**JMS ID:** 007836

**Sample's Information:**

**Sample ID:** SP-2

**Site:** 6'

**Date Collected:** 11/9/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

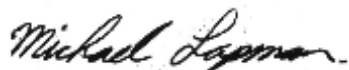
**Lab No.:** J0610719

**Matrix:** Soil

Date Analyzed	Test Name	Result	Method
11/14/06	Acenaphthene	400 ppb	8270
11/14/06	Acenaphthylene	380 ppb	8270
11/14/06	Anthracene	2050 ppb	8270
11/14/06	Benzo(a)anthracene	5540 ppb	8270
11/14/06	Benzo(a)pyrene	4200 ppb	8270
11/14/06	Benzo(b)fluoranthene	4000 ppb	8270
11/14/06	Benzo(g,h,i)perylene	2400 ppb	8270
11/14/06	Benzo(k)fluoranthene	3000 ppb	8270
11/14/06	Chrysene	5300 ppb	8270
11/14/06	Dibenz(a,h)anthracene	<330 ppb	8270
11/14/06	Fluoranthene	8100 ppb	8270
11/14/06	Fluorene	560 ppb	8270
11/14/06	Indeno(1,2,3-cd)pyrene	3000 ppb	8270
11/14/06	Naphthalene	<330 ppb	8270
11/14/06	Phenanthrene	5150 ppb	8270
11/14/06	Pyrene	9100 ppb	8270


ppb = micrograms

**Signature:**



Michael Lapman  
President

**Reviewed By:**



Sharon Houlahan, Director

**State #:** PH-0218 **ELAP #:** 11715

**Ref Lab:** PH0618

## Impact Environmental: 06-210

### Mailing Information:

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Phone:** (631) 269-8800

**Zip:** 11716

**Fax:** (631) 269-1599

### Collector's Information:

**Name:** Ted Veno

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Phone:**

**Zip:**

**JMS ID:** 007837

### Sample's Information:

**Sample ID:** SP-2

**Site:** 11'

**Date Collected:** 11/9/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

**Lab No.:** J0610720

**Matrix:** Soil

Date Analyzed	Test Name	Result	Method
11/14/06	1,2,4-Trimethylbenzene	<5 ppb	8260
11/14/06	1,3,5-Trimethylbenzene	<5 ppb	8260
11/14/06	Benzene	<5 ppb	8260
11/14/06	Ethylbenzene	<5 ppb	8260
11/14/06	Isopropylbenzene	<5 ppb	8260
11/14/06	m&p-Xylene	<5 ppb	8260
11/14/06	MTBE	<5 ppb	8260
11/14/06	Naphthalene	<5 ppb	8260
11/14/06	n-Butylbenzene	<5 ppb	8260
11/14/06	n-Propylbenzene	<5 ppb	8260
11/14/06	o-Xylene	<5 ppb	8260
11/14/06	p-Isopropyltoluene	<5 ppb	8260
11/14/06	sec-Butylbenzene	<5 ppb	8260
11/14/06	tert-Butyl Benzene	<5 ppb	8260
11/14/06	Toluene	<5 ppb	8260
11/14/06	Total Xylenes	<5 ppb	8260

## Impact Environmental: 06-210

### Mailing Information:

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Phone:** (631) 269-8800

**Zip:** 11716

**Fax:** (631) 269-1599

### Collector's Information:

**Name:** Ted Veno

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Phone:**

**Zip:**

**JMS ID:** 007837

### Sample's Information:

**Sample ID:** SP-2

**Site:** 11'

**Date Collected:** 11/9/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

**Lab No.:** J0610720

**Matrix:** Soil

Date Analyzed	Test Name	Result	Method
11/14/06	Acenaphthene	<330 ppb	8270
11/14/06	Acenaphthylene	<330 ppb	8270
11/14/06	Anthracene	<330 ppb	8270
11/14/06	Benzo(a)anthracene	144 ppb	8270
11/14/06	Benzo(a)pyrene	152 ppb	8270
11/14/06	Benzo(b)fluoranthene	225 ppb	8270
11/14/06	Benzo(g,h,i)perylene	114 ppb	8270
11/14/06	Benzo(k)fluoranthene	<330 ppb	8270
11/14/06	Chrysene	174 ppb	8270
11/14/06	Dibenz(a,h)anthracene	<330 ppb	8270
11/14/06	Fluoranthene	247 ppb	8270
11/14/06	Fluorene	<330 ppb	8270
11/14/06	Indeno(1,2,3-cd)pyrene	167 ppb	8270
11/14/06	Naphthalene	<330 ppb	8270
11/14/06	Phenanthrene	<330 ppb	8270
11/14/06	Pyrene	278 ppb	8270

Values reported less than 330ppb for 8270 are "J" values.

ppb = micrograms

**Signature:**

*Michael Lapman*

Michael Lapman  
President

**Reviewed By:**

*Sharon Houlahan*

Sharon Houlahan, Director

**State #:** PH-0218 **ELAP #:** 11715

**Ref Lab:** PH0618

# Analytical Report

**Impact Environmental: 06-210**

170 Keyland Ct  
Bohemia, NY 11716

Report Date: 11/15/2006

## Impact Environmental: 06-210

### Mailing Information:

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Phone:** (631) 269-8800

**Zip:** 11716

**Fax:** (631) 269-1599

### Collector's Information:

**Name:** Ted Veno

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Phone:**

**Zip:**

**JMS ID:** 007838

### Sample's Information:

**Sample ID:** SP-3

**Site:** 4'

**Date Collected:** 11/9/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

**Lab No.:** J0610721

**Matrix:** Soil

Date Analyzed	Test Name	Result	Method
11/14/06	1,2,4-Trimethylbenzene	<5 ppb	8260
11/14/06	1,3,5-Trimethylbenzene	<5 ppb	8260
11/14/06	Benzene	<5 ppb	8260
11/14/06	Ethylbenzene	<5 ppb	8260
11/14/06	Isopropylbenzene	<5 ppb	8260
11/14/06	m&p-Xylene	<5 ppb	8260
11/14/06	MTBE	<5 ppb	8260
11/14/06	Naphthalene	<5 ppb	8260
11/14/06	n-Butylbenzene	<5 ppb	8260
11/14/06	n-Propylbenzene	<5 ppb	8260
11/14/06	o-Xylene	<5 ppb	8260
11/14/06	p-Isopropyltoluene	<5 ppb	8260
11/14/06	sec-Butylbenzene	<5 ppb	8260
11/14/06	tert-Butyl Benzene	<5 ppb	8260
11/14/06	Toluene	<5 ppb	8260
11/14/06	Total Xylenes	<5 ppb	8260

## Impact Environmental: 06-210

**Mailing Information:**

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Phone:** (631) 269-8800

**Zip:** 11716

**Fax:** (631) 269-1599

**Collector's Information:**

**Name:** Ted Veno

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Phone:**

**Zip:**

**JMS ID:** 007838

**Sample's Information:**

**Sample ID:** SP-3

**Site:** 4'

**Date Collected:** 11/9/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

**Lab No.:** J0610721

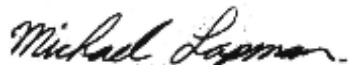
**Matrix:** Soil

Date Analyzed	Test Name	Result	Method
11/14/06	Acenaphthene	<330 ppb	8270
11/14/06	Acenaphthylene	107 ppb	8270
11/14/06	Anthracene	248 ppb	8270
11/14/06	Benzo(a)anthracene	635 ppb	8270
11/14/06	Benzo(a)pyrene	420 ppb	8270
11/14/06	Benzo(b)fluoranthene	730 ppb	8270
11/14/06	Benzo(g,h,i)perylene	224 ppb	8270
11/14/06	Benzo(k)fluoranthene	<330 ppb	8270
11/14/06	Chrysene	640 ppb	8270
11/14/06	Dibenz(a,h)anthracene	<330 ppb	8270
11/14/06	Fluoranthene	1200 ppb	8270
11/14/06	Fluorene	<330 ppb	8270
11/14/06	Indeno(1,2,3-cd)pyrene	297 ppb	8270
11/14/06	Naphthalene	48 ppb	8270
11/14/06	Phenanthrene	490 ppb	8270
11/14/06	Pyrene	1180 ppb	8270

Values reported less than 330ppb for 8270 are "J" values.

ppb = micrograms

**Signature:**



**Michael Lapman**  
President

**Reviewed By:**



**Sharon Houlahan, Director**

**State #:** PH-0218 **ELAP #:** 11715

**Ref Lab:** PH0618

**Impact Environmental: 06-210****Mailing Information:****Name:** Impact Environmental**Address:** 170 Keyland Ct**City:** Bohemia**State:** NY**Zip:** 11716**Phone:** (631) 269-8800**Fax:** (631) 269-1599**Collector's Information:****Name:** Ted Veno**Address of site:** 3rd Avenue**City:** Not Specified**State:** NY**Zip:****Phone:****JMS ID:** 007839**Sample's Information:****Sample ID:** SP-3**Site:** 12'**Date Collected:** 11/9/2006**Date Received:** 11/10/2006**Preservative:****Time Collected:** 10:00:00 AM**Time Received:** 3:00:00 PM**Temperature:****Lab No.:** J0610722**Matrix:** Soil

Date Analyzed	Test Name	Result	Method
11/14/06	1,2,4-Trimethylbenzene	<5 ppb	8260
11/14/06	1,3,5-Trimethylbenzene	<5 ppb	8260
11/14/06	Benzene	6.6 ppb	8260
11/14/06	Ethylbenzene	<5 ppb	8260
11/14/06	Isopropylbenzene	<5 ppb	8260
11/14/06	m&p-Xylene	<5 ppb	8260
11/14/06	MTBE	<5 ppb	8260
11/14/06	Naphthalene	<5 ppb	8260
11/14/06	n-Butylbenzene	<5 ppb	8260
11/14/06	n-Propylbenzene	<5 ppb	8260
11/14/06	o-Xylene	<5 ppb	8260
11/14/06	p-Isopropyltoluene	<5 ppb	8260
11/14/06	sec-Butylbenzene	<5 ppb	8260
11/14/06	tert-Butyl Benzene	<5 ppb	8260
11/14/06	Toluene	<5 ppb	8260
11/14/06	Total Xylenes	<5 ppb	8260

## Impact Environmental: 06-210

**Mailing Information:**

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Zip:** 11716

**Phone:** (631) 269-8800

**Fax:** (631) 269-1599

**Collector's Information:**

**Name:** Ted Veno

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Zip:**

**Phone:**

**JMS ID:** 007839

**Sample's Information:**

**Sample ID:** SP-3

**Site:** 12'

**Date Collected:** 11/9/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

**Lab No.:** J0610722

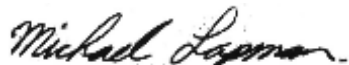
**Matrix:** Soil

Date Analyzed	Test Name	Result	Method
11/14/06	Acenaphthene	<330 ppb	8270
11/14/06	Acenaphthylene	<330 ppb	8270
11/14/06	Anthracene	<330 ppb	8270
11/14/06	Benzo(a)anthracene	<330 ppb	8270
11/14/06	Benzo(a)pyrene	<330 ppb	8270
11/14/06	Benzo(b)fluoranthene	<330 ppb	8270
11/14/06	Benzo(g,h,i)perylene	<330 ppb	8270
11/14/06	Benzo(k)fluoranthene	<330 ppb	8270
11/14/06	Chrysene	<330 ppb	8270
11/14/06	Dibenz(a,h)anthracene	<330 ppb	8270
11/14/06	Fluoranthene	<330 ppb	8270
11/14/06	Fluorene	<330 ppb	8270
11/14/06	Indeno(1,2,3-cd)pyrene	<330 ppb	8270
11/14/06	Naphthalene	<330 ppb	8270
11/14/06	Phenanthrene	<330 ppb	8270
11/14/06	Pyrene	<330 ppb	8270

Values reported less than 330ppb for 8270 are "J" values.

ppb = micrograms

**Signature:**



**Michael Lapman**  
President

**Reviewed By:**



**Sharon Houlahan, Director**

**State #:** PH-0218 **ELAP #:** 11715

**Ref Lab:** PH0618



## Impact Environmental: 06-210

### Mailing Information:

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Phone:** (631) 269-8800

**Zip:** 11716

**Fax:** (631) 269-1599

### Collector's Information:

**Name:** Ted Veno

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Phone:**

**Zip:**

**JMS ID:** 007840

### Sample's Information:

**Sample ID:** SP-4

**Site:** 4'

**Date Collected:** 11/9/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

**Lab No.:** J0610723

**Matrix:** Soil

Date Analyzed	Test Name	Result	Method
11/14/06	1,2,4-Trimethylbenzene	<5 ppb	8260
11/14/06	1,3,5-Trimethylbenzene	<5 ppb	8260
11/14/06	Benzene	<5 ppb	8260
11/14/06	Ethylbenzene	<5 ppb	8260
11/14/06	Isopropylbenzene	<5 ppb	8260
11/14/06	m&p-Xylene	<5 ppb	8260
11/14/06	MTBE	<5 ppb	8260
11/14/06	Naphthalene	<5 ppb	8260
11/14/06	n-Butylbenzene	<5 ppb	8260
11/14/06	n-Propylbenzene	<5 ppb	8260
11/14/06	o-Xylene	<5 ppb	8260
11/14/06	p-Isopropyltoluene	<5 ppb	8260
11/14/06	sec-Butylbenzene	<5 ppb	8260
11/14/06	tert-Butyl Benzene	<5 ppb	8260
11/14/06	Toluene	<5 ppb	8260
11/14/06	Total Xylenes	<5 ppb	8260

## Impact Environmental: 06-210

**Mailing Information:**

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Zip:** 11716

**Phone:** (631) 269-8800

**Fax:** (631) 269-1599

**Collector's Information:**

**Name:** Ted Veno

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Zip:**

**Phone:**

**JMS ID:** 007840

**Sample's Information:**

**Sample ID:** SP-4

**Site:** 4'

**Date Collected:** 11/9/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

**Lab No.:** J0610723

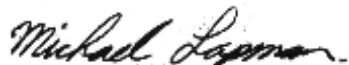
**Matrix:** Soil

Date Analyzed	Test Name	Result	Method
11/14/06	Acenaphthene	<330 ppb	8270
11/14/06	Acenaphthylene	<330 ppb	8270
11/14/06	Anthracene	<330 ppb	8270
11/14/06	Benzo(a)anthracene	153 ppb	8270
11/14/06	Benzo(a)pyrene	126 ppb	8270
11/14/06	Benzo(b)fluoranthene	220 ppb	8270
11/14/06	Benzo(g,h,i)perylene	109 ppb	8270
11/14/06	Benzo(k)fluoranthene	<330 ppb	8270
11/14/06	Chrysene	188 ppb	8270
11/14/06	Dibenz(a,h)anthracene	<330 ppb	8270
11/14/06	Fluoranthene	261 ppb	8270
11/14/06	Fluorene	<330 ppb	8270
11/14/06	Indeno(1,2,3-cd)pyrene	<330 ppb	8270
11/14/06	Naphthalene	<330 ppb	8270
11/14/06	Phenanthrene	<330 ppb	8270
11/14/06	Pyrene	306 ppb	8270

Values reported less than 330ppb for 8270 are "J" values.

ppb = micrograms

**Signature:**



**Michael Lapman**  
President

**Reviewed By:**



**Sharon Houlahan, Director**

**State #:** PH-0218 **ELAP #:** 11715

**Ref Lab:** PH0618

## Impact Environmental: 06-210

### Mailing Information:

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Phone:** (631) 269-8800

**Zip:** 11716

**Fax:** (631) 269-1599

### Collector's Information:

**Name:** Ted Veno

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Phone:**

**Zip:**

**JMS ID:** 007841

### Sample's Information:

**Sample ID:** SP-4

**Site:** 12'

**Date Collected:** 11/9/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

**Lab No.:** J0610724

**Matrix:** Soil

Date Analyzed	Test Name	Result	Method
11/14/06	1,2,4-Trimethylbenzene	<5 ppb	8260
11/14/06	1,3,5-Trimethylbenzene	<5 ppb	8260
11/14/06	Benzene	<5 ppb	8260
11/14/06	Ethylbenzene	<5 ppb	8260
11/14/06	Isopropylbenzene	<5 ppb	8260
11/14/06	m&p-Xylene	<5 ppb	8260
11/14/06	MTBE	<5 ppb	8260
11/14/06	Naphthalene	<5 ppb	8260
11/14/06	n-Butylbenzene	<5 ppb	8260
11/14/06	n-Propylbenzene	<5 ppb	8260
11/14/06	o-Xylene	<5 ppb	8260
11/14/06	p-Isopropyltoluene	<5 ppb	8260
11/14/06	sec-Butylbenzene	<5 ppb	8260
11/14/06	tert-Butyl Benzene	<5 ppb	8260
11/14/06	Toluene	<5 ppb	8260
11/14/06	Total Xylenes	<5 ppb	8260

## Impact Environmental: 06-210

**Mailing Information:**

**Name:** Impact Environmental

**Address:** 170 Keyland Ct

**City:** Bohemia

**State:** NY

**Zip:** 11716

**Phone:** (631) 269-8800

**Fax:** (631) 269-1599

**Collector's Information:**

**Name:** Ted Veno

**Address of site:** 3rd Avenue

**City:** Not Specified

**State:** NY

**Zip:**

**Phone:**

**JMS ID:** 007841

**Sample's Information:**

**Sample ID:** SP-4

**Site:** 12'

**Date Collected:** 11/9/2006

**Date Received:** 11/10/2006

**Preservative:**

**Time Collected:** 10:00:00 AM

**Time Received:** 3:00:00 PM

**Temperature:**

**Lab No.:** J0610724

**Matrix:** Soil

Date Analyzed	Test Name	Result	Method
11/14/06	Acenaphthene	<330 ppb	8270
11/14/06	Acenaphthylene	<330 ppb	8270
11/14/06	Anthracene	<330 ppb	8270
11/14/06	Benzo(a)anthracene	<330 ppb	8270
11/14/06	Benzo(a)pyrene	<330 ppb	8270
11/14/06	Benzo(b)fluoranthene	<330 ppb	8270
11/14/06	Benzo(g,h,i)perylene	<330 ppb	8270
11/14/06	Benzo(k)fluoranthene	<330 ppb	8270
11/14/06	Chrysene	<330 ppb	8270
11/14/06	Dibenz(a,h)anthracene	<330 ppb	8270
11/14/06	Fluoranthene	171 ppb	8270
11/14/06	Fluorene	<330 ppb	8270
11/14/06	Indeno(1,2,3-cd)pyrene	<330 ppb	8270
11/14/06	Naphthalene	<330 ppb	8270
11/14/06	Phenanthrene	<330 ppb	8270
11/14/06	Pyrene	212 ppb	8270

Values reported less than 330ppb for 8270 are "J" values.

ppb = micrograms

**Signature:**



Michael Lapman  
President

**Reviewed By:**



Sharon Houlahan, Director

**State #:** PH-0218 **ELAP #:** 11715

**Ref Lab:** PH0618