

# **REMEDIAL INVESTIGATION REPORT**

**Prepared for the**

**Long Dock Beacon Site**

**NYSDEC Brownfields Program Site: C314112**

**Located at**

**Red Flynn Drive  
City of Beacon  
Dutchess County, New York**

**November 2007**

**Prepared By:**

**ECOSYSTEMS STRATEGIES, INC.  
24 Davis Avenue  
Poughkeepsie, New York 12603  
(845) 452-1658**

**ESI File: SG96152.51**

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Ecosystems Strategies, Inc.  
24 Davis Avenue  
Poughkeepsie, New York 12603

**Prepared For:**

The Scenic Hudson Land Trust, Inc.  
Civic Center Plaza  
Poughkeepsie, New York 12601

Foss Group Beacon, LLC  
163 Delaware Avenue  
Delmar, New York 12045

The undersigned has reviewed this Remedial Investigation Report and certifies to The Scenic Hudson Land Trust, Inc. and Foss Group Beacon, LLC, that the information provided in this document is accurate as of the date of issuance by this office.

Any and all questions or comments, including requests for additional information, should be submitted to the undersigned.



\_\_\_\_\_  
Paul H. Ciminello  
President

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## **1.0 INTRODUCTION**

### **1.1 Purpose**

This Remedial Investigation Report (RIR) summarizes environmental investigation services performed by Ecosystems Strategies, Inc. (ESI) at the "Long Dock Beacon" property (hereafter referred to as the "Site"), located at Red Flynn Drive, City of Beacon, Dutchess County, New York (Figure 1, Appendix A). The work was performed to document the extent of known contamination resulting from historic uses of the property (see Section 2.2, below).

Investigative services were conducted consistent with the Remedial Investigation Workplan (RIWP), dated August 2006, and the Supplemental Remedial Investigation Workplan (SRIWP), dated January 2007, collectively referred to as the "Workplan", approved by the New York State Department of Environmental Conservation (NYSDEC). Any variations from the approved Workplan are described in Section 3.0. This RIR describes all fieldwork methodology and sample collection procedures, includes discussions of laboratory data, and provides conclusions and recommendations drawn from the fieldwork and analytical data.

### **1.2 Limitations**

This written analysis is an assessment of the site characterization activities conducted on the Long Dock Beacon property, and is not relevant to any other property. It is a representation of those portions of the property analyzed as of the respective dates of fieldwork. This RIR cannot be held accountable for activities or events resulting in contamination after the dates of fieldwork.

Services summarized in this RIR were performed in general conformance with Draft Division of Environmental Remediation -10, Technical Guidance for Site Investigation and Remediation (DER-10), dated December 2002. Unless specifically noted, the findings and conclusions contained herein must be considered not as scientific certainties, but as probabilities based on professional judgment.

### **1.3 Objectives**

ESI conducted an environmental investigation at the Site in order to achieve the following objectives:

- To document impacts to on-site soil, groundwater, surface water and sediment from former Site uses and the presence of historic fill materials;
- To provide guidance on response actions warranted to address identified environmental conditions; and,
- To determine if on-site contamination has the potential to migrate off-site.

## **2.0 SITE DESCRIPTION**

### **2.1 Site Location, Features, and History**

The Site is an 8.85 acre irregular-shaped parcel situated on a peninsula on the eastern shore of the Hudson River, in the City of Beacon, Dutchess County, New York. The northern half of the Site was formerly known as the "Beacon Salvage" property, and the southern half of the Site was known as the "Garret Storm" property. The former Beacon Salvage property and the former Garret Storm property were combined as a single site under the Brownfields Clean-up Program (BCP) in May 2006.

The Site extends approximately 1,200 feet westwards from Red Flynn Drive and includes lands submerged in the Hudson River. A barn and a vacant single-family dwelling are located on the northeastern portions of the Site, a concrete foundation is located in the vicinity of the western shoreline, and a boathouse and two small storage sheds, utilized by the Dutchess Boat Club, are located on the southwest portion. The remaining portions of the Site consist of vacant, overgrown areas. A Site Location Map is provided as Figure 1 (Appendix A).

#### *Previous Site Uses*

Historic maps and municipal records indicate on-site structures as early as the late-1800s, and document a variety of industrial uses. Dates indicated below are approximate dates based on when structures appear on historic maps and/or municipal records.

#### **Former Beacon Salvage property**

- Dwelling – north-central portion of the Site, current location of the vacant single-family dwelling (late-1800s-present)
- Barn – built at the northeastern portion of the Site and moved immediately to the northeast to its current location in the early 2000s (late-1800s-present)
- Long Dock Coal Company/Garret Storm Coal Yard – northwestern portion of the Site (1919-1927)
- Transformer House – north-central portion of the Site, immediately west of the current location of the vacant single-family dwelling (1919-1946).
- National Power Corporation – northeastern portion of the Site, immediately southeast of the current location of the barn (1919).
- Beacon Soap Company, Incorporated - northeastern portion of the Site, in the location of the previous National Power Corporation (1927).
- Central Hudson Steamboat Company – western portion of the Site, current location of the concrete foundation (1927-1946).
- Salvage Yard – northwestern portion of the Site, in the location of the previous Long Dock Coal Company/Garret Storm Coal Yard and Central Hudson Steamboat Company (1962-1983).

Former Garrett Storm property

The majority of the Garret-Storm property was comprised of a basin of the Hudson River until at least 1936. The entire basin was filled by 1960.

- Garret-Storm Major Oil Storage Facility (MOSF), with aboveground petroleum storage tank structures – south-central portion of the Site (1936-1994).

## **2.2 Site Topography**

The surface of the Site generally slopes gently downward to the southwest, towards the Hudson River, with a surface elevation ranging approximately 5-10 feet above mean sea level (msl). Lands submerged in the Hudson River, at the western portion of the Site, extends as deep as 24 feet below msl along the western border of the Site.

## **2.3 Site Climate**

According to available sources average temperatures for the month of January (coldest month) in Beacon, New York range from 17 to 36 degrees Fahrenheit (-8 to 2 degrees Celsius). Average temperatures for the month of July (warmest month) in Beacon, New York range from 85 to 64 degrees Fahrenheit (29 to 18 degrees Celsius). Annual precipitation is frequent and steady year-round, with an average yearly precipitation of 44.79 inches.

## **2.4 Site Geology**

State maps indicate that soils at the Site consist of lacustrine silt and clay deposits, overlying sandstone and shale. The local soil survey indicates that the smoothed Udorthents soil type is located on the Site. The smoothed Udorthents designation consists of very deep, somewhat excessively drained to moderately well drained soils that have been altered by cutting and filling.

Subsurface soils in the northern portion of the Site, encountered in soil borings and test pits in the approximate 0-5 feet below surface grade (bsg) interval generally consisted of variable texture sandy fill material with gravel and fragments of brick and coal. Subsurface soils in the northern portion of the Site in the approximate 5-10 feet bsg interval, generally consisted of brown to black fine materials (silt, clay and organic muck), with fragmentary debris materials (coal and ash). Subsurface soils in the southern portion of the Site, encountered in soil borings and test pits in the approximate 0-15 feet bsg interval, generally consisted of variable texture sandy fill material with gravel, coal, ash, wood and fragments of brick and rock.

A dense clay layer is generally present at a depth of approximately 10 feet bsg in the northern portion of the Site which slopes downwards towards the south at depths between 15 and 17 feet bsg. The clay appears to be native material and is likely to form a continuous confining layer.

A detailed description of soils encountered during the Site investigation is provided in Table 1, Appendix C.

## **2.5 Site Surface Hydrology and Wetlands**

The westernmost portion of the Site is submerged in the Hudson River with a surface-water flow from north to south. The Hudson River is mapped as a federal wetland. No other wet areas or mapped wetlands are present at the Site or surrounding areas. Approximately, 80% of the Site is located in a 100-year flood plain.

## 2.6 Site Groundwater Hydrology

Groundwater measurements were collected during low and high tides for monitoring wells MW-1 through MW-10 on August 16, 2007 (MW-5 was damaged and could not be measured). Measurements were taken from the top of the well casings with an electronic depth meter accurate to the nearest 0.01-foot. According to tidal charts, low and high tides were predicted to occur at 9:45 am and 3:35 pm, respectively. Groundwater measurements during low tide were collected from 10:03 am to 10:43 am (starting at MW-10 and ending at MW-1). Groundwater measurements during high tide were collected from 3:04 pm to 3:30 pm (starting at MW-10 and ending at MW-1).

Groundwater elevations during low tide ranged from 0.25 feet above mean sea level (msl) at MW-4 to 2.13 feet above msl at MW-1. Groundwater elevations during high tide ranged from 2.06 feet above msl at MW-10 to 3.01 feet above msl at MW-2.

Groundwater fluctuations between low and high tide (i.e. rise in water level) ranged from 2.70 feet (MW-4) to -0.06 (MW-1). Wells with a groundwater fluctuation greater than 1.5 feet (MW-2, MW-3, MW-4 and MW-7) were located in the western portion of the Site. Wells with a groundwater fluctuation less than 1.5 feet (MW-6, MW-8 and MW-9) were located in the central portion of the Site. Wells with an inverse groundwater fluctuation (MW-1 and MW-10) were located in the eastern portion of the Site. Inverse fluctuation occurs when groundwater elevations are higher at low tide than at high tide. Low and high tides have a greater impact in groundwater elevations in the westernmost portion of the Site than in groundwater elevations in the central and eastern portion of the Site. Groundwater elevations and fluctuations are tabulated in Table 2 (Appendix C).

The overall direction of groundwater flow during low and high tide is in a southwesterly and easterly direction, respectively. Direction of groundwater flow during low and high tide is illustrated on Figure 2 and Figure 3, respectively. The rate of groundwater flow is not known at this time. Results indicate that soil present on Site is permeable and that groundwater flow and elevations are susceptible to tidal influence.

Groundwater at the Site is not used for potable or non-potable purposes on or near the Site. The Site is supplied by central water via a connection at the single-family dwelling located in north-central portion of the Site.

## 2.7 Description of Adjoining and Surrounding Area Properties

The Site is located along the Hudson River in a suburban area comprised primarily of single-family residential, small commercial and vacant properties. A description of the adjoining and nearby properties is provided in Table 3, below.

**Table 3: Land Uses in the Vicinity of the Site**

Direction	Adjoining Use(s)	Surrounding Use(s)
North	<ul style="list-style-type: none"><li>undeveloped vacant land</li><li>Hudson River</li></ul>	<ul style="list-style-type: none"><li>Beacon train station</li><li>small commercial</li><li>recreational</li></ul>
East	<ul style="list-style-type: none"><li>train station parking</li></ul>	<ul style="list-style-type: none"><li>residential</li></ul>
South	<ul style="list-style-type: none"><li>undeveloped vacant land</li><li>Hudson River</li></ul>	<ul style="list-style-type: none"><li>Hudson River</li></ul>
West	<ul style="list-style-type: none"><li>Hudson River</li></ul>	<ul style="list-style-type: none"><li>Hudson River</li></ul>

## **2.8 Current and Proposed Usage of the Site and Adjoining Properties**

The Site is vacant and overgrown except for the following: a barn on the northeastern portion (utilized by Scenic Hudson for storage of recreational equipment), a boathouse and two small storage sheds on the southwest portion (utilized by the Dutchess Boat Club), a vacant single-family dwelling on the north-central portion, and a concrete foundation near the western shoreline.

The Site is proposed for use as a mixed-use waterfront development, which includes a hotel, conference center, restaurants, offices, retail stores, water dependent uses, and a public park with public access to waterfront-related amenities. All existing on-site structures will be demolished with the exception of the barn. Most of the Site will be occupied by a new main structure extending from the northwestern shore of the Site to Red Flynn Drive (114,110 square feet of gross floor area), and a potential second structure at the southeastern portion of the Site (49,000 square feet of gross floor area).

There are no known proposed changes to the usages of adjoining properties.

## **2.9 Previous Environmental Reports**

Environmental investigations conducted by various consultants in the 1980s indicated that the Site had been formed with uncontrolled fill from multiple sources, and that soils and groundwater had been impacted by metals and hydrocarbon-based contamination. The Site was subsequently investigated by ESI to more fully characterize known and suspected contamination. Relevant documentation produced by ESI includes the following work:

### *Former Beacon Salvage property*

- Subsurface Investigation and Monitoring Well Installation Report, November 1994;
- Combined Phase I and Phase II Environmental Site Assessment, July 2000;
- Summary Report of Subsurface Investigation, September 2000; and,
- Summary Report of Remedial Activities, October 2002.

### *Former Garret Storm property*

- Environmental Audit, February 1997;
- Summary Report of Environmental Services, May 2000; and,
- Summary Report of Remedial Activities, August 2003.

### *Summary of Soil Investigations at the Former Beacon Salvage Property – Northern Portion of Site*

ESI's Phase I investigation identified several areas of potential environmental concern, including the integrity of fill materials and the presence of on-site burn areas (associated with activities conducted at the scrap yard). Soils investigations conducted from 2000 to 2002 documented elevated concentrations of metals in surface soils to the west of the residence and to the east of the barn, and elevated levels of PCBs in the burn areas. Limited removal of PCB-contaminated soil east of the barn was conducted in 2002 and clean cover soils were imported to this area. Areas of previous soil removal activities are illustrated on Figure 4 (Appendix A).

Several trenches were extended at the western portion of the property in December 2004 as part of an archeological investigation. Low-grade contamination by polycyclic aromatic hydrocarbons (PAHs) and metals, and evidence of low-level petroleum impacts, was found throughout the study area, and low levels of PCBs were detected near the western end of the barn.

*Summary of Soil Investigations at the Former Garret Storm Property – Southern portion of Site*

The Phase I investigation identified the former MOSF facility and associated NYSDEC spill events as an area of environmental concern. Investigations starting in 1997 identified significant petroleum impacts in soils located in the former fuel handling and storage area, and remedial activities were initiated in 1999 (a former pump house and tank-cradles were demolished, and petroleum contaminated soils were excavated). Confirmatory sampling documented the absence of significant petroleum constituents in remaining soils; however, soils with obvious petroleum odors remained at various Site locations.

*Summary of Site Groundwater Investigations*

ESI installed eight wells on and near the Site in 1994 (several wells were subsequently destroyed during remedial activities), two observation/recovery sumps in 1999, a temporary well point in 2001, and six temporary well points in 2002. Evidence of petroleum contamination, including some observations of light non-aqueous phase liquids (LNAPL), has been observed in on-site wells and in groundwater entering excavations (no measurable thickness of product was found in observation/recovery wells). Elevated concentrations of several petroleum compounds were detected in 1994 in two wells located in the immediate vicinity of the fuel distribution area. Data collected since 1994, however, indicated a general decrease in the number of detected compounds and their concentrations. Historically, no volatile organic compounds (VOCs) or PAHs have been detected in off-site wells. This evidence suggests that any low level petroleum compounds remaining in soils at the southern portion of the site are not significantly dissolving into local groundwater or migrating off-site.

A Summary Report of Remedial Activities, for the former Beacon Salvage property (dated October 2002) and a Summary Report of Remedial Activities, for the former Garret Storm property (dated August 2003), are provided in Appendix B.

### **3.0 SITE INVESTIGATION**

#### **3.1 General Provisions**

##### **3.1.1 Personnel**

ESI supervised the extension of soil borings and the installation of monitoring wells by Zebra Environmental Corporation (Zebra) and Enviroprobe Service Incorporated (Enviroprobe), the excavation of test pits by Gleason, Inc. (Gleason), and sediment sampling services by Aqua Survey, Inc. (ASI). ESI personnel developed all monitoring wells and collected all soil, groundwater, surface-water and sediment samples. Laboratory services were subcontracted to Severn Trent Laboratories (STL), a New York State Department of Health (NYSDOH) certified laboratory (ELAP Certification Number 10602).

##### **3.1.2 Fieldwork Observations, Sample Collection and Sample Custody**

An assessment of encountered field conditions (e.g., soil type, field indications of contamination) was made during the collection of all samples. A MiniRAE<sup>®</sup> 2000 (Model PGM 7600) photo-ionization detector (PID), calibrated to read parts per million calibration gas equivalents (ppm-cge) of isobutylene, was utilized by ESI personnel (where appropriate) to screen all encountered material for the presence of any volatile organic vapors. ESI personnel maintained field logs documenting all field observations and measurements (see Table 1, fieldwork observations, in Appendix C, and accompanying field logs, in Appendix D).

All media samples were collected in a manner consistent with NYSDEC sample collection protocols. Dedicated, disposable gloves were worn by all personnel handling samples, and collected media was placed into laboratory-supplied glassware or plastic jars. All sample containers were maintained at low temperature prior to, and during, transport to STL for analytical testing. Appropriate chain-of-custody procedures were followed.

Sampling equipment was decontaminated, when possible, prior to initiation of fieldwork and before each new sample location. Freezing temperatures during the winter season hindered decontamination procedures. Grossly contaminated soils and sediments were not encountered during the Site investigation. Groundwater for monitoring wells MW-1 through MW-8 was containerized in 55-gallons plastic drums. Based on the absence of field evidence of contamination, groundwater in wells MW-9 and MW-10 was not containerized.

##### **3.1.3 Terminology**

###### *Guidance Levels*

The term "guidance level", as defined in this RIR, refers to the concentration of a particular contaminant above which remedial actions are considered more likely. The overall objective of setting guidance levels is to assess the integrity of on-site media relative to conditions that are likely to present a threat to public health or the environment, given the existing and probable future uses of the Site. On-site soils, groundwater, surface-water and sediments with contaminant levels exceeding these guidance levels are considered more likely to warrant remediation. No independent risk assessment was performed as part of this investigation.

Guidance levels for all compounds detected in soils are based on NYSDEC Remedial Program Soil Cleanup Objectives (SCOs) for Commercial Restricted Use, as provided in 6 NYCRR Subpart 375, Table 375-6.8(b), and (as warranted) on NYSDEC Technical and Administrative Guidance Memorandum #4046 (TAGM 4046), including subsequent NYSDEC memoranda.



Guidance levels for all compounds detected in water are based on NYSDEC Division of Water Technical and Operational Guidance Series 1.1.1, Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations (TOGS 1.1.1).

Guidance levels for all compounds detected in sediments are based on sediment quality guidelines (SQGs) provided in Development and Evaluation of Consensus-Based Sediment Quality Guidelines for Freshwater Ecosystems (DECSQG), Archives of Environmental Contamination and Toxicology 39: 20-21, MacDonald, et al. 2000. SQGs provided in DECSQG are defined as "Threshold Effect Concentration" (TEC), the concentration below which adverse effects on sediment-dwelling organisms are not expected to occur, and "Probable Effect Concentration" (PEC), the concentration above which adverse effects on sediment-dwelling organisms are likely to be observed. For the purpose of this document, PECs are used as guidance levels when evaluating sediment analyte concentrations.

All data presented in this RIR have been analyzed in accordance with applicable guidance levels. [Note: A Remedial Alternatives Report and Remedial Action Workplan (RAR/RAWP) will be prepared, which will compare contaminants concentrations in soil to NYSDEC Remedial Program SCOs for Unrestricted Use, as provided in 6 NYCRR Subpart 375, Table 375-6.8(a), as part of the remedial alternatives analysis.]

Guidance levels for soils and sediments are referenced in units of milligrams per kilogram (mg/kg, parts per million [ppm]). Guidance levels for groundwater and surface-water are referenced in units of micrograms per liter (µg/L).

#### *Background Levels*

The term "background level", as defined in this RIR, is the concentration of a particular metal that is known to naturally occur in soils. The overall objective of setting background levels is to assess metal concentrations relative to those that are naturally occurring. On-site soils with concentrations exceeding these background levels are considered more likely to have been affected by anthropogenic contributions. The background levels for metals provided in this RIR are based on the NYSDEC's Background Levels of Heavy Metals in Soils of the Lower Hudson Valley (Summary of Results), July 2003 [revised July 2006] (a copy of this document is provided in Appendix E), and on data reported in TAGM 4046.

### **3.1.4 Documented Variations from the Approved Workplan**

There were no significant deviations from the Workplan that were critical to the validity of the conclusions and recommendations presented in Section 4.0. Based on actual field conditions, some sampling locations were modified at the request of NYSDEC personnel.

### **3.1.5 Pre-Investigation Services**

As specified in the Workplan, ESI personnel conducted the following tasks:

- A utility mark-out was called in per New York State Department of Labor regulations identifying areas on the Site where subgrade utilities might represent a constraint to proposed investigative services. Fieldwork activities along the southern property line in the vicinity of the former MOSF were slightly modified to avoid subgrade utilities.
- Field equipment was calibrated prior to on-site use, in accordance with manufacturer's specifications.

- The Health and Safety Plan prepared for the Workplan was reviewed with all on-site subcontractors. ESI personnel served as the Site Health and Safety officer during all on-site work.
- NYSDEC personnel were notified of fieldwork activities and any changes to the Workplan.

### **3.2 Soil Investigation**

Twelve surface soil samples (SS-1 to SS-12) were collected by ESI on August 17, 2006, eleven mechanical soil borings (SB-1 to SB-11) were extended by Zebra on August 21-22, 2006, and nine test pits (TP-1 to TP-9) were extended by Gleason on August 17, 2006. Sampling locations for surface soil samples, soil borings, and test pits extended in August 2006 were selected to provide a general screening of surface and subsurface conditions at the Site.

Thirty-five additional mechanical soil borings (2SB-1 to 2SB-35) were extended by Zebra and Enviroprobe on February 15-16 and February 20, 2007, respectively. These borings were located to define the lateral and vertical extent of soil contamination that had been previously documented by ESI at SS-3, SS-10, SS-12, SB-1, TP-2, TP-3, TP-6, TP-7, TP-8, and TP-9.

Soil sampling locations are illustrated on a Fieldwork Map, provided as Figure 5 (Appendix A).

#### **3.2.1 Sample Collection Methodology**

Surface soil samples were collected from the 0-2" depth interval using a stainless steel trowel. Mechanical soil borings were extended using a truck-mounted or track-mounted Geoprobe unit. Soil boring samples were collected from various depths from the surface to 22 feet bsg. Test pits were extended using a standard backhoe to a maximum depth of 10 feet bsg or until groundwater was reached.

#### **3.2.2 Fieldwork Observations**

Surface soils observed at the Site generally consisted of medium-brown, sandy loam with coal fragments. Generally, black staining and gritty soil was associated with lead and arsenic contamination in surface soils (see Section 3.2.3.4). No odors or other visual evidence of contamination were noted during surface sampling. Subsurface soils in the northern portion of the Site, encountered in soil borings in the approximate 0-5 feet bsg interval, and in test pits generally consisted of variable texture sandy fill material with gravel and fragments of brick and coal, and soils in the approximate 5-10 feet bsg interval, generally consisted of brown to black fine materials (silt, clay and organic muck), with fragmentary debris materials (coal and ash). Subsurface soils in the southern portion, encountered in soil borings in the approximate 0-15 feet bsg interval and in test pits, generally consisted of variable texture sandy fill material with gravel, coal, ash, wood and fragments of brick and rock.

A dense clay layer is generally present at a depth of approximately 10 feet bsg in the northern portion of the Site which slopes downwards towards the south at depths between 15 and 17 feet bsg. The clay appears to be native material and is likely to form a continuous confining layer. Groundwater was encountered in exposed soils at depths of 2 to 13.5 feet bsg.

Field evidence of contamination, including odors, staining and positive PID readings, was encountered at fifteen locations in the south-central portion of the Site in the vicinity of the former MOSF facilities (Figure 4 and Figure 5, Appendix A). PID readings of 50 ppm-cge or more were detected at SB-9, 2SB-13, 2SB-14, 2SB-16, 2SB-35, TP-6 and TP-9 (ranging from 280 ppm-cge at TP-9[1.5'] to 50 ppm-cge at 2SB-35[5-10']). PID readings below 50 ppm-cge were detected in the remaining eight locations. Fuel-oil odors were detected in all fifteen locations, with the

exception of 2SB-13, and sheens were observed at 2SB-10, 2SB-14, 2SB-15, 2SB-18 and 2SB-35 (throughout the soil columns). Areas with strong fuel-oil odors and significant sheens were primarily located in the vicinity of the former MOSF facilities at the southern portion of the Site. LNAPL was encountered at 2SB-16 at 5-9' bsg. Staining was observed at 2SB-11A, 2SB-17 and TP-6 between 0-10' bsg. Field evidence of contamination at these locations is summarized in Table 4, Appendix C.

NYSDEC personnel utilized an XT-400 Series Environmental Metals Analyzer (XRF, calibrated to read metal concentrations in ppm) to screen samples SS-3, SS-6, SS-10, 2SB-1 to 2SB-9, and 2SB-15 to 2SB-26 for the presence of metals. Indications of potentially significant arsenic concentrations were detected at sampling locations SS-3, SS-6, SS-10, 2SB-2 [0-3'], 2SB-19 [0-3'], 2SB-20 [0.5-1'], 2SB-21 [0-2'], 2SB-22 [2-3'], 2SB-23 [6-7'] and 2SB-25 [1-2' and 6-7']. Potentially elevated concentrations of cadmium, copper, iron, and lead were also found at several locations (see Tables 5 and 6, Appendix C).

No other significant field evidence of contamination (i.e. odors, staining, PID readings) was noted during the soil investigation.

### 3.2.3 Laboratory Analysis and Findings

#### 3.2.3.1 Laboratory Submission

Table 7, below, summarizes submission of soil samples for laboratory analysis. Laboratory results are tabulated in data summary tables provided in Appendix F, and laboratory reports are provided in Appendix G.

**Table 7: Summary of Laboratory Analysis for Soil Samples**  
(USEPA Method identification provided in parentheses)

Sample ID	Analysis (USEPA Method)					
	VOCs (8260)	SVOCs (8270)	PCBs (8082)	TAL Metals* (6010 & 7471)	Pesticides (8081)	TPH-DRO** (8015)
SS-1 to SS-12 SB 1 to SB-11 TP-1 to TP-9	X	X	X	X		
SS-3 to SS-7, SS-10, SB-2[9-10'], SB-9 [4-4.5'] TP-2 [2.5'], TP-3 [1'] TP-6 [4'], TP-9 [1.5']					X	
2SB-1 to 2SB-4		X		X (As)		
2SB-5 to 2SB-8		X		X (As/Pb)		
2SB-9				X (Pb)		
2SB-10 to 2SB-14	X	X				X
2SB-15	X (36-40" & 18')	X (36-40" & 18')		X (As/Pb)		X (36-40" & 18')
2SB-16	X (9')	X (9-15')				X
2SB-17	X (36-40" & 5-10')	X (36-40" & 5-10')		X (As/Pb)		X (36-40" & 5-10')
2SB-18	X (9-10')	X (9-10')		X (As/Pb) (0-4", 20-24" & 36-40")		X (9-10')
2SB-19 to 2SB-22		X	X	X (As/Pb)		
2SB-23 to 2SB-30		X	X	X (As/Pb/Hg)		
2SB-31 to 2SB-33	X					X

**Table 7: Summary of Laboratory Analysis for Soil Samples**

(USEPA Method identification provided in parentheses)

Sample ID	Analysis (USEPA Method)					
	VOCs (8260)	SVOCs (8270)	PCBs (8082)	TAL Metals* (6010 & 7471)	Pesticides (8081)	TPH-DRO** (8015)
2SB-34			X	X (Hg) (3-5')		
2SB-35	X	X				X

**Notes:**

All depths of a given sample were analyzed using the indicated method unless a sample interval is indicated.

\* Target Analyte List (TAL) metals unless otherwise indicated.

\*\* TPH-DRO = Total Petroleum Hydrocarbons- Diesel Range Organic

Note: STL provided additional laboratory data, beyond the analyses requested on the chains of custody, for the following analytes: polychlorinated biphenyls (PCBs, 2SB-23 to 2SB-26), arsenic (2SB-5 to 2SB-8 and 2SB-27 to 2SB-30), and lead and mercury (2SB-27 to 2SB-30). These results are incorporated in the discussion, below.

**3.2.3.2 Laboratory Results: PCBs**

PCB concentrations in soil samples are summarized below and are tabulated in Tables 8, 9, 10, 11 and 12 (Appendix F). PCB concentrations exceeding guidance levels are illustrated on Figure 6.

*Surface Soils*

The greatest concentrations of total PCBs were detected in surface soil at SS-12 (67 ppm, guidance level 1 ppm), located at the eastern portion of the Site. Elevated concentrations of PCBs were also detected in surface/near-surface samples SS-3, SS-11, 2SB-20 [0-4"], 2SB-21 [0-4"], 2SB-21 [10-14"], 2SB-23 [0-4"], 2SB-24 [0-4"], 2SB-25 [0-4"], 2SB-27 [0-4"] and 2SB-30 [0-4"] (concentrations ranging from 7 ppm at 2SB-30 to 1.19 ppm at 2SB-25, average detected concentration 3.822 ppm). PCBs were detected in fourteen of the remaining eighteen surface samples at concentrations significantly below guidance levels (peak concentration of 0.468 ppm at SS-6, average detected concentration of 0.121 ppm).

*Subsurface Soils*

Elevated concentrations of PCBs were detected in subsurface soils at the northeastern portion of the Site at 1.47 ppm and 1.18 ppm, in samples 2SB-25 [20-24"] and 2SB-34 [0-2"], respectively. PCBs were detected at low concentrations in fourteen of the remaining fifty subsurface soil samples (peak concentration less than 0.079 ppm).

**3.2.3.3 Laboratory Results: SVOCs**

Concentrations of semi-volatile organic compounds (SVOCs) in soil samples are summarized below and are tabulated in Tables 13, 14, 15, 16, 17, 18 and 19 (Appendix F). Total SVOC concentrations exceeding guidance levels are illustrated on Figure 7.

Elevated concentrations of SVOCs (total and individual SVOCs) were detected at the northeastern and south-central portions of the Site and elevated concentrations of individual PAHs were detected in remaining portions (note: TAGM 4046 provides a maximum guidance level of 500 ppm for total SVOCs).

*Northeastern Portion of Site, Near the Barn*

Significantly elevated levels of total SVOCs (9,190 ppm), PAHs (6,849 ppm), and carcinogenic-PAHs (c-PAHs, 2,060 ppm) were detected in sample SB-1 [7.8-8.2'], located east of the barn. Ten PAHs were detected at concentrations significantly above guidance levels in this sample, including Site-wide peak values for benzo(a)anthracene (420 ppm, guidance level 5.6 ppm); benzo(a)pyrene (360 ppm, guidance level 1 ppm); benzo(b)fluoranthene (280 ppm, guidance level 5.6 ppm); dibenzo(a,h)anthracene (60 ppm, guidance level 0.56 ppm); and indeno(1,2,3-cd)pyrene (300 ppm, guidance level 5.6 ppm). In addition, elevated levels of total tentatively identified compounds (TICs) were detected at this location at 1,855 ppm.

Elevated levels of benzo(a)pyrene were detected in thirteen of the remaining forty-six soil samples (peak concentration 4.7 ppm at 2SB-26 [36-40']) and elevated levels of dibenzo(a,h)anthracene were detected in six of the samples (peak concentration 1.4 ppm at 2SB-26 [36-40']). Elevated levels of benzo(a)anthracene (6.1 ppm) and benzo(b)fluoranthene (5.8 ppm) were detected at 2SB-26 [36-40']. No other SVOCs were detected above guidance levels in the northeastern portion of the Site. Non-PAH SVOCs were detected in several soil samples at very low concentrations.

*South-central Portion of Site, Former MOSF Area*

Elevated concentrations of total SVOCs were detected in samples 2SB-15 [36-40'] (2,733.4 ppm), TP-9 [4.7'] (2,657.2 ppm), and 2SB-10 [5-6'] (1,184.2 ppm). Elevated levels of total TICs were detected at all three locations, and elevated levels of total unknown compounds were detected at 2SB-15 and TP-9.

Elevated levels of benzo(a)pyrene were detected in ten of the remaining twenty-seven soil samples (peak concentration 10 ppm at TP-8 [3']), and elevated levels of dibenzo(a,h)anthracene were detected in four of the remaining twenty-seven soil samples (peak concentration 1.6 ppm at 2SB-18 [9-10']). Elevated levels of benzo(a)anthracene (8.1 ppm and 9.8 ppm), benzo(b)fluoranthene (7.3 ppm and 8 ppm), and indeno(1,2,3-cd)pyrene (6.1 ppm and 6.7 ppm) were detected at 2SB-18 [9-10'] and TP-8 [3'], respectively. Dibenzofuran was the only non-PAH SVOC detected at concentrations above guidance levels (6.7 ppm at 2SB-13[6-7']); other SVOCs were detected at low concentrations.

*Remaining Portions of the Site*

Elevated concentrations of five PAHs were detected in eight of the forty-five samples collected from remaining portions of the Site (peak concentrations were detected at TP-2 [2.5'], including benzo(a)anthracene at 16 ppm, benzo(a)pyrene at 15 ppm, and dibenzo(a,h)anthracene at 2.8 ppm). Other SVOCs were detected at low concentrations in several samples.

**3.2.3.4 Laboratory Results: Metals**

Metal concentrations in soil samples are summarized below and are tabulated in Tables 20, 21, 22, 23 and 24 (Appendix F). Elevated metal levels, indicative of the presence of fill soils, were found throughout the Site. Elevated concentrations of arsenic in soil are illustrated on Figure 8, and elevated concentrations of lead are illustrated on Figure 9.

*Arsenic*

Elevated concentrations of arsenic (guidance level 16 ppm) were detected throughout the Site in thirty-three of ninety-six samples. Significantly elevated concentrations (above 50 ppm) were detected in samples SS-10, SB-1 [4.2-5' and 7.8-8.2'], 2SB-3 [36-40'], 2SB-20 [0-4'], 2SB-23 [7-7.3'], 2SB-25 [6-7'], 2SB-26 [8.2-8.6'], 2SB-27[20-24'] and 2SB-29 [36-40']. Concentrations

ranged from 299 ppm at 2SB-23 to 79.4 ppm at 2SB-29. All of these samples were collected in the northeastern portion of the Site, with the exception of samples 2SB-3 [0-4"] and SS-10, collected east of the concrete foundation and south of the dwelling, respectively.

Elevated concentrations between 50 ppm and 16 ppm were detected in the remaining twenty-three samples. Concentrations ranged from 41.7 ppm at 2SB-25 to 16.8 ppm at 2SB-21. All of these samples were collected in the eastern portion of the Site, with the exception of sample TP-5 [2'], collected north of the boathouse.

Generally, good agreement was found between elevated XRF results for arsenic and documented elevated concentrations of arsenic in samples submitted for laboratory analysis. Eighteen of twenty-one samples were in good agreement. Elevated XRF results for arsenic (above guidance level) were detected in samples SS-6, 2SB-2[0-3'] and 2SB-19[0-3']. However, corresponding samples submitted for laboratory analysis did not detect arsenic concentrations above the guidance level.

#### *Lead*

Elevated concentrations of lead (guidance level 1,000 ppm) were detected in samples SS-3, SB-1 [4.2-5'], 2SB-20 [0-4"], 2SB-21 [0-4"], 2SB-21 [10-14"], 2SB-24 [0-4"], TP-2 [2.5'] and TP-9 [1.5']. Concentrations ranged from 4,990 ppm at 2SB-20 to 1,180 ppm at 2SB-24, with an average detected concentration of 2,633 ppm. Lead was detected at concentrations below guidance levels at all other locations (peak concentration of 881 ppm at 2SB-25, average detected concentration of 151 ppm).

Generally, good agreement was found between elevated XRF results for lead and documented elevated concentrations of lead in samples submitted for laboratory analysis. Twenty of twenty-one samples were in good agreement. An elevated XRF result for lead (above guidance level) was detected in sample 2SB-19[0-3']. However, corresponding sample submitted for laboratory analysis did not detect the lead concentration above the guidance level.

#### *Other Metals*

An elevated concentration of mercury was detected in sample location SB-1[7.8-8.2'] (14.8 ppm, guidance level 2.8 ppm). Mercury was detected at concentrations below guidance levels at all other locations (peak concentration of 1.2 ppm at 2SB-24, average detected concentration of 0.186 ppm). Elevated concentrations of barium (peak concentration of 701 ppm, guidance level 400 ppm), cadmium (peak concentration of 11 ppm, guidance level 9.3 ppm), copper (peak concentration of 5,640 ppm, guidance level 270 ppm), iron (peak concentration of 46,900 ppm, guidance level 2,000 ppm or site background), and magnesium (85,400 ppm, guidance level site background) were found at one or more sample locations.

### **3.2.3.5 Laboratory Results: VOCs**

VOC concentrations in soil samples are summarized below and are tabulated in Tables 25, 26, 27, and 28 (Appendix F). VOC concentrations exceeding TAGM 4046 guidance level for total VOCs are illustrated on Figure 10.

Total VOCs concentrations exceeding the maximum cap value for commercial restricted use (500 ppm) were detected at 2SB-15 [36-40"] (peak concentration, 2,552.274 ppm) and TP-6 [8.5'] (574.25 ppm), located in the central and south-central portions of the Site, respectively.

In addition, elevated concentrations of total VOCs exceeding the TAGM 4046 guidance level (10 ppm) were detected in the central and south-central portions of the Site in samples 2SB-10 [5-6'], 2SB-10 [12-13'], 2SB-14 [9'], 2SB-15 [18'], 2SB-17 [36-40"], 2SB-17 [5-10'], 2SB-35 [5-10'], 2SB-35 [20'], and TP-9 [4.7']. Concentrations ranged from 235.956 ppm at TP-9 to 14.944 ppm at

2SB-35 [20'], with an average detected concentration 58.612 ppm. Elevated levels of total TICs and total unknown compounds were detected in all of these samples with the exception of TICs at 2SB-17[36-40"] and 2SB-35 [5-10' and 20'] and total unknown compounds at 2SB-14[9'] and 2SB-35 [20']. No individual identifiable VOCs were detected at concentrations above guidance levels in any soil samples.

#### **3.2.3.6 Laboratory Results: Total Petroleum Hydrocarbons**

Soil collected from the vicinity of the former MOSF facilities were analyzed for diesel-range total petroleum hydrocarbons (TPH-DRO). TPH concentrations in soil samples are summarized below and are tabulated in Table 29 (Appendix F). TPH concentrations are illustrated on Figure 11.

TPH-DRO (guidance level not established) was detected at concentrations above 10,000 ppm at 2SB-10 [5-6'], 2SB-11A [6-7'], 2SB-13 [6-7'] and 2SB-13 [6-7'] (peak concentration 22,000 ppm at 2SB-10, average detected concentration 19,333 ppm) and above 1,000 ppm at 2SB-14 [9'], 2SB-15 [36-40"], 2SB-16 [9'], 2SB-16 [9-15'], 2SB-17 [36-40"], 2SB-17 [5-10'], 2SB-18 [9-10'] and 2SB-35 [5-10']. TPH-DRO concentrations below 1,000 ppm were detected at 2SB-10 [12-13'], 2SB-12 [6-7'], 2SB-13 [17-19'], 2SB-15 [18'], and 2SB-32 [9']. No TPH-DRO concentrations were detected at 2SB-11A [9-10'], 2SB-31 [8.5'], 2SB-33 [7-8'] and 2SB-35 [20'].

#### **3.2.3.6 Laboratory Results: Pesticides**

Pesticide concentrations in soil samples are summarized below and are tabulated in Table 30 (Appendix F).

No significant concentrations of organic pesticides were detected in Site soils.

### **3.2.4 Nature and Extent of Contamination**

PCB contamination in on-Site soils is limited to areas immediately west, east, and southeast of the barn, in the northeast portion of the Site, from 0 to 3 feet bsg. Arsenic contamination is present in the northeastern portion of the Site (particularly east of the barn), to the north of the boathouse, and in the northeast portion of the area of the former MOSF. With the exception of the areas south of the dwelling (2SB-10) and immediately east of the barn, arsenic contamination throughout the Site generally extends vertically from the surface to approximately 4 feet bsg. The vertical extent of arsenic contamination in the areas south of the dwelling and immediately east of the barn is estimated to occur between 5 to 10 feet bsg. Nine of eleven sampling locations with PCB contamination overlap areas with arsenic contamination, with the exception of areas east of the barn (SS-11 and 2SB-34).

Lead contamination is present in surface soils located east and west of the barn, with the exception of the area immediately east of the barn (SB-1) in which lead contamination was encountered in subsurface soils (4 - 6 feet bsg). Lead contamination was also encountered east of the dwelling (TP-2) and in the area of the former MOSF (TP-9), with a maximum depth of 3 feet bsg. Six of seven sampling locations with lead contamination overlap areas with arsenic contamination, with the exception of the area immediately west of the dwelling (TP-2).

SVOC and mercury contamination is present east of the barn (SB-1) at a depth of 7 - 9 feet bsg. Generally, SVOC and VOC contamination is limited to the area of the former MOSF, with higher concentrations at the southeastern portion of this area. SVOC contamination in the former MOSF extends vertically from approximately 3 to 5 feet bsg. VOC contamination in the former MOSF extends vertically from 3 to 20 feet bsg. TPH-DRO concentrations are higher in the central portion of the former MOSF and less elevated to the east. The presence of elevated levels of SVOCs, VOCs and TPH-DRO are consistent with observed field evidence of contamination.

Areas delineating arsenic, lead and mercury contamination, and a significant exceedence of individual PAHs east of the concrete foundation, are illustrated on Figure 12. Remaining exceedences of total SVOCs, located in the area of the former MOSF, are illustrated on Figure 7 (additional scattered exceedences of individual SVOCs are present throughout the Site).

There is the potential for arsenic to be found off-site, northeast of the barn (Arsenic contamination is present along the northern property line at approximately 5 -10 feet bsg). Arsenic contamination is likely to be derived from the fill material present on Site; off-site areas, particularly north of the barn, are also comprised of fill material and could potentially be contaminated with arsenic.

Petroleum contamination is present along the southern property line at approximately 5 -20 feet bsg and may extend off-site to the southeast of the former MOSF. A subgrade utility line along the southern property line, however, hindered further investigation in this area. It is likely that the utility line serves as a barrier preventing southerly migration of shallow contamination. Impacts of petroleum contamination on off-site soils, or the effect of future remedial actions on these areas, are unknown at this time. Data from off-site monitoring wells does not indicate significant groundwater contamination; additional off-site soil sampling, however, is necessary.

Changes in groundwater levels during low and high tide have an impact on the volume of saturated soils in the western and north-central portions of the Site. Depth of contamination in these areas extends to approximately 4 feet bsg, with an average groundwater level (MW-2, MW-3, MW-4 and MW-7) of 5.0 feet bsg during low tide. The average groundwater fluctuation between low and high tide (i.e. rise in water level) in these areas is 2.5 feet and approximately half of the volume of contaminated soils in this area is subject tidal influences. No impacts are anticipated in the volume of saturated soils in the south-central and eastern portions of the Site. In these areas contamination is present below the saturated zone and/or groundwater levels are not susceptible to significant tidal influences.

Based on the relatively immobility of PCBs and metals, and an absence of significant groundwater contamination (Section 3.3.6), groundwater flow is not likely to have a significant impact in the horizontal and vertical movement of contamination throughout the Site.

### **3.3 Groundwater Investigation**

#### **3.3.1 Monitoring Well Installation**

ESI personnel supervised the installation of ten on-site groundwater-monitoring wells (MW-1 to MW-10). Zebra installed monitoring wells MW-1 to MW-8 on August 22-24 and 28, 2006, and MW-10 on February 16, 2007. Enviroprobe installed MW-9 on February 22, 2007. Monitoring well locations are illustrated on the Fieldwork Map, provided as Figure 5 (Appendix A).

A Geoprobe 6600 and Geoprobe 6620 DT were used for the installation of the monitoring wells. Each well is constructed of two-inch PVC casing and 0.01-inch slotted PVC well screening, which extends above the watertable. In general, all wells were screened at the same shallow depth (on average 2.5 to 12.5 feet bsg). The annular spaces between well screens and boreholes were backfilled with clean #2 silica sand, followed by a one-foot thick bentonite seal and cement grout. The wells are protected by stickup, steel outer casings with locks. Monitoring well construction logs are presented in Appendix H.

#### **3.3.2 Monitoring Well Development**

Monitoring wells were developed on August 25 and 28, 2006 (MW-1 to MW-8) and February 27, 2007 (MW-9 and MW-10). The purpose of the well development was to clear fine-grained material that might have settled around the well screen and to enhance the natural hydraulic



connection between the well screen and the surrounding soils. Water removed from each monitoring well during well development was visually inspected for indications of contamination. Petroleum odors were detected in wells MW-6 and MW-8. No odors or visual evidence of contamination were noted in remaining wells (MW-1 through MW-5, MW-7, MW-9 and MW-10).

All wells were developed utilizing a submersible Whale<sup>®</sup> pump (model WP6012) and dedicated plastic tubing. Development was conducted by lowering the pump below the water table and surging (raising and lowering the pump). After surging for approximately three to five minutes per location, the pump was turned on. Purge water was directed through a Horiba<sup>®</sup> U-22 multi-parameter instrument with a flow thru-cell. Development was considered complete when the turbidity of the discharged water was below 50 NTUs and other parameters (e.g., dissolved oxygen, pH, temperature) stabilized. All wells were successfully developed following this protocol, with the exception of MW-9, which was developed based on visual observations based on malfunctioning of the equipment. MW-9 was developed for a longer period of time (approximately 25 minutes) to ensure acceptable development conditions.

### **3.3.3 Groundwater Flow**

The height of each well casing was professionally surveyed, and the direction of groundwater flow was determined based on elevations of static groundwater, measured prior to water quality sample collection, using an electronic depth meter accurate to the nearest 0.01-foot. A discussion on groundwater flow is presented in Section 2.6.

### **3.3.4 Sample Collection Methodology**

Two groundwater monitoring events were conducted: monitoring wells MW-1 to MW-8 were sampled on September 5 and 6, 2006, and monitoring wells MW-1 to MW-10 were sampled on February 27 and March 6, 2007 (Note: MW-5 was damaged and could not be sampled during the second groundwater monitoring event).

Prior to sampling, each monitoring well casing was opened and the well column was immediately screened with a PID to document the presence of any volatile organic vapors. All wells were purged and sampled following the USEPA Low-Flow Method. All sampling was conducted using the Horiba<sup>®</sup> U-22 (set to record parameter levels at one minute intervals), dedicated plastic tubing and a peristaltic pump. All wells were purged at a flow rate between 100 and 200 ml per minute, for a period of no less than 15 minutes. Flow rate was determined using a graduated cylinder and a stopwatch.

Sample collection occurred after the initial 15 minute period when field parameters stabilized (achieved when three consecutive readings were within the required parameters specified by the USEPA protocol). Each groundwater sample was collected in laboratory supplied glassware (40 ml vials, 1 liter amber jars and 500 ml plastic jars, preserved with acid as appropriate for the specific analysis). No groundwater samples were filtered prior to submission to the laboratory. After sample collection, the containers were placed in a cooler prior to transport via overnight delivery to STL. All samples were accompanied by proper chain of custody documentation.

### **3.3.5 Fieldwork Observations**

#### *September 2006*

Petroleum odors and elevated PID readings (51.4 and 17.5 ppm-cge, respectively) were detected at MW-6 and MW-8. No other evidence of contamination was noted in remaining wells (MW-1 through MW-5, and MW-7).

*February/March 2007*

MW-5 was damaged and could not be sampled. Petroleum odors were detected at MW-8; no other significant evidence of contamination (elevated PID readings and odors) was noted in any other wells (MW-1 through MW-4, MW-6, MW-7, MW-9, and MW-10).

### **3.3.6 Laboratory Analysis and Findings**

Groundwater samples for both sampling events were submitted to STL for analysis of VOCs (USEPA method 8260), TAL metals (USEPA methods 6010 and 7471), SVOCs (USEPA method 8270), and PCBs (USEPA method 8082). Several samples from the September 2006 sampling event were additionally analyzed for pesticides (USEPA method 8081).

#### **3.3.6.1 Laboratory Results: VOCs**

VOC concentrations in groundwater samples are summarized below and are tabulated in Tables 31 and 32, Appendix F.

*September 2006*

Elevated levels of benzene (48 µg/L, guidance level 0.7 µg/L), ethyl benzene (59 µg/L, guidance level 5 µg/L), toluene (13 µg/L, guidance level 5 µg/L), and total xylenes (280 µg/L, guidance level 5 µg/L), collectively known as BTEX, were detected at MW-5, located in the southeast portion of the Site. No other identified VOCs were detected in groundwater samples. Total VOCs, inclusive of TICs and unknown compounds, were detected at 942 µg/L at MW-5 (peak value), 136 µg/L at MW-8, 74 µg/L at MW-2, 72 µg/L at MW-6, and 19 µg/L at MW-3. No VOCs, TICs or unknown compounds were detected in the remaining wells (MW-1, MW-4, or MW-7).

*February/March 2007*

Low levels of 1,2,4-trimethylbenzene, isopropylbenzene, n-butylbenzene, n-propylbenzene, and sec-butylbenzene were detected at MW-8, and a low level of naphthalene was detected at MW-1 (all compounds below 5 µg/L). No other VOCs were detected in groundwater samples. Total VOCs, inclusive of TICs and unknown compounds, were detected at 277.52 µg/L at MW-8 (peak value), 37.8 µg/L at MW-9, 11.1 µg/L at MW-10, and 3.4 µg/L at MW-1. No TICs or unknown compounds were detected in the remaining wells (MW-2, MW-3, MW-4, MW-6 and MW-7 (note: MW-5 was damaged and could not be sampled)).

#### **3.3.6.2 Laboratory Results: Metals**

Metal concentrations in groundwater samples are summarized below and are tabulated in Tables 33 and 34, Appendix F.

*September 2006*

Elevated concentrations of the following metals were detected at one or more monitoring wells: aluminum (peak concentration of 283 µg/L at MW-1, guidance level 100 µg/L), iron (peak concentration of 12,200 µg/L at MW-1, guidance level 300 µg/L), manganese (peak concentration of 1,200 µg/L at MW-3, guidance level 300 µg/L), selenium (detected at 14.4 µg/L at MW-1, guidance level 10 µg/L), and sodium (peak concentration of 153,000 µg/L at MW-5, guidance level 20,000 µg/L). No other metals were detected above guidance levels. Low levels of arsenic were detected in MW-1 (11.1 µg/L, guidance level 25 µg/L). No lead or mercury concentrations were detected in any samples.

*February/March 2007*

Elevated concentrations of the following metals were detected at one or more monitoring wells: aluminum (peak concentration of 400 µg/L at MW-1), cobalt (peak concentration of 5.6 µg/L at MW-10, guidance level 5 µg/L), iron (peak concentration of 40,200 µg/L at MW-1), manganese (peak concentration of 5,300 µg/L at MW-10), sodium (peak concentration of 114,000 µg/L at MW-10), and thallium (peak concentration of 18 µg/L at MW-1, guidance level 0.5 µg/L). No other metals were detected above guidance levels. Arsenic was detected in MW-1 at 20 µg/L and low levels of lead (peak value 4.4 µg/L, guidance level 25 µg/L) were detected in MW-8 and MW-10. No mercury concentrations were detected in any samples.

### **3.3.6.3 Laboratory Results: SVOCs**

SVOC concentrations in groundwater samples are summarized below and are tabulated in Tables 35 and 36, Appendix F.

*September 2006*

No individual SVOCs were detected above guidance levels in any samples. Low levels of several compounds, primarily PAHs, were detected in MW-1, MW-6, and MW-8. Significant concentrations of total SVOCs (inclusive of TICs and unknown compounds) were detected in groundwater samples MW-6 (229 µg/L) and MW-8 (269 µg/L), and less elevated levels were detected in all other groundwater samples (ranging from 9 µg/L at MW-5 to 35 µg/L at MW-1, average concentration 21 µg/L).

*February/March 2007*

No individual SVOCs were detected above guidance levels in any samples. Low levels of several compounds, primarily PAHs, were detected in MW-1 and MW-8. Significant concentrations of total SVOCs (inclusive of TICs and unknown compounds) were detected in groundwater sample MW-8 (280.9 µg/L), and less elevated levels were detected in MW-1. No SVOCs, TICs, or unknown compounds were detected in samples MW-2 to MW-7, MW-9, and MW-10 (MW-5 was not sampled).

### **3.3.6.4 Laboratory Results: PCBs and Pesticides**

PCB and pesticide concentrations in groundwater samples are summarized below and tabulated in Tables 37 and 38, Appendix F.

No PCBs or organic pesticides were detected in any samples during either sampling event.

## **3.3.7 Nature and Extent of Contamination**

Significantly elevated levels of VOCs (BTEX) are present in groundwater east of the former MOSF (MW-5). Low-levels of VOCs (below guidance levels) are present in the area of the former MOSF (MW-6 and MW-8) and south of the former MOSF (MW-9 and MW-10). Low-levels of SVOCs (below guidance levels) are mainly within the area former MOSF (MW-6 and MW-8). Low-level arsenic (at concentrations approaching the guidance level) is present east of the barn (MW-1). Generally, areas with low-levels of VOC, SVOC and arsenic in groundwater corresponded to known areas of contamination in soils located in former MOSF and east of the barn. Analytical data and field observations indicate that groundwater contamination likely originated from soil contamination.

Based on the relatively immobility of metals and an absence of significant groundwater contamination, groundwater tidal flow is not likely to have a significant impact in the horizontal and vertical movement of contamination throughout the Site.

### **3.4 Surface-Water Investigation**

#### **3.4.1 Sample Collection Methodology**

Four surface-water samples (SW-1, SW-2, SW-3, and SW-4) were collected from the Hudson River by ESI on August 10, 2006, using a trailerable work boat. Sample SW-1 (co-located with sediment sample Core-1) was collected southwest of the boathouse, samples SW-2 (co-located with Core-2) and SW-3 (co-located with Core-3) were collected along the west shore and SW-4 (co-located with Core-4) was collected along the north shore, northwest of the dwelling. Surface-water sampling locations are illustrated on the Fieldwork Map, provided as Figure 5 (Appendix A).

Surface-water samples were collected from the boat using a dip-type sampler, then transferred (as necessary) to smaller sized glassware (1 liter amber jar, 500 ml plastic jars, and 40 ml vials, preserved with acid as appropriate for the specific analysis). No surface-water samples were filtered prior to submission to the laboratory.

#### **3.4.2 Fieldwork Observations**

No significant field evidence of contamination was noted during the sampling event.

#### **3.4.3 Laboratory Analysis and Findings**

All surface-water samples (SW-1 to SW-4) were submitted to STL for analysis of VOCs (USEPA method 8260), SVOCs (USEPA method 8270), and PCBs (USEPA method 8082). Surface-water samples SW-3 and SW-4 were analyzed for pesticides (USEPA method 8081).

##### **3.4.3.1 Laboratory Results: Pesticides**

Pesticide concentrations in surface-water samples are summarized below and are tabulated in Table 39, Appendix F.

Heptachlor epoxide was detected in surface-water samples SW-3 and SW-4 at concentrations of 0.013 µg/L and 0.020 µg/L, respectively. These concentrations are above the water quality standard for the protection of freshwater fish for human consumption (0.0003 µg/L) but are below the water quality standard for the protection of drinking water (0.03 µg/L). No other organic pesticides were detected in surface-water samples submitted for laboratory analysis.

##### **3.4.3.2 Laboratory Results: VOCs**

VOC concentrations in surface-water samples are summarized below and are tabulated in Table 40, Appendix F.

No identified VOCs were detected in surface-water samples. Total TICs were detected in sample SW-3 at 7 µg/L. No unknown compounds were reported.

##### **3.4.3.3 Laboratory Results: SVOCs**

SVOC concentrations in surface-water samples are summarized below and are tabulated in Table 41, Appendix F.

No identified SVOCs were detected in surface-water samples. Total TICs were detected in sample SW-1 at 9 µg/L. No unknown compounds were reported.

#### **3.4.3.4 Laboratory Results: PCBs**

PCB concentrations in surface-water samples are summarized below and are tabulated in Table 39, Appendix F.

No PCBs were detected in any surface-water samples submitted for laboratory analysis.

#### **3.4.4 Nature and Extent of Contamination**

Low-level pesticide exceedences are present in samples collected in the northwest (SW-3) and north-central portions of the Site (SW-3 and SW-4, respectively). Low-level pesticide exceedences are not likely to have originated from the Site and are not indicative of significant contamination.

### **3.5 Sediment Investigation**

Twelve sediments cores (Core-1 to Core-12) were extended in the Hudson River by ASI on August 10, 2006. Core-1 (co-located with surface-water sample SW-1) and Core-5 are located south of the Site; Core-2 (co-located with sample SW-2), Core-3 (co-located with sample SW-3), and Core-6 through Core-10 are located to the west of the Site; and Core-4 (co-located with sample SW-4), Core-11, and Core-12 are located to the north of the Site. Sediment sampling locations are illustrated on the Fieldwork Map, provided as Figure 5 (Appendix A).

#### **3.5.1 Sample Collection Methodology**

ASI personnel conducted sediment sampling from a trailerable work boat, to a maximum depth of 8.5 feet below the river bottom. Sediment cores were collected using a Rossfelder electrical vibracoring P3 system. After collection sediment cores were inspected by ESI personnel and samples were stored in appropriate laboratory glassware.

#### **3.5.2 Fieldwork Observations**

Sediment samples consisted of dark black and gray silt, clay and organic muck. Petroleum odors were noted at sediment locations Core-2, Core-3, Core 4, Core-11, and Core-12 at varying depths. No other significant field evidence of contamination was noted during sediment coring.

#### **3.5.3 Laboratory Analysis and Findings**

All sediment samples (Core-1 to Core-12) were submitted to STL for analysis of PCBs (USEPA method 8082), TAL metals (USEPA methods 6010 and 7471), and SVOCs (USEPA method 8270). Samples Core-3 [0-2.5'] and Core-4 [4.5'] were analyzed for pesticides (USEPA method 8081) and samples Core-2 [2'8"], Core-3 [0-2.5'], Core-7 [7.5'], Core-7 [4'], Core-11 [4'], and Core-12 [5.5-6'] were analyzed for VOCs (USEPA method 8260).

##### **3.5.3.1 Laboratory Results: PCBs**

PCB concentrations in sediment samples are summarized below and are tabulated in Table 42, Appendix F.

Elevated concentrations of total PCBs (guidance level 0.68 ppm) were detected at the western portion of the Site in samples Core-2[2'8"] (2.17 ppm), Core-3[0-2.5'] (1.287 ppm), Core-7[0.5'] (0.785 ppm), Core-8-1[2'] (0.81 ppm), Core-8-2[1'] (8.79 ppm), Core-10[0.5'] (8.5 ppm), Core-11[2'] (1.62 ppm), and Core-11[4'] (6.37 ppm). PCBs were detected in seven of the remaining eleven sediment samples at concentrations below guidance levels.

### **3.5.3.2 Laboratory Results: Metals**

Metal concentrations in sediment samples are summarized below and are tabulated in Table 43, Appendix F.

Elevated concentrations of cadmium (peak concentration of 9.3 ppm, guidance level 4.98 ppm), chromium (peak concentration 226 ppm, guidance level 111 ppm), copper (peak concentration 205 ppm, guidance level 149 ppm), lead (peak concentration of 629 ppm, guidance level 128 ppm), mercury (1.1 ppm, guidance level 1.06 ppm), and nickel (48.9 ppm, guidance level 48.6 ppm) were detected at one or more sample locations. No arsenic or zinc concentrations were detected above guidance levels. Low-levels of other metals were detected in all sediment samples. [Note: Lead, mercury and copper were also detected in soil samples above soil guidance levels.]

No specified sediment guidance levels exist for fifteen TAL metals. Three of these metals (iron, magnesium and barium) were present in sediments and were also detected above their respective soil guidance levels. No other metals without sediment guidance levels were detected also above their respective guidance levels.

### **3.5.3.3 Laboratory Results: SVOCs**

SVOC concentrations in sediment samples are summarized below and are tabulated in Table 44, Appendix F.

Elevated concentrations of benzo(a)anthracene (peak concentration of 1.7 ppm, guidance level 1.05 ppm), chrysene (peak concentration 1.9 ppm, guidance level 1.29 ppm), phenanthrene (peak concentration of 2 ppm, guidance level 1.17 ppm) and pyrene (peak concentration of 2.6 ppm, guidance level 1.52 ppm) were detected at Core-4[4.5'] and Core-4[6.5']. Elevated concentrations of benzo(a)pyrene (1.6 ppm, guidance level 1.45 ppm) and fluoranthene (3.2 ppm, guidance level 2.23 ppm) were detected at Core-4[6.5']. [Note: These individual SVOCs were also detected in soil samples above guidance levels.] Low-levels of SVOCs were detected in all sediment samples. Total SVOC concentrations ranged from 16.64 ppm to 73.48 ppm and total PAHs ranged from non-detect to 18.6 ppm (guidance level 22.8 ppm).

No specified sediment guidance levels exist for fifty analyzed SVOCs. No SVOCs without sediment guidance levels were detected above soil guidance levels.

### **3.5.3.4 Laboratory Results: Pesticides**

Pesticide concentrations in sediment samples are summarized below and are tabulated in Table 45, Appendix F.

Elevated concentrations of lindane (0.0065 ppm, guidance value 0.00499 ppm) were detected in Core-4[4.5']. Low levels of multiple other pesticides were found in this sample and in sample Core-3[0-2.5'].

No specified sediment guidance levels exist for thirteen analyzed pesticides. No pesticides without sediment guidance levels were detected above soil guidance levels.

### **3.5.3.5 Laboratory Results: VOCs**

VOC concentrations in sediment samples are summarized below and are tabulated in Table 46, Appendix F.

Trace concentrations of methylene chloride (a common laboratory contaminant) were detected in all samples submitted for laboratory analysis; no other identified VOCs were detected in samples. Low-levels of TICs and/or unknown compounds were detected in four of the six samples (total VOC concentrations inclusive of TICs and unknown compounds ranged from 0.6771 to 0.0071 ppm).

No specified sediment guidance levels exist for VOCs. No VOCs levels were detected above soil guidance levels.

### **3.5.4 Nature and Extent of Contamination**

PCB contamination in sediments is present along the western shore of the Site at a depth of 0.5 to 2.5 feet below river bottom surface, with the exception of sediments north and southwest of the concrete foundation (Core-11 and Core-8) and west of the boathouse (Core-2), where PCB contamination extends 1 to at least 4 feet below river bottom surface. The composition of the PCBs indicates that this contamination is not attributed to on-site activities. PCBs in sediments are similar to PCBs found in other contaminated areas of the Hudson River.

Lead contamination is present along the western shore at a depth of 0.5 to at least 5.5 feet below river bottom surface and northwest of the dwelling (Core-4 and Core-12) at a depth of 4 to at least 6.5 feet below river bottom surface. Five of seven sampling locations with PCB contamination overlap areas with lead contamination, with the exception of areas northwest of the dwelling (Core-4 and Core-12).

Low-level exceedences of SVOCs are present in sediments northwest of the dwelling (Core-4) at a depth of 4.5 to at least 6.5 feet below river bottom surface.

## **3.6 Data Generation and Validation**

Complete laboratory data packages were provided to an independent, third-party data validator. A summary of the findings in the Data Usability Summary Reports (DUSRs) for the work outlined in the RIWP and SRIWP is presented below.

ESI has reviewed the DUSRs for the RIWP and SRIWP.

### **RIWP**

Thirty-eight out of forty-three soil samples in the RIWP contained unusable data for one or more particular compounds. Data not suited for analysis was found in results for 4,4'-DDT, naphthalene (identified as a volatile TIC), aldol condensation product (semi-volatile TIC), and unknown aldol condensate (semi-volatile TIC). Results of "non-detect" for 4,4'-DDT for samples TP-3[1'] and SB-2[9-10'] were unusable due to excessive DDT degradation. Results for naphthalene for twelve samples (SS-6, SS-7, SS-11, SS-12, SB-1[7.8-8.2'], SB-8[10-15'], TP-1[1.3'] through TP-6[4']) were unusable as naphthalene is reported and analyzed as an individual compound under the SVOCs. Results for aldol condensation product or unknown aldol condensate for thirty five samples (SS-1 through SS-12, SB-1[4.2-5'] through SB-11[14-15'], TP-1[1.3'], TP-4[1'], TP-5[2'], and TP-6[4']) were unusable due to the fact that reported concentrations were less than the corresponding method blank limit. All other data for soil samples is usable and suited for analysis.

All sediment samples in the RIWP contained unusable data for particular compounds. Data not suited for analysis was found in the results for antimony, mercury and unknown aldol condensate (semi-volatile TIC). Results of "non-detect" for antimony and mercury were unusable due to very low matrix spike recovery. Results for unknown aldol condensate were unusable due to the fact that reported concentrations were less than the method blank limit. All other data for sediment samples is usable and suited for analysis.

All data for groundwater and surface water samples in the RIWP is usable and suited for analysis.

#### ***SRIWP***

All soil samples in the SRIWP contained unusable data for a particular compound. Data not suited for analysis was found in the results for unknown aldol condensate and aldol condensation product (both semi-volatile TICs). Results for unknown aldol condensate and aldol condensation product were unusable due to the fact that reported concentrations were less than the method blank limit. All other data for soil samples is usable and suited for analysis.

All data for groundwater samples in the SRIWP is usable and suited for analysis.

These findings support the conclusion that there are no significant reliability issues involving the collected data. DUSRs are presented in Appendix I.

### **3.7 Exposure Assessment**

An exposure assessment was conducted to qualitatively assess the potential impacts of known environmental contaminants on the existing Site on human health, cognizant of all possible exposure pathways (i.e. ingestion, inhalation, and direct contact). Both current (existing conditions) and future use (proposed waterfront development) scenarios were considered. Contaminants are assessed relative to specific impacted media.

#### ***Soils***

The primary contaminants present in Site soils are PCBs, SVOCs (primarily c-PAHs), total VOCs, TPH-DRO, arsenic, lead and mercury. Soil contamination at the Site is characterized in Section 3.2.3. PCB contamination is present in specific surface/near surface locations. VOCs, TPH-DRO and mercury contamination is present in subsurface soils. SVOCs, arsenic and lead contamination is present in both, surface and subsurface soils. The potential exists for arsenic and petroleum contamination in subsurface soils to be found off-site (northeast of the barn and southeast of the former MOSF, respectively).

#### ***Current Scenario***

Limited existing or potential exposure pathways for contaminated surface soils are anticipated during the current scenario due to limited access to surface soils. Access to surface soils is currently limited by restricted access to the Site with fences and gates, and heavy vegetation covering surface soils. These restrictions minimize chronic exposure to contaminants in surface soils, although acute exposure may exist.

No existing or potential exposure pathways (through direct contact, inhalation or ingestion) for on-site and potential off-site contaminated subsurface soils are anticipated as subsurface soils will not be disturbed during the current scenario.



*Future Scenario*

In conjunction with construction activities, remedial activities will take place at the Site in order to address soil contamination. Remedial activities are expected to remove and reduce contamination at the Site.

Contaminated soils are a potential source of concern during development activities. Site clearing, soil removal and grading activities are the most likely release and transport mechanism for contaminants. Inhalation of dust generated on-site, and direct contact with soils, are the likely routes of exposure. Trespassers, construction workers and users of adjoining properties are likely the receptor populations. The implementation of a Health and Safety Plan (HASP) with a community air-monitoring plan, will mitigate possible impacts to the on-site and off-site receptor populations. Any development activity that involves soil disturbance will require monitoring and mitigation plans to address potential dust generation and contaminant migration.

The potential exist for low-level SVOC and VOC contamination in soil and groundwater to remain on-site after development activities. Access to low-level contamination will be limited by paved areas, building footprints and a barrier layer of at least two feet of soil. No existing or potential exposure pathways through direct contact or ingestion for low-level contamination in subsurface soils are anticipated during the operation of the waterfront development, as subsurface soils will not be disturbed following construction.

Limited existing or potential exposure pathways for potential off-site contaminated subsurface soils are anticipated during the future scenario. The possibility exists for subsurface soils to be disturbed by future off-site development. The adjoining property owner will be notified in order to take appropriate measures for soil and vapor management. Currently, the future scenario does not include the disturbance of subsurface soils. Access to off-site subsurface soils (southeast of the former MOSF) will be limited by current surface soils. Therefore, no direct contact with off-site subsurface soils is anticipated.

**Soil Vapors**

The presence of VOCs indicates the potential for soil vapors in subsurface soils in the area of the former MOSF. In addition, the potential exists for VOC contamination in subsurface soils to be found off-site (southeast of the former MOSF). Therefore, the potential exists for soil vapors to be present southeast of the former MOSF.

*Current Scenario*

No existing or potential exposure pathways for on-site and potential off-site soil vapors are anticipated. No structures exist either on-site in the area of the former MOSF or off-site to the southeast of the former MOSF, eliminating the possibility of soil vapor exposures.

*Future Scenario*

In conjunction with construction activities, remedial activities at the Site are expected to remove sources of soil vapor.

Soil vapors are a potential contaminant source of concern during development activities. Site clearing, soil removal and grading activities are the most likely release and transport mechanism for soil vapors. Inhalation of soil vapors is the likely route of exposure. Trespassers, construction workers and users of adjoining properties are likely the receptor populations. The implementation of a HASP with a community air-monitoring plan, will mitigate possible impacts to the on-site and off-site receptor populations. Any development activity that involves soil disturbance will require monitoring and mitigation plans to address potential soil vapors and contaminant migration.

The potential exist for low-level VOC contamination in soil and groundwater to remain on-site after development activities. Inhalation of soil vapors is a potential route of exposure. On-site users and users of adjoining properties are likely the receptor populations. A sub-slab depressurization system (SSDS) is proposed in order to remove any potential vapors that might accumulate beneath new on-site structures.

No existing or potential exposure pathways for potential off-site soil vapors are anticipated. No off-site structures are proposed near areas of concern (that is, the property to the south is currently parkland, reserved for passive recreation), eliminating the possibility of soil vapors accumulation and exposure.

### ***Groundwater***

The primary contaminants of concern in groundwater are VOCs, SVOCs and low-level metals. The potential exists for petroleum contamination to be found in off-site groundwater (southeast of the former MOSF).

#### ***Current Scenario***

No existing or potential exposure pathways for on-site and potentially off-site contaminated groundwater are anticipated during the current scenario due to limited access to groundwater. Groundwater at the Site and adjacent property is not used for potable or non-potable purposes on or near the Site. The Site is supplied by central water via connections at the single-family dwelling located in the north-central portion of the Site and at the boathouse located in the southwestern portion of the Site.

#### ***Future Scenario***

In conjunction with construction activities, remedial activities will take place at the Site in order to address groundwater contamination. Remedial activities are expected to remove and reduce contamination at the Site.

Potential contact with on-site and potentially off-site groundwater will be restricted to limited exposure during construction (e.g. dewatering) and to periodic groundwater sampling prior and during remedial activities. Direct contact is a potential route of exposure. Trespassers, construction workers and sampling personnel are likely the receptor populations. During Site development activities, groundwater exposure will be controlled by strict health and safety protocols.

No existing or potential exposure pathways for on-site and potentially off-site contaminated groundwater are anticipated during the operation of the waterfront development. Groundwater contamination likely originated from soil contamination and is expected to lessen following soil remediation. Use of on-site groundwater will be restricted through institutional controls. Potential exposures, therefore, will be limited to groundwater monitoring.

### ***Surface-water***

No significant contamination is present in surface-water. The Hudson River is not expected to be significantly impacted by on-site or off-site groundwater contamination. No significant existing or potential exposure pathways for migration of contamination are anticipated during the current scenario. Appropriate construction measures to manage stormwater, dust, and/or sediment run-off will mitigate possible impacts to the Hudson River.

***Sediments***

The primary contaminants of concern in sediments are PCBs and lead, with localized SVOC contamination. Although future use of the Site does not include planned use or contact with sediments, limited existing or potential exposure pathways for sediment contamination could exist during the current or future scenario via direct contact with off-shore sediment. Sediment remediation will be pursued in conjunction with existing NYSDEC efforts to address the wider contamination present in the Hudson River.

## **4.0 CONCLUSIONS AND RECOMMENDATIONS**

This office has completed the environmental investigative services summarized in Section 3.0 at the Long Dock Beacon Site, located at Red Flynn Drive, City of Beacon, New York. The investigation was conducted in order to determine the impacts from historical site uses and the nature and extent of contamination, and to provide guidance on response actions warranted to address identified environmental conditions.

### **4.1 Conclusions**

1. Analyte concentrations above Restricted Commercial Use SCOs are present on the Site:

- Concentrations of PCBs, arsenic, lead and mercury above respective SCOs (1 ppm, 16 ppm, 1,000 ppm and 2.8 ppm, respectively) were found in the vicinity of the barn, with significant PCB contamination limited to surface/near-surface soils. Elevated concentrations of arsenic were detected at scattered locations on the Site (approximately a third of the samples); significantly elevated concentrations, however, were primarily collected east of the barn.
- Significant concentrations of SVOCs (total and individual SVOCs, primarily c-PAHs) were detected in a single boring in deeper soils near the barn (SB-1), with less elevated levels at the south-central portion of the Site. Elevated concentrations of total VOCs, and TPH-DRO above 10,000 ppm, were found in the south-central portion of the Site (no elevated concentrations of individual VOCs were detected), in the vicinity of the former MOSF facility.
- Low level exceedences of individual PAHs and metals are present at several other Site locations.
- No significant concentrations of organic pesticides were detected.

These findings support the conclusion that historic fill materials and former commercial/industrial uses have impacted Site soils; areas with significantly elevated contaminant levels, however, are generally restricted to well-defined areas at the northeastern and south-central portions of the Site.

2. Site groundwater has been locally impacted by low-level metal and hydrocarbon-based contamination. No significant arsenic or lead concentrations, and no concentrations of mercury, PCBs or organic pesticides, were detected in any groundwater samples.

Significant VOC contamination is present east of the former MOSF (MW-5). No other significant on-site groundwater contamination is present at the Site. No response actions are warranted at this time. Existing data suggest that low-level petroleum contamination is migrating off-site beyond the southern property line, south of the area of the former MOSF. Any petroleum compounds in groundwater are likely to naturally attenuate over time (the source area, the former MOSF, has been and will be substantially remediated). The removal of soil significantly impacted by arsenic will reduce the potential for groundwater contamination.

3. No significant contamination was encountered in surface-water samples (documented low-level contamination is not likely to have originated from the Site).

4. Hudson River sediments in the vicinity of the Site contain elevated concentrations of PAHs, PCBs, pesticides and metals; no significant contamination, however, is attributable to on-site activities (PCBs in sediments are similar to PCBs found in other contaminated areas of the Hudson River).

## **4.2 Recommendations**

A RAR/RAWP will be prepared to investigate and formally propose a remedial alternative to address contamination present at the Site.

The following preliminary response actions are proposed for this Site:

1. It is recommended that soil excavation be conducted at the below areas until all remaining soils are documented to contain concentrations of respective contaminants below the SCOs. Specifically soils containing PCBs at levels above 1 ppm, arsenic at levels above 16 ppm, and/or lead above 1,000 ppm should be removed as detailed below:
  - Arsenic contaminated soils in the vicinity of the barn (removing most PCB and lead contaminated soils), south and southwest of the dwelling in the area of the former MOSF, and east and southeast of the concrete foundation (~ 10,800 cubic yards);
  - SVOC contaminated soils east of the concrete foundation at 2SB-2 (~260 cubic yards);
  - Lead contaminated soils west of the dwelling at TP-2 (~ 200 cubic yards);
  - SVOC and mercury contaminated soils near the barn at SB-1 (~200 cubic yards); and,
  - PCB contaminated soils southeast of the barn at SS-11 (~50 cubic yards).

Soil volume calculations are presented in Appendix J.

Post-excavation confirmatory sampling and proper documentation of remedial activities (including waste disposal manifests and laboratory data) should be provided to the NYSDEC. The overall volume of contaminated soil to be removed is estimated to be approximately between 8,000 and 11,500 cubic yards and an equivalent volume of backfill should be imported to restore the original grade. Portions of the Site not covered by proposed new commercial structures or other impermeable areas (e.g., asphalt) should subsequently be covered by a barrier layer of at least two feet of soil (such material must be approved by the NYSDEC as acceptable for Site use).

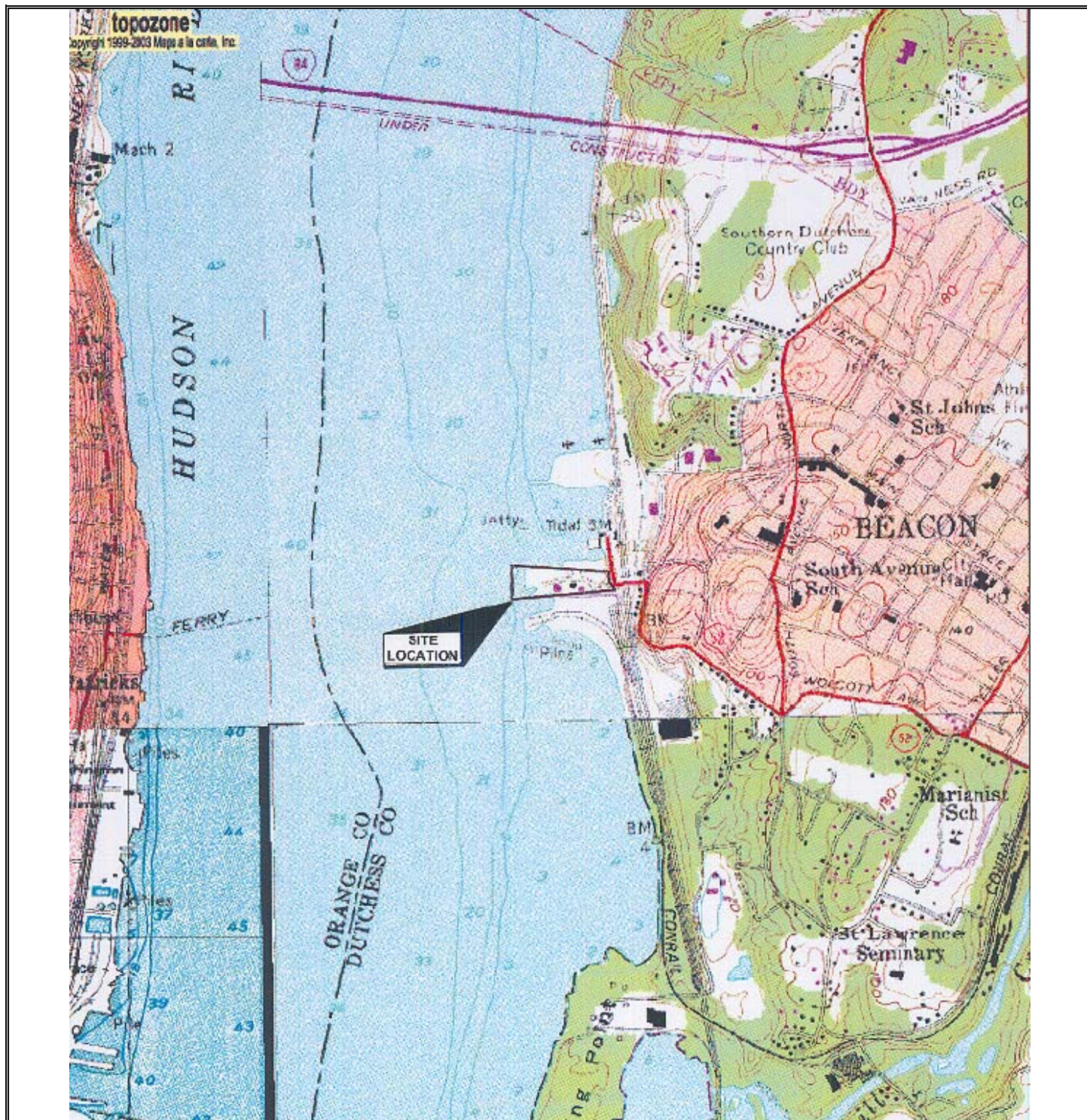
2. It is recommended that in-situ remediation be used to treat petroleum contamination present in soil in the vicinity of the former MOSF prior to construction. Sub-slab depressurization systems (SSDS) are being considered depending on the continued presence of petroleum vapors and building design. If necessary, SSDS should be installed in order to remove any potential vapors that might accumulate beneath new on-site structures. A testing regiment should be implemented to document proper system function and post-construction indoor air quality.

3. No further investigation of groundwater prior to the start of remediation activities at the Site is recommended and no groundwater remediation is warranted at this time (soil remediation is expected to mitigate groundwater contamination). Groundwater monitoring wells should be resampled prior to and following remediation activities (particularly MW-1, MW-9 and MW-10) and additional wells (replacement for MW-5) should be installed if necessary. Monitoring wells should be sampled for metals, VOCs and SVOCs.
4. No further investigation of Hudson River surface-water is recommended.
5. It is recommended that sediment remediation is pursued in conjunction with existing NYSDEC efforts to address the wider contamination present in the Hudson River. No further investigation of Hudson River sediments is recommended (existing data adequately delineate extent of contamination on sediments).

## **APPENDIX A**

### **Figures**





Source: USGS Topographic Map of Wappingers Falls, New York Quadrangle, dated 1981, digital image provided by Maps a la carte, Inc. (Topozone.com)

# **Figure 1 - Site Location Map**

(Scale : 1:50000)

Long Dock Beacon

Red Flynn Drive, City of Beacon

Dutchess County, New York

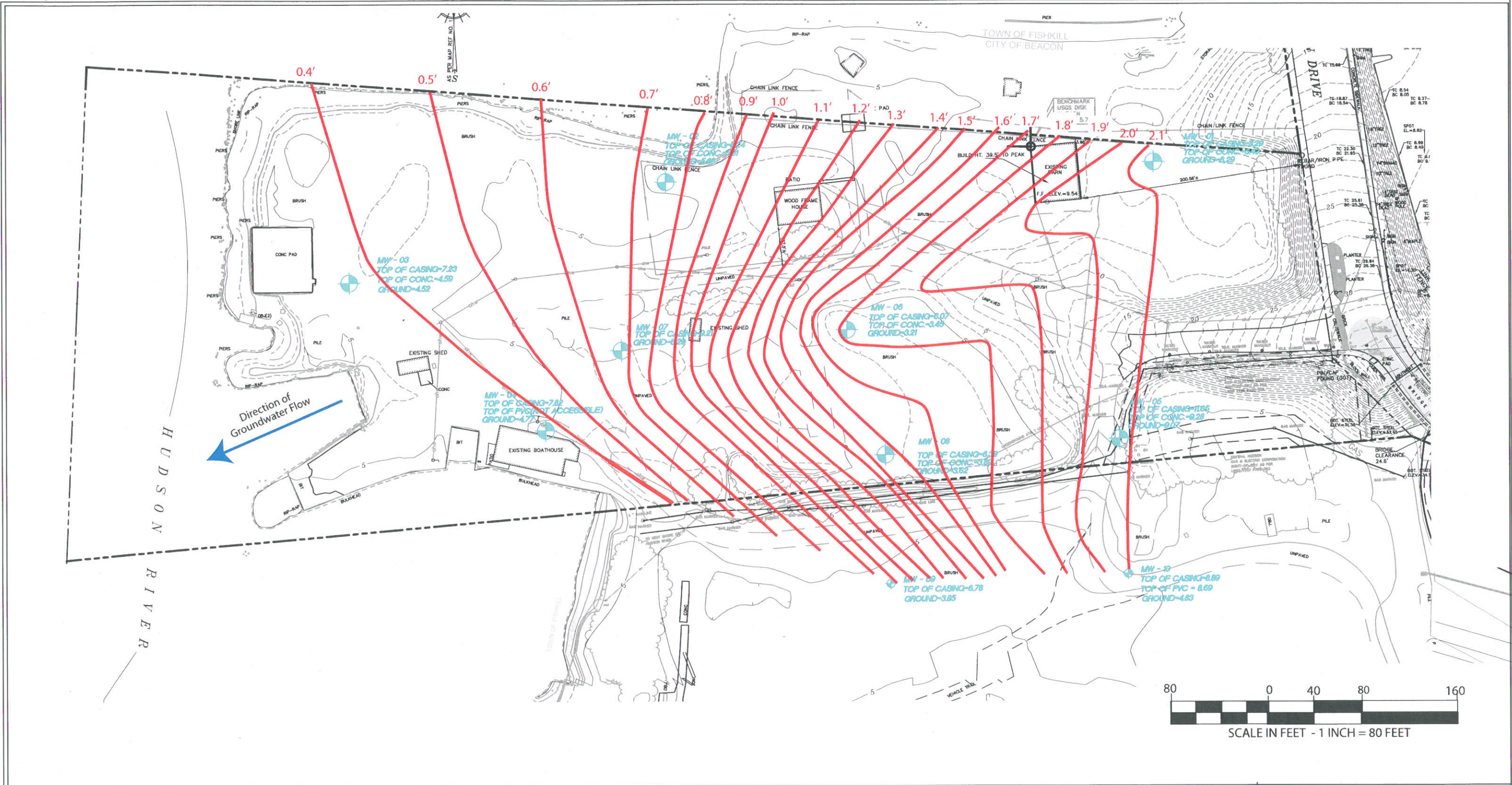


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Date: November 2007

Appendix A



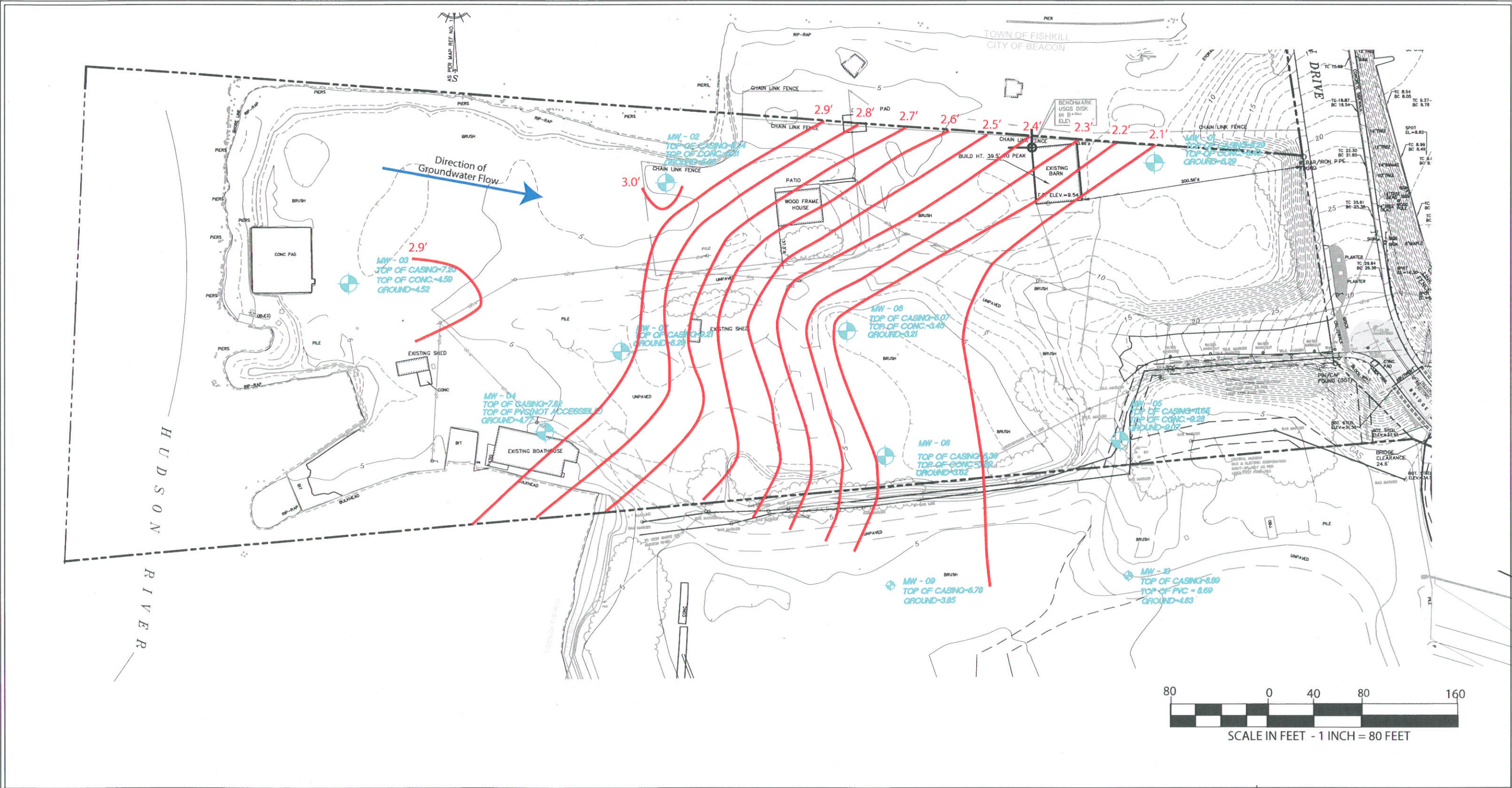


**Figure 2- Direction of Groundwater Flow - Low Tide**  
Long Dock Beacon  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

- Legend:
- Site Boundary
  - Monitoring Well
  - 0.0' Groundwater Isopleths, elevation in feet above mean sea level

ESI File: SG96152.51  
November 2007  
Scale as shown  
Appendix A



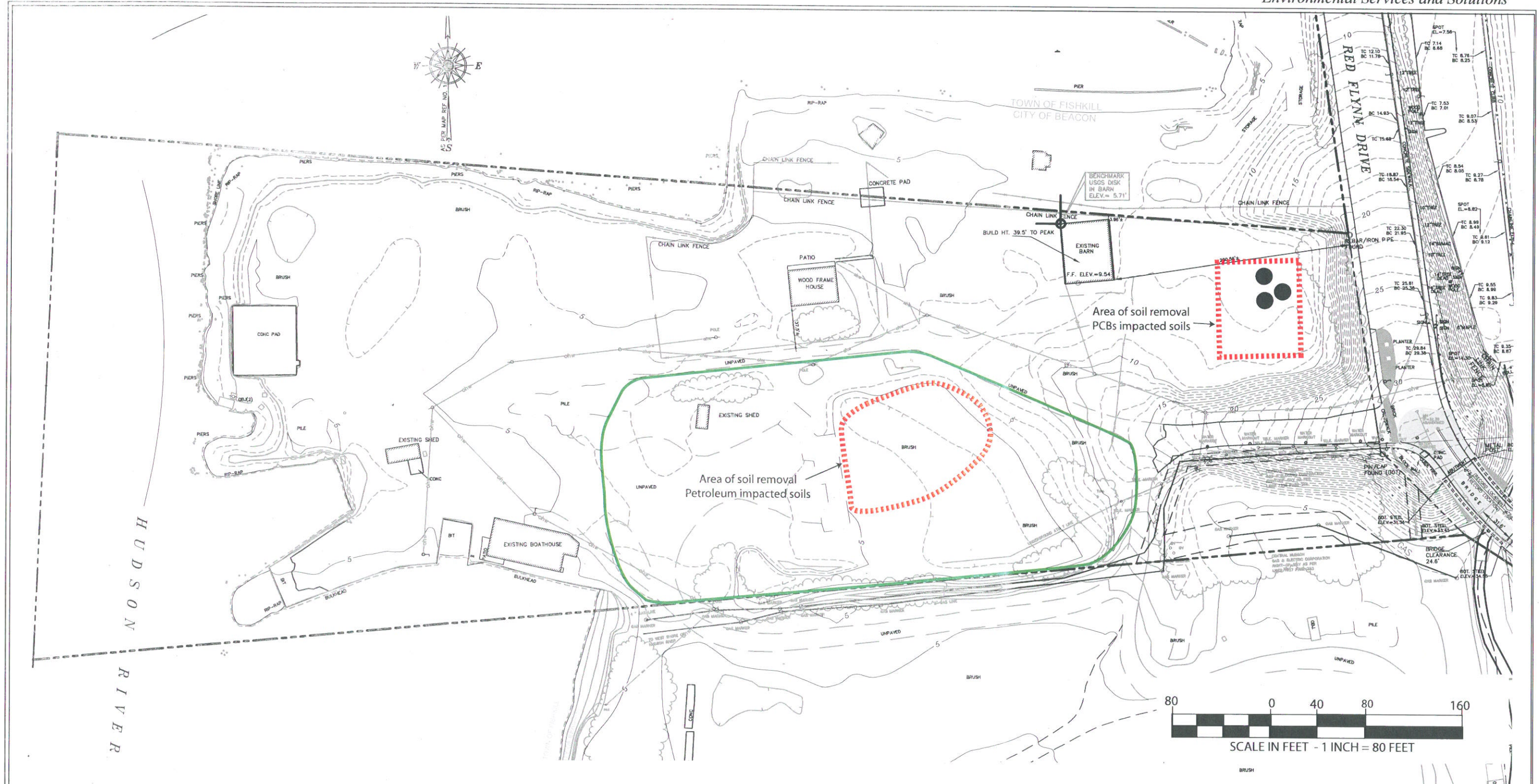


**Figure 3 - Direction of Groundwater Flow - High Tide**  
Long Dock Beacon  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

Legend:  
--- Site Boundary  
● Monitoring Well  
0.0' Groundwater Isopleths, elevation in feet above mean sea level

ESI File: SG96152.51  
November 2007  
Scale as shown  
Appendix A





**Figure 4 - Previous Soil Removal Areas**

Long Dock Beacon  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

**Legend:**

- Site Boundary
- Approximate locations of burn areas
- Area of former Major Oil Storage Facility (MOSF)

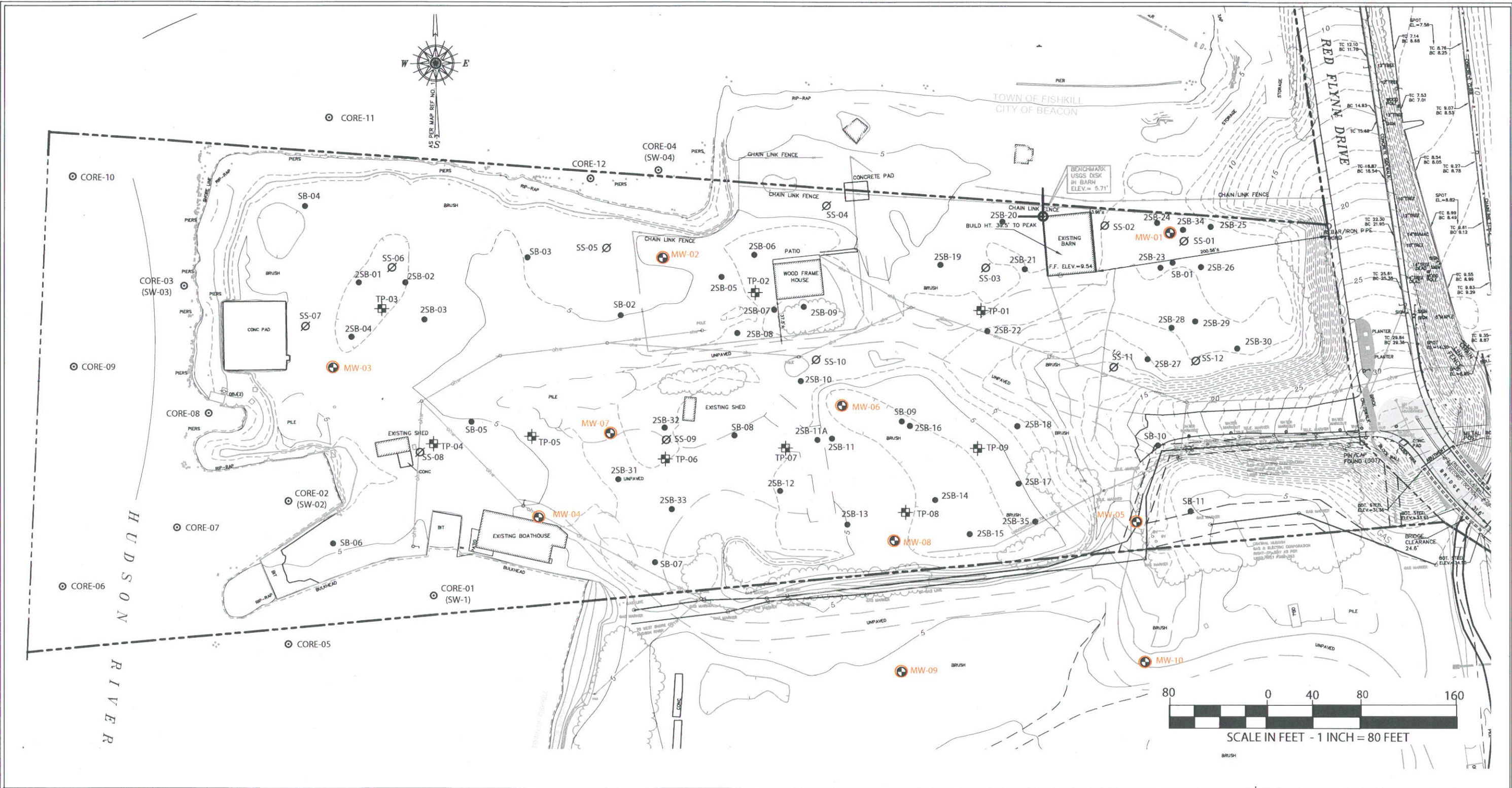
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November 2007

Scale as shown

Appendix A





**Figure 5 - Fieldwork Map**  
Long Dock Beacon  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

- Legend:**
- Site Boundary
  - Soil Boring
  - + Test Pit
  - Surface Sample
  - Sediment Sample
  - Monitoring Well

ESI File: SG96152.51  
November 2007  
Scale as shown  
Appendix A



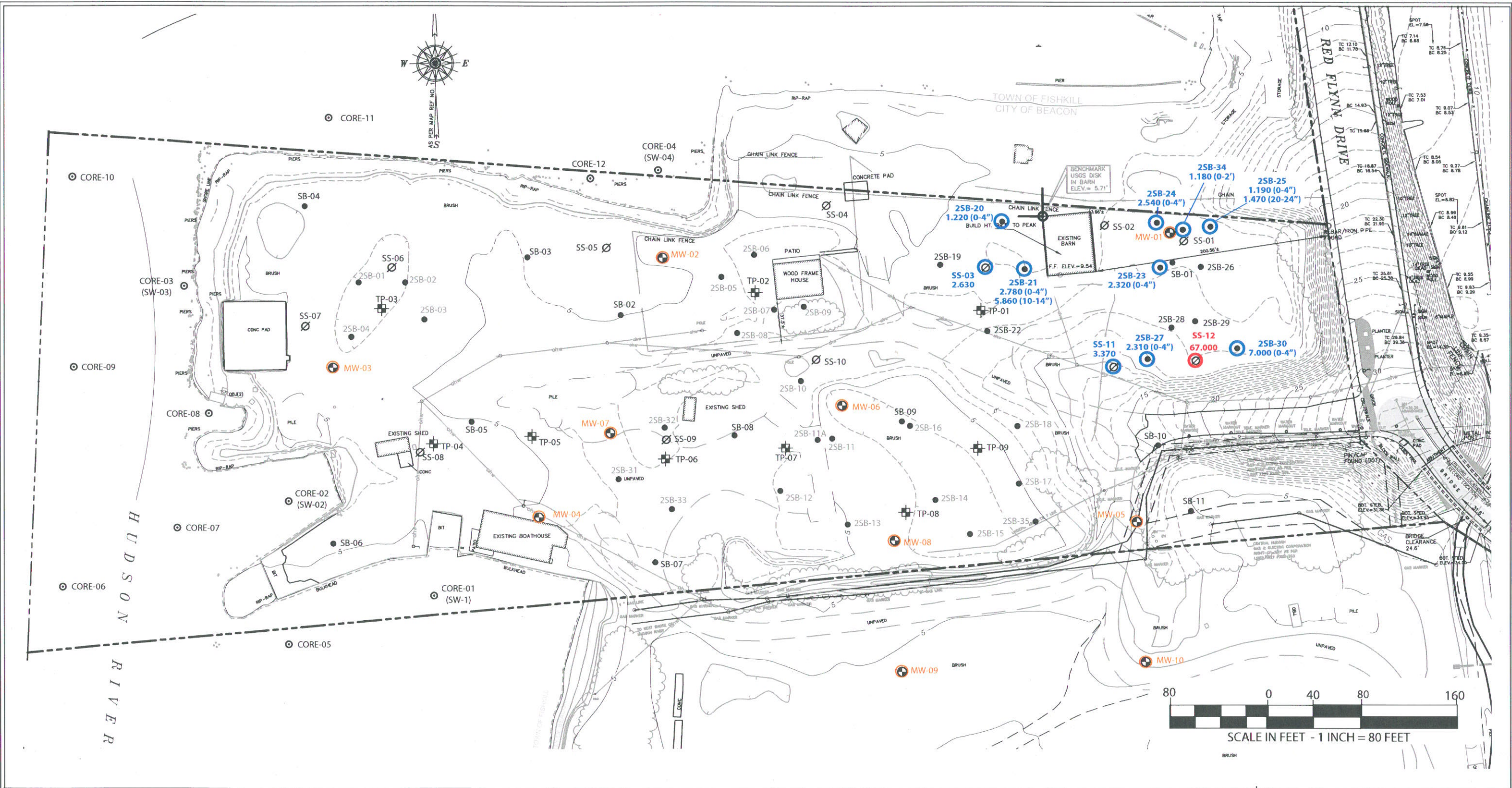


Figure 6 - Exceedences of PCBs in Site Soils

Long Dock Beacon  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

Legend:

- Site Boundary
- Soil Boring
- Test Pit
- Surface Sample
- Sediment Sample
- Monitoring Well
- Soil samples not analyzed for PCBs

- Exceedence of PCB concentration > 10 ppm  
sample ID  
concentration (sample depth)
- Exceedence of PCB concentration < 10 ppm  
sample ID  
concentration (sample depth)

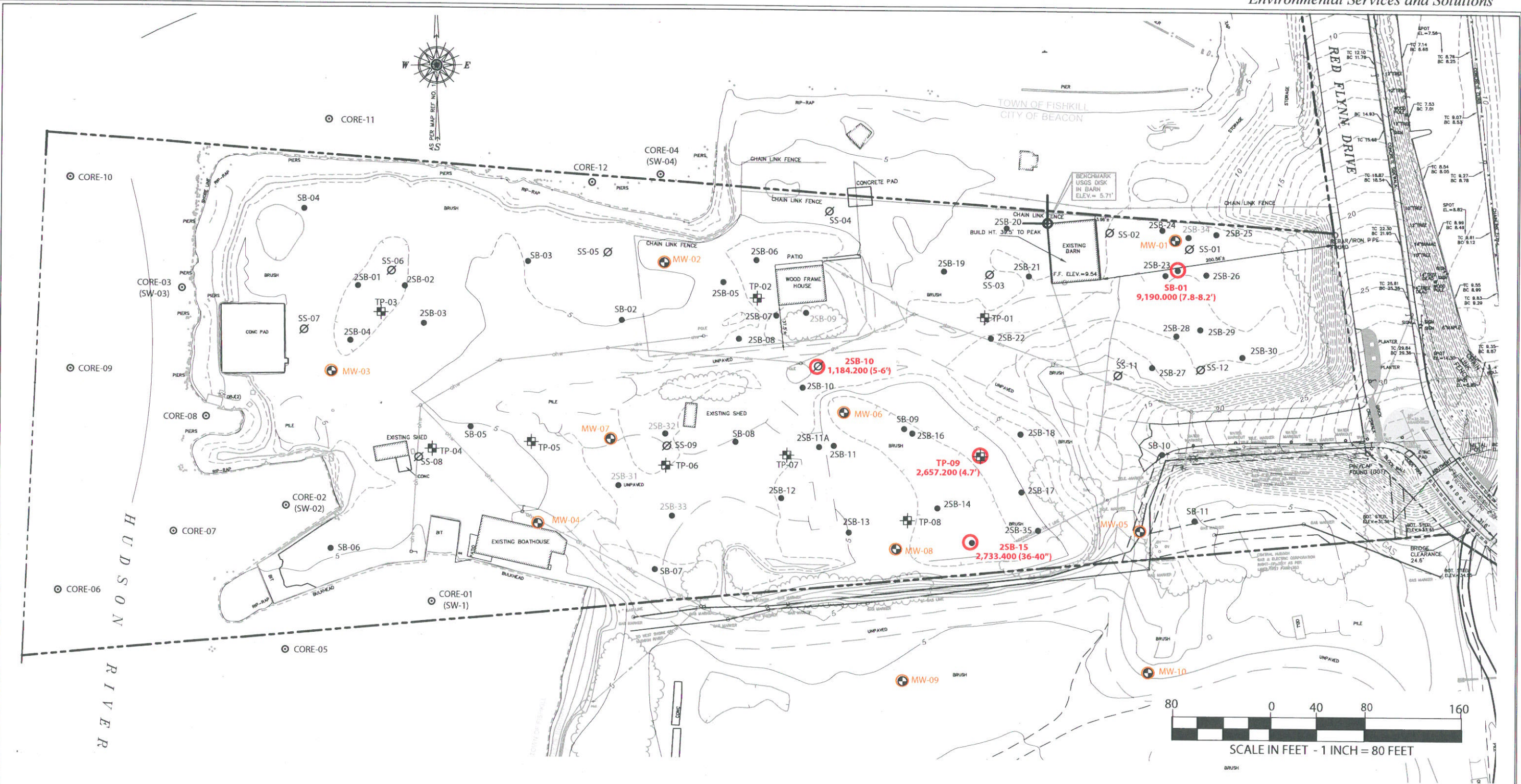
ESI File: SG96152.51

November 2007

Scale as shown

Appendix A





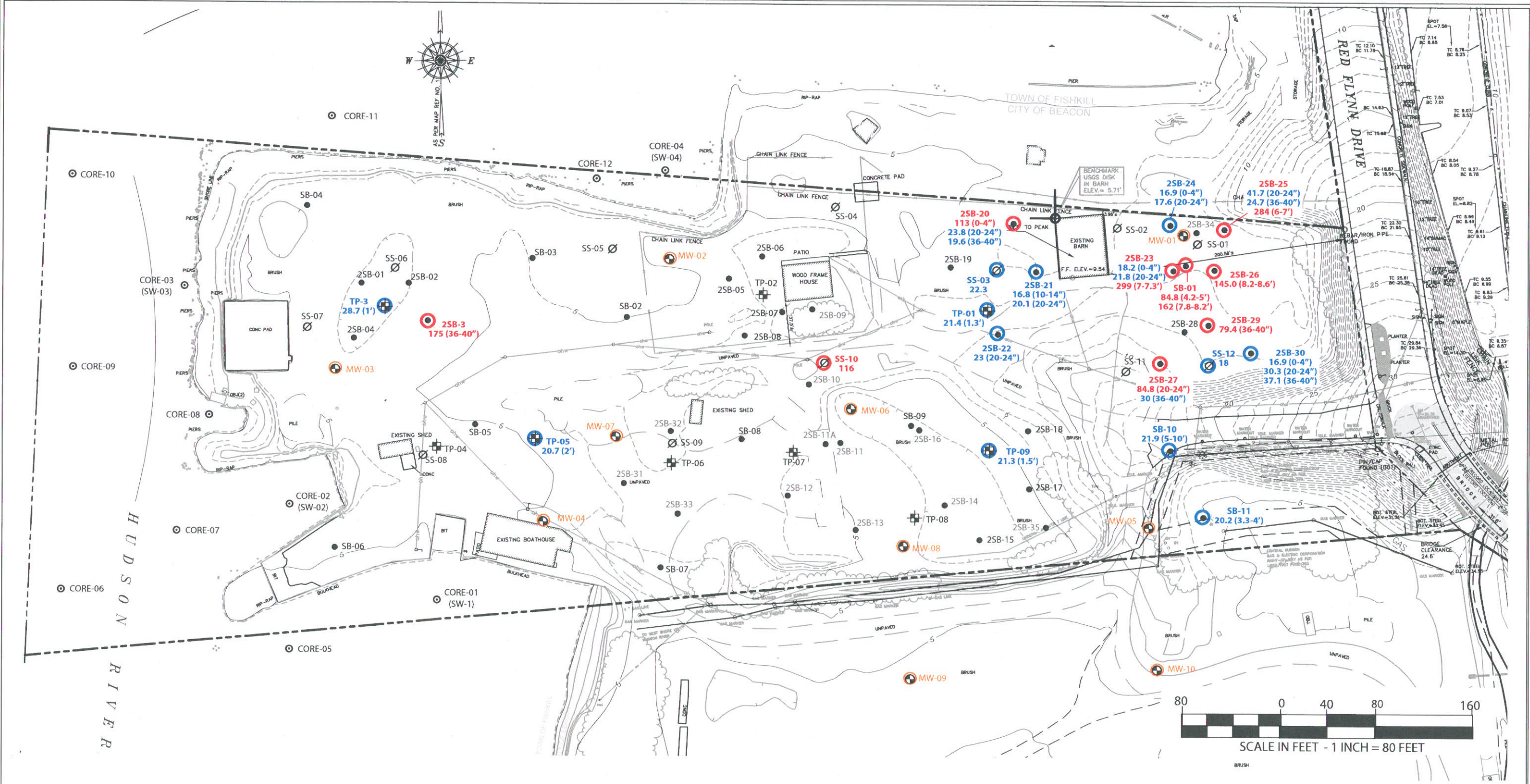
**Figure 7 - Exceedences of Total SVOCs in Site Soils**  
Long Dock Beacon  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

**Legend:**

--- Site Boundary	○ Sediment Sample	○ Exceedence of Total SVOC concentration > 500 ppm
● Soil Boring	○ Monitoring Well	sample ID
⊕ Test Pit	○ Soil samples not analyzed for SVOCs	concentration (sample depth)
○ Surface Sample		

ESI File: SG96152.51
November 2007
Scale as shown
Appendix A

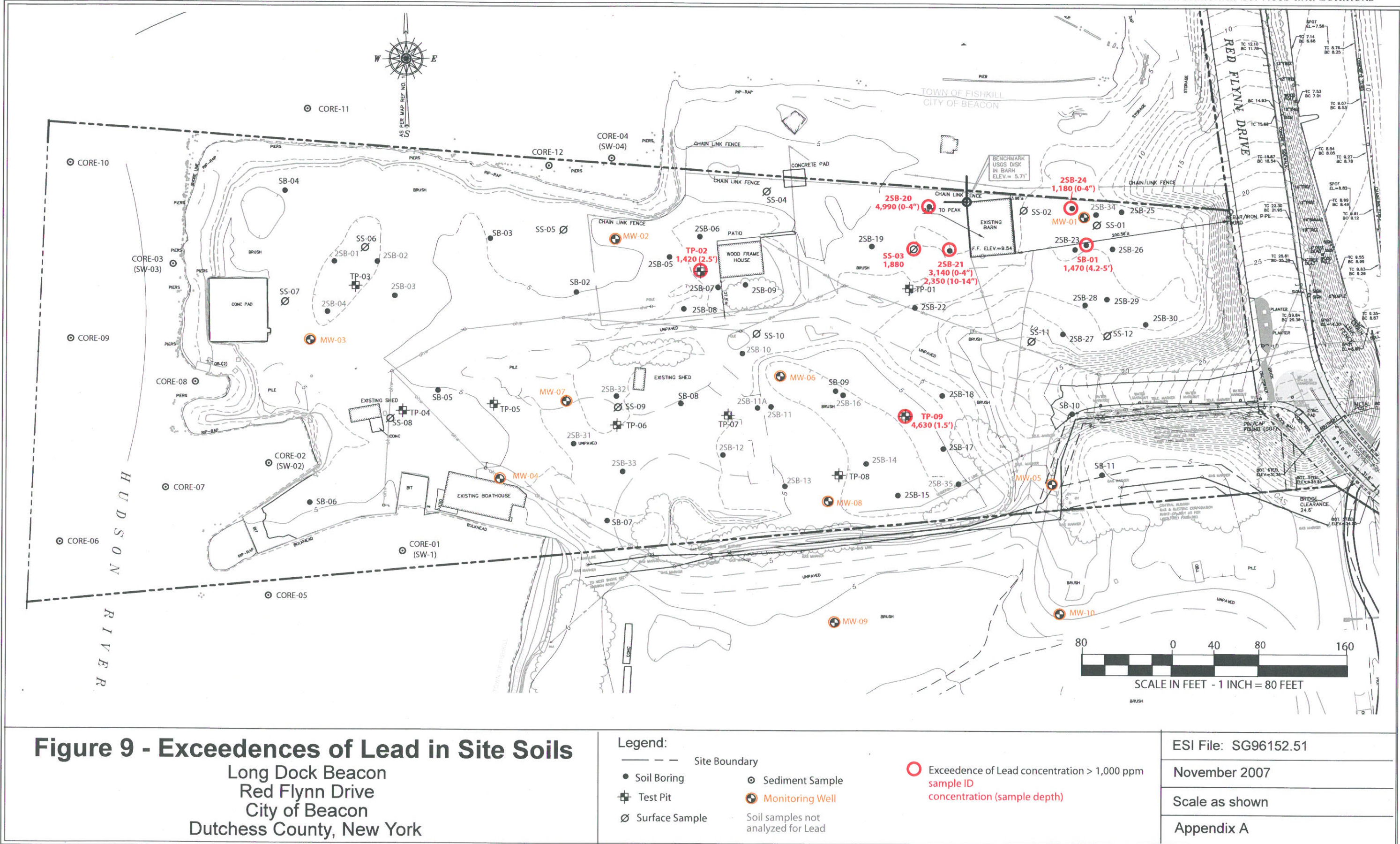




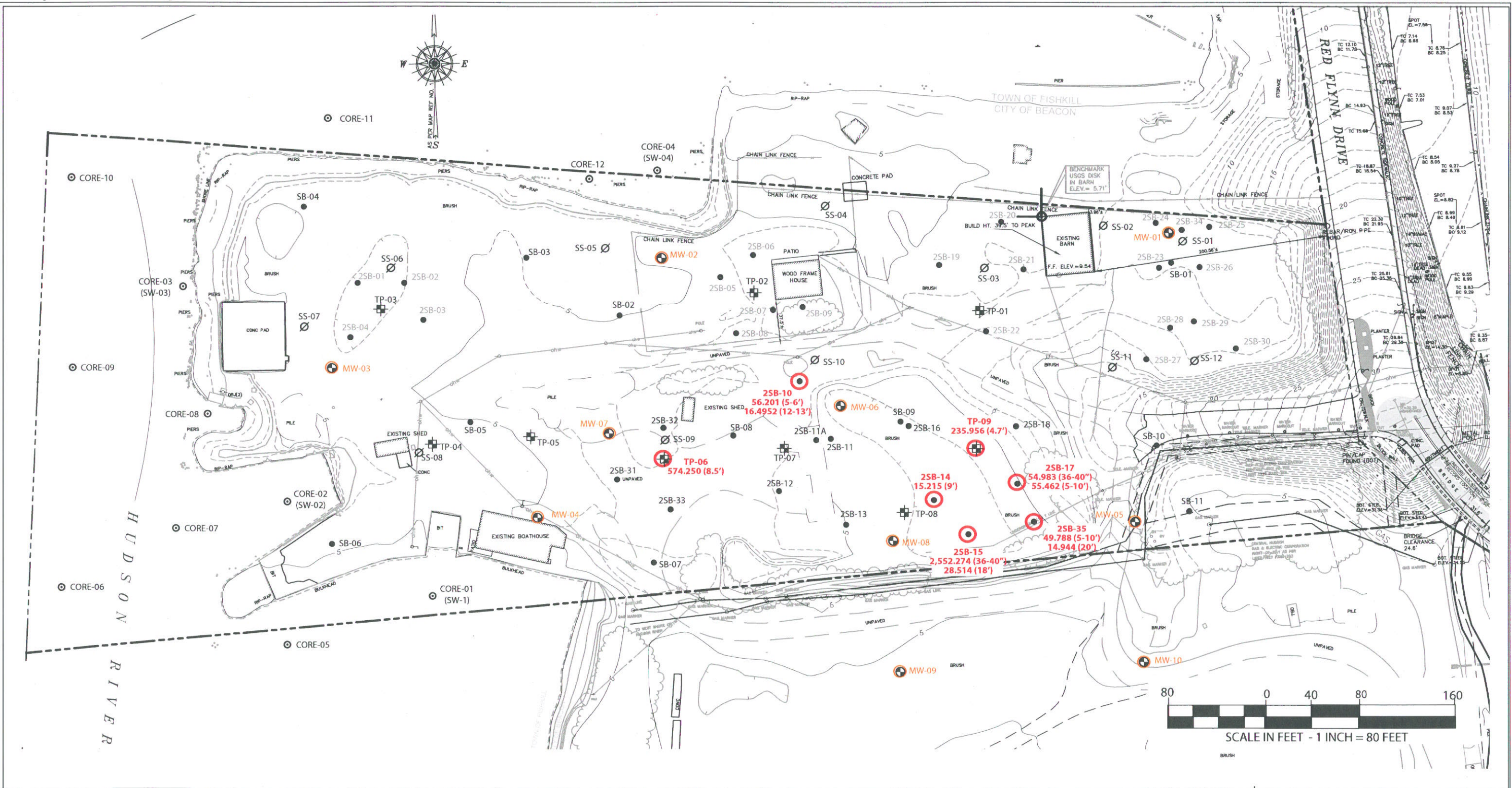
**Figure 8 - Exceedences of Arsenic in Site Soils**  
Long Dock Beacon  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

ESI File: SG96152.51  
November 2007  
Scale as shown  
Appendix A









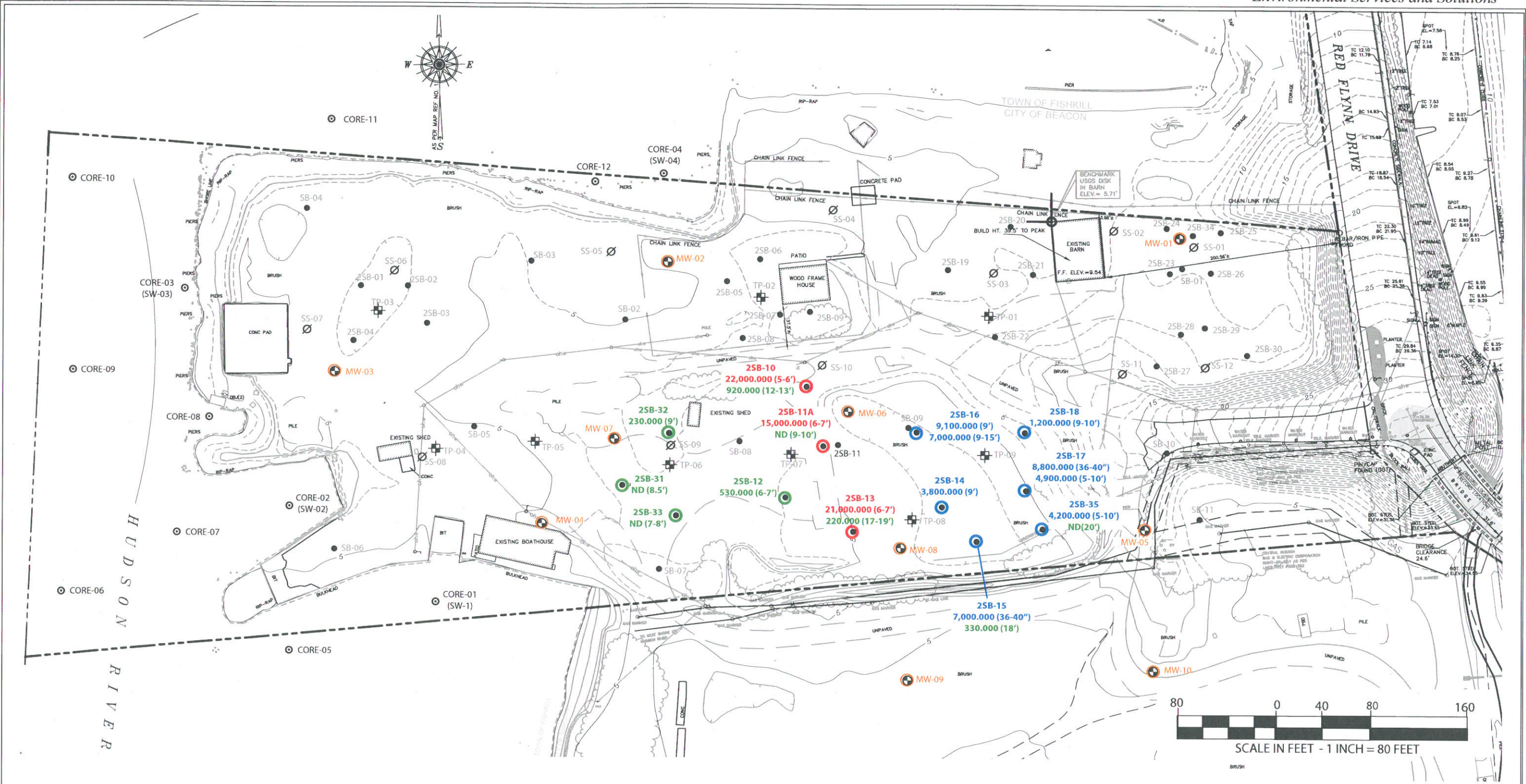
**Figure 10 - Exceedences of Total VOCs in Site Soils**  
Long Dock Beacon  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

**Legend:**

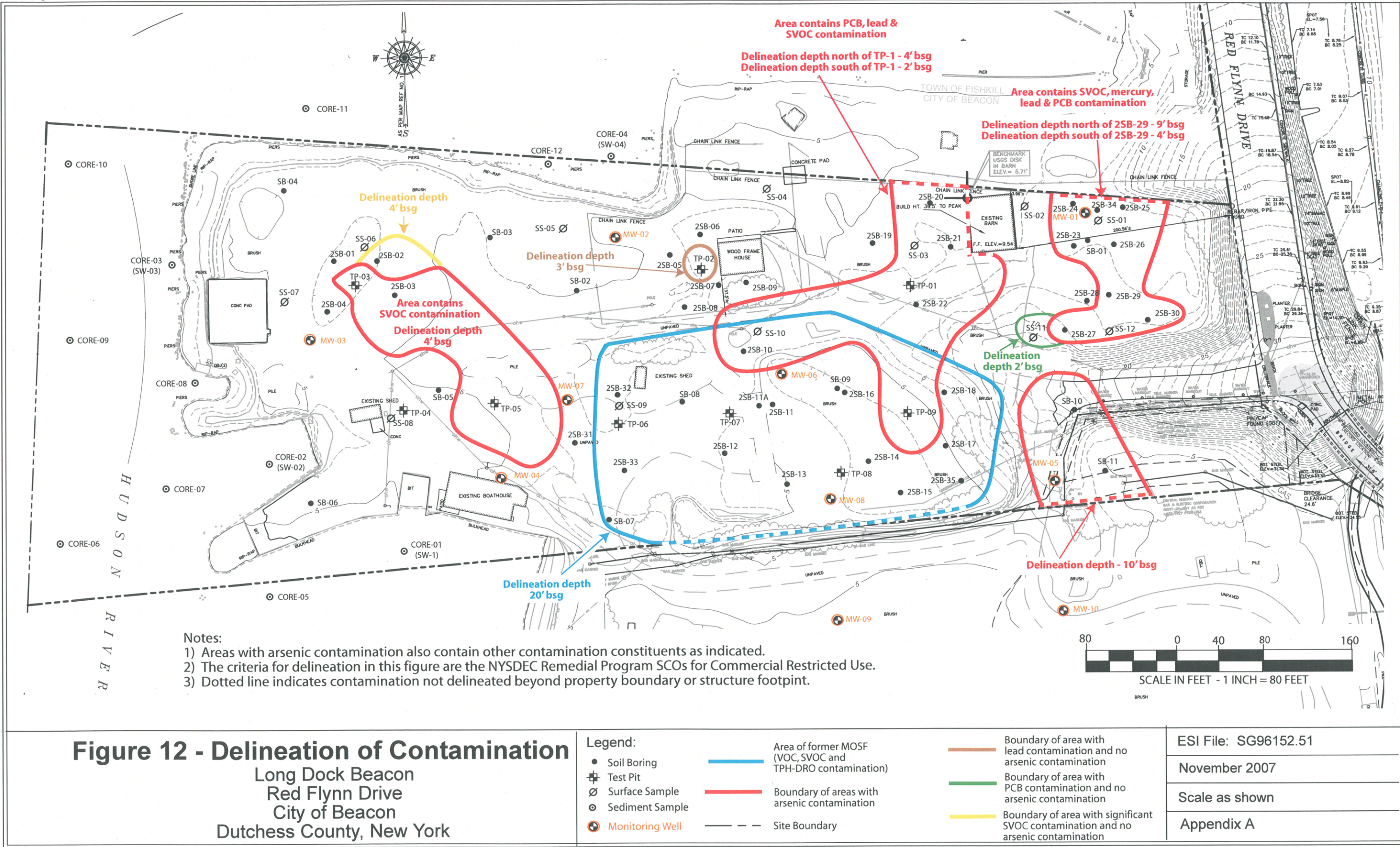
--- Site Boundary	● Sediment Sample	○ Exceedence of Total VOC concentration >10 ppm
● Soil Boring	⊕ Test Pit	sample ID
⊕ Surface Sample	⊕ Monitoring Well	concentration (sample depth)
	Soil samples not analyzed for VOCs	

ESI File: SG96152.51  
November 2007  
Scale as shown  
Appendix A











## **APPENDIX B**

### **Excerpts from Previous Environmental Reports**

**SUMMARY REPORT**

**OF**

**REMEDIAL ACTIVITIES**

**Performed on the "Beacon Salvage" Property**

**Located at**

**Red Flynn Drive  
City of Beacon  
Dutchess County, New York**

**Voluntary Cleanup Site: V00444-3**

**ESI File: SB2096.40**

**October 23, 2002**

**Prepared By:**

**ECOSYSTEMS STRATEGIES, INC.  
24 DAVIS AVENUE  
POUGHKEEPSIE, NEW YORK 12603  
(845) 452-1658**

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B	<i>Laboratory Results</i>
C	<i>Waste Disposal Manifests</i>
D	<i>Well Installation Logs</i>

## 1.0 INTRODUCTION

### 1.1 Purpose

This Summary Report of Remedial Activities (Report) summarizes all fieldwork performed by Ecosystems Strategies, Inc. (ESI) and its subcontractors from May to September 2002 on the "Beacon Salvage" property located at Red Flynn Drive in the City of Beacon, Dutchess County, New York. The work summarized in this Report was performed to address the presence of on-site PCB contaminated soils identified by ESI during subsurface investigations of the property in 200 and 2001.

The specific purpose of this Report is to satisfy the requirements set forth in the Voluntary Cleanup Program according to the protocols of an Interim Remedial Model and document all remedial activities performed on a specified portion of the subject property. Remedial activities were deemed necessary based upon information obtained from prior fieldwork, which revealed the presence of PCB contamination at concentrations ranging from 0.53 to 17 mg/kg (parts per million, ppm) in soils at the eastern end of the property. Remedial activities are summarized in Section 2.1 of this Report. This Report describes all soil excavation, field work methodology, and soil sampling procedures; includes discussions of the resulting analytical data from collected soil samples; and provides conclusions and recommendations drawn from the field work and analytical data.

### 1.2 Limitations

This written analysis is a summary of fieldwork activities conducted on a specified portion of the Beacon Salvage property and is not relevant to other portions of this property or any other property. It is a representation of those portions of the property analyzed as of the respective dates of fieldwork. This Report cannot be held accountable for activities or events resulting in contamination after the dates of fieldwork.

Services summarized in this Report were performed in accordance with generally accepted practices and established New York State Department of Environmental Conservation (NYSDEC) protocols. Unless specifically noted, the findings and conclusions contained herein must be considered not as scientific certainties but as probabilities based on professional judgment.

### 1.3 Site Location and Description

The Beacon Salvage property is an approximately 4.2-acre parcel having 170 feet of frontage on the westernmost end of Red Flynn Drive. This property extends approximately 1,100 feet westwards from Red Flynn Drive and includes lands located under the waters of the Hudson River, which adjoins the property to the west. The Site is comprised of a single tax lot (City of Beacon Tax Identification: 30-5954-32-48835). A map depicting the location of the subject property is provided in Appendix A of this Report.

The subject property is an elongated, irregularly-shaped lot, occupied by a house located in the central portion of the property and a barn located on the central northeastern portion of the property. Located to the east of the on-site barn structure is an area which has historically been used for the storage and processing of scrap metal.

Observations made by this office indicate that the eastern portion of the property is relatively level, while the western portion of the property has a gentle downward slope to the west, toward the Hudson River. Reported surface elevations range from approximately 5 to 10 feet above mean sea-level. The westernmost portion of the property is located beneath the surface of the Hudson River.

The specified portion of the property on which the remediation was conducted (hereafter referred to as the "Site") consists of a rectangular-shaped area located approximately 50 feet east of the barn structure and measuring approximately 80 feet by 100 feet. A Field Work Map indicating specific site characteristics and sampling locations is located in Appendix A of this Report.

## **1.4 Previous Environmental Investigations**

Previous environmental investigations of the subject property have documented the presence of polychlorinated biphenyls (PCBs) and metals in on-site soils. In June 2000, ESI collected samples from 12 locations in the eastern portion of the property, including three "burn areas" where burning of wire was believed to have occurred. These samples were collected from depths ranging from the surface to five feet below surface grade. In August 2000, ESI collected additional surface and subsurface soil samples from the vicinity of the previously identified "burn areas" for analysis of PCBs. In October 2000, samples obtained from two on-site monitoring wells were analyzed for PCBs. Supplemental surface soil sampling for both PCBs and RCRA metals was performed throughout the property in August 2001 and a sample from a third on-site monitoring well was also collected for analysis of RCRA metals. Additional surface soil sampling and analysis for arsenic and lead was conducted by ESI in October 2001 on the western portion of the property. In February 2002, additional groundwater samples were collected by ESI for analysis of RCRA metals, PCBs, VOCs, and SVOCs. Observations made during the extension of soil cores and monitoring wells indicated the presence of on-site fill materials composed of ash, slag and coal.

Soil data from June and August 2000 and August 2001 documented the presence of elevated levels of PCBs in surface soils located almost exclusively in the vicinity of the "burn areas". Peak PCB concentrations were detected at 17.72 ppm. One surface soil sample (SS-2) collected to the west of the barn was found to have somewhat elevated PCBs. Analysis of subsurface soil samples did not indicate the presence of elevated levels of PCBs above action levels in soils at depths greater than three feet below surface grade. Groundwater samples collected in October 2000 from two on-site groundwater-monitoring wells identified as RD-7 and RD-9 documented the absence of PCBs in groundwater.

Laboratory analysis of the soil samples for RCRA metals in June 2000 indicated the presence of elevated concentrations of arsenic, selenium, and lead. Sampling conducted in August 2001 throughout the property likewise documented the presence of elevated arsenic and lead; however, selenium was either not detected or significantly below the action level in all eight samples. The October 2001 soil-sampling round found that soils on the western portion of the property exhibited elevated concentrations of lead and arsenic above action levels.

These cumulative data support the conclusion that elevated metal concentrations are present throughout the property, in both surface and subsurface soils. In ESI's opinion, the likely source of these elevated metals is on-site fill materials. TCLP analyses conducted in June 2000 indicate that on-site soils can be managed as non-hazardous waste. Additionally, laboratory analysis of a groundwater sample obtained from monitoring well RD-7 in August 2001 found no detectable concentrations of any dissolved RCRA metals (with the exception of Barium which was present at a concentration below the New York State Department of Health drinking water standard).

In February 2002, six temporary well points (TMW-1 through TMW-6) were installed on the property to provide additional information regarding groundwater quality. Samples were obtained from wells TMW-2, TMW-3, TMW-4, and TME-6 (two wells, TMW-1 and TMW-5, had insufficient recharge and were not sampled). No detectable concentrations of VOCs, SVOCs, or PCBs were found in these samples and no metals were detected with the exception of barium, which was present at concentrations significantly below the NYSDEC groundwater protection standard.



Based on all investigative work conducted by ESI prior to remedial activity, the following environmental conditions are known to exist on the Site:

- Groundwater has not been impacted with respect to VOCs, SVOCs, PCBs or RCRA metals.
- Surface soils on the eastern portion of the Site are known to contain concentrations of PCBs above NYSDEC action levels, possibly attributable to activities related to the usage of the Site as scrap metal processing area. Borings extended on the Site documented the presence of PCB-contaminated surface soils in this area of the property (see Proposed Remediation Field Work Map, Appendix A). In total, an estimated footprint of between 5,000 – 8,000 square feet in the scrap metal processing area of the property is likely to contain elevated levels of PCBs at concentrations above NYSDEC action levels and will therefore require remediation.
- Additional on-site soils (including subsurface soils) contain concentrations of PCBs, which are below NYSDEC action levels and are, therefore, not the subject of this Remedial Report. No remedial work is warranted for these areas based on current analytical data, and no such work is recommended.
- Surface and subsurface soils in the eastern portion of the Site and in the far western portion of the Site are known to contain concentrations of metals (arsenic and lead primarily) above NYSDEC action levels. The approximate boundaries of on-site areas with elevated lead are provided in the Proposed Remediation Field Work Map (Appendix A). The source of this contamination is believed to be the fill historically used to create the property and possibly the use of the property as a scrap metal processing area. In total, it is estimated that approximately 80,000 square feet of the subject property (excluding the 5,000 - 8,000 square feet in the PCB-contaminated area) will require remediation (see Proposed Remediation Field Work Map, Appendix A).

## **2.0 Field Work**

### **2.1 Summary of Services**

ESI conducted the following remedial activities on the site which were identified and approved in the voluntary Cleanup Agreement Workplan:

- The excavation of a total of approximately 400 tons of PCB contaminated soil from the former scrap/burn areas identified at the east end of the property;
- The off-site disposal of excavated PCB contaminated soils;
- The collection and analysis of endpoint post-excavation confirmatory soil samples;
- The installation of three (3) permanent groundwater monitoring wells in the vicinity of the excavated "burn" areas;
- The collection and analysis of groundwater samples from these wells; and
- The restoration of the excavated area to approximate former grade

### **2.2 Excavation of PCB-Contaminated Soil**

#### **2.2.1 Site Preparation Services**

Prior to the initiation of fieldwork, a request for a complete utility markout of the subject property was submitted by ESI, as required by New York State Department of Labor. Confirmation of underground utility locations was secured, and a field check of the utility markout was conducted prior to excavation and removal of soil.

#### **2.2.2 Excavation Methodology and Observations**

S.J. Lore Contracting Inc. conducted the soil excavation under the supervision of ESI personnel. All excavation was completed utilizing a front-end loader and backhoe. An assessment of subsurface soil characteristics, including soil type, the presence of foreign materials, field indications of contamination, and instrument indications of contamination (i.e., photo-ionization detector (PID) readings), was made by ESI personnel during the soil excavation. ESI personnel maintained field logs documenting the physical characteristics of the encountered soil, PID readings, and any field indications of contamination for all encountered material.

The approximate excavation area was located at the east end of the property approximately 50-feet east of the barn structure. The final excavated area measured approximately 80-feet wide by 100-feet long and was approximately 3-feet deep. Excavated material encountered in the excavation consisted mostly of dark brown to black ash, slag and coal with a small volume of soil.

Based on field observations and previous laboratory data, excavated soils were stockpiled on, and covered with, 6-mil plastic sheeting at a designated on-site location pending off-site removal. Approximately 400-tons of soil were removed and stockpiled.

Two rounds of excavation occurred at the site as a result of test data confirming the continued presence of levels of PCB's in soil above NYSDEC action levels.

On August 2, and September 16, 2002 a total of approximately 400 tons of stockpiled material consisting mostly of slag, ash, coal, and soil material were removed from the site by Allied Waste Services and delivered to Clean Earth of Philadelphia (SRP) for proper disposal. Soil disposal manifests are included as Appendix C of this Report.

### 2.2.3 Sample Collection

After completion of the excavation described above, a grid-sampling plan was established and multiple confirmatory subsurface soil samples were collected from the excavation. All soil samples were collected in a manner consistent with NYSDEC sample collection protocols. Decontaminated stainless steel trowels and dedicated gloves were used at each sample location to place the material into sterile laboratory jars. All sample collection equipment was properly decontaminated prior to the initiation of sampling and between sample locations to avoid cross-contamination.

Twenty-one (21) soil samples were collected from the grid, in order from PESS-1 to PESS-21. All samples were collected from a depth of approximately two to three feet below surface grade.

After sample collection, the sample containers were placed in a cooler prior to transport to the laboratory. The soil samples were transported via courier to York Analytical Laboratories, Inc. (NELAP Certification Number 10854) for chemical analyses. Appropriate chain of custody procedures were followed.

## 2.3 Laboratory Analysis

### 2.3.1 Terminology

The term "action level" as defined in this Report, refers to the concentration of a particular contaminant above which remedial actions are considered more likely. The overall objective of setting action levels is to assess the integrity of on-site soils relative to conditions which are likely to present a threat to public health, given the existing and probable future uses of the site. On-site soils with contaminant levels exceeding these action levels are considered more likely to warrant remediation. No independent risk assessment was performed as part of this investigation.

The action levels identified in this Report for PCBs in soils are determined based on the NYSDEC's Technical and Administrative Guidance Memorandum (TAGM) dated January 24, 1994, as modified by subsequent, relevant NYSDEC Records of Decision (ROD).

All data have been analyzed in accordance with applicable TAGM standards. All detected compounds with their respective action levels are provided below in the data summary table. The laboratory data results are included as Appendix B of this Report.

### 2.3.2 Results

Twenty-one (21) soil samples (PESS-1 through PESS-21) were submitted to the laboratory to be analyzed for PCBs utilizing USEPA Method 8082. Laboratory analytical results are provided below in Table 1.

Laboratory analysis of excavation endpoint soil samples indicate the absence of PCBs in three (3) of the twenty-one (21) soil samples analyzed (PESS-2, PESS-14 and PESS-21). Fourteen (14) soil samples exhibited levels of total PCBs (0.02 ppm to 0.87 ppm) below NYSDEC action levels for both surface soils (1 ppm) and subsurface soils (10 ppm). Three (3) soil samples exhibited levels of total PCBs (1.34 ppm to 2.67 ppm) at concentrations above the NYSDEC action level for surface soils but below the action level for subsurface soils (PESS-4, PESS-7 and PESS-8). Soil sample PESS-12 exhibited 39.1 ppm total PCBs, exceeding the NYSDEC action level for both surface and subsurface soils.

(All results provided in  $\mu\text{g/kg}$ . Results in **bold** exceed designated action levels.)

		Sample Identification																				
		October 23, 2002																				
Compound (USEPA Method 8082)	Action Level <sup>1</sup>	PESS -1	PESS -2	PESS -3	PESS -4	PESS -5	PESS -6	PESS -7	PESS -8	PESS -9	PESS -10	PESS -11	PESS -12	PESS -13	PESS -14	PESS -15	PESS -16	PESS -17	PESS -18	PESS -19	PESS -20	PESS -21
PCB-1016	1,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1221	1,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1232	1,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1242	1,000	ND	ND	120	1810	450	160	210	390	230	220	400	2970	330	ND	100	70	170	110	190	60	ND
PCB-1248	1,000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1254	1,000	60	ND	180	870	170	150	780	1650	270	160	250	6000	210	ND	110	70	50	100	110	40	ND
PCB-1260	1,000	ND	ND	130	440	230	180	350	630	270	210	340	3400	330	ND	150	80	30	160	170	50	ND
Total PCBs		60	ND	430	3120	850	490	1340	2670	770	590	990	39100	870	ND	360	220	250	370	470	150	ND

Notes:  
1. Source: NYSDEC Division Technical and Administrative Guidance Memorandum on Determination of Soil Cleanup Objectives and Cleanup Levels dated January 24, 1994, as modified by subsequent, relevant NYSDEC Records of Decision (RODs).  
ND = Not Detected above specified detection limit.

### 2.3.3 Additional Soil Excavation

**Table 2: Summary of PCBs in Soil Samples- Additional excavation**

(All results provided in  $\mu\text{g/kg}$ . Results in **bold** exceed designated action levels.)

Compound (USEPA Method 8082)	Action Level <sup>1</sup>	2PESS- 4N	2PESS- 4S	2PESS- 7N	2PESS- 7S	2PESS- 8N	2PESS- 8S	2PESS- 12N	2PESS- 12S
PCB-1016	10,000	820	20	70	ND	470	ND	220	300
PCB-1221	10,000	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1232	10,000	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1242	10,000	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1248	10,000	ND	ND	ND	ND	ND	ND	ND	ND
PCB-1254	10,000	570	ND	110	70	2000	2710	360	730
PCB-1260	10,000	290	ND	90	ND	470	ND	270	350
<b>Total PCBs</b>		1680	20	270	70	2940	2710	850	1380

An additional soil excavation was conducted on September 16, 2002 to remove remaining PCB concentrations. Endpoint samples were obtained to insure that PCB levels in remaining soils were below NYSDEC action levels for subsurface soils (10 ppm). Two samples were collected from each of the four locations of additional excavation and labeled 2PESS-4N, 2PESS-4S, 2PESS-7N, 2PESS-7S, 2PESS-8N, 2PESS-8S, 2PESS-12N and 2PESS-12S respectively. All soil samples exhibited concentrations of total PCBs below NYSDEC action levels for subsurface soils (10 ppm). PCB Concentrations for this round of sampling ranged from 0.02 ppm to 2.94 ppm.

### 2.3.4 Stockpile analysis

Two composite samples of stockpiled materials (PE Stock Comp 1 and PE Stock Comp 2) were collected and analyzed for BTEX volatiles, PCBs, TCLP metals, total RCRA metals, flashpoint, pH, reactivity, total organic halogens (TOX) and total petroleum hydrocarbons (TPH), as was required by the soil repository. Based on the concentrations of detected compounds from samples obtained from the stockpiled soils, the material was deemed acceptable for disposal at Clean Earth of Philadelphia soil repository. The laboratory data results are included as Appendix B of this Report.

### 2.3.5 Site Restoration Activities

On October 1, 2002 ESI personnel directed the restoration activities in the eastern portion of the site. Activities included the importing of approximately 300 tons of "clean fill" material from the West Hook Gravel Mine (DEC Permit Number: 3-1330-52). Fill material was distributed and back bladed evenly throughout the excavation until the approximate original grade was achieved. At the conclusion of soil restoration activity, the site was seeded and mulched with straw to encourage the growth of stabilizing grasses for erosion control.

### 2.3.6 Monitoring Well Installation And Sampling

On September 5, 2002 ESI personnel directed the installation of three monitoring wells (see attached fieldwork map for locations) on the site by Site Environmental, LLC (see well installation logs, Appendix D, for well specifications). The three wells were installed in the vicinity of the

All data provided in  $\mu\text{g/L}$  or ppb. Concentrations in **bold** exceed NYSDEC established action levels.

Metals	Action Levels <sup>1</sup>	Sample Identification					
		PMW-1 (filtered)	PMW-1 (unfiltered)	PMW-2 (filtered)	PMW-2 (unfiltered)	PMW-3 (filtered )	PW-3 (unfiltered)
Arsenic	25	ND	ND	71	564	ND	ND
Barium	1,000	92	ND	84	232	138	153
Cadmium	5	ND	ND	ND	ND	ND	ND
Chromium	50	ND	5	ND	9	ND	6
Lead	15	ND	185	ND	27	ND	10
Mercury	0.7	ND	ND	ND	ND	ND	ND
Selenium	10	ND	ND	ND	12	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND
<b>Organics</b>							
PCB's	10,000	ND	ND	ND	ND	ND	ND
VOC's	NA	ND	ND	ND	ND	ND	ND

Notes:

- Source: NYSDEC Water Quality Regulations, Surface Water and Groundwater Classifications and Standards 6 NYCRR Parts 700 – 706

ND = Not detected above specified laboratory detection limit.

### 3.0 CONCLUSIONS AND RECOMMENDATIONS

This office has completed the services summarized in Section 2.0 for the specified portion of the "Beacon Salvage" property located at Red Flynn Drive in the City of Beacon, Dutchess County, New York. All work was completed in coordination with NYSDEC personnel and consistent with the Remedial Action Workplan prepared by ESI and approved by the NYSDEC (Voluntary Clean-up Site: V00444-3).

Field work was completed in July – October, 2002, wherein PCB contaminated soil was excavated, stockpiled and disposed of at a licensed repository; confirmatory samples were collected and analyzed; groundwater monitor wells were installed, developed and sampled; and a final summary report was prepared.

Based on the services provided and data generated, the following conclusions and recommendations (**in bold**) have been made.

1. Soil samples collected from within the boundary of the excavation indicate that the "hot spot" of PCB contamination has been removed from the Site. Confirmatory sampling of remaining soils (for both the initial and follow-up soil removal) indicates all levels of PCBs below established action levels for subsurface soils (10 ppm). At the conclusion of remedial activities (soil removal), a volume of soil from a NYSDEC licensed facility was imported to the site and distributed at the site of excavation to restore the area to former grade and condition. The area was seeded for erosion control.

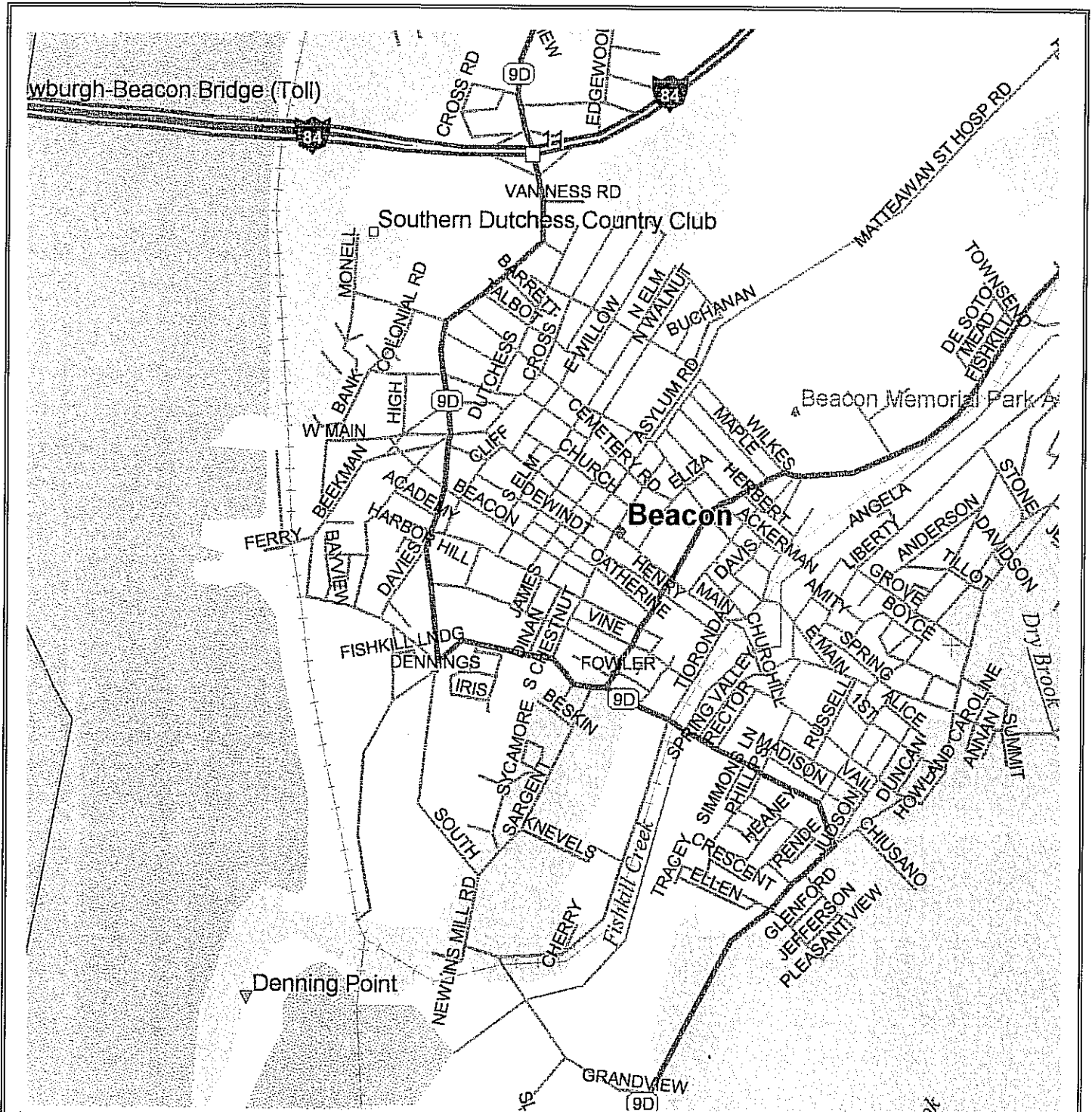
**No further investigation or remedial action is recommended for this portion of the site.**

2. Groundwater samples were obtained from the three permanent monitoring wells installed in eastern portion of the site. Groundwater samples were submitted for analysis of PCBs and RCRA metals. Samples from PMW-1 and PMW-2 were additionally analyzed for VOCs due to field observations of a petroleum-like sheen on the purge water from the wells. Laboratory analysis of the groundwater samples indicate the absence of VOCs and PCBs from the samples. Groundwater samples collected from PMW-1 exhibit a NYSDEC action level exceedance for lead in the unfiltered sample. Groundwater samples collected from PMW-2 exhibit NYSDEC action level exceedances for arsenic in both the filtered and unfiltered sample. Groundwater samples from PMW-2 also exhibit an exceedance for selenium. The low levels of metals detected in groundwater samples do not pose a threat to the proposed future utility of the site. Municipal water is available for site use and it is anticipated that groundwater resources will not be utilized.

**No further investigation recommended.**

3. The remedial activities described in this Report satisfy all tasks included in the approved Workplan.

**It is recommended that this Report be submitted to the NYSDEC for review in anticipation of a no further action letter.**



Source: DeLorme Street Atlas, Version 6.0, dated 1998

### Site Location Map

"Beacon Salvage" Property  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

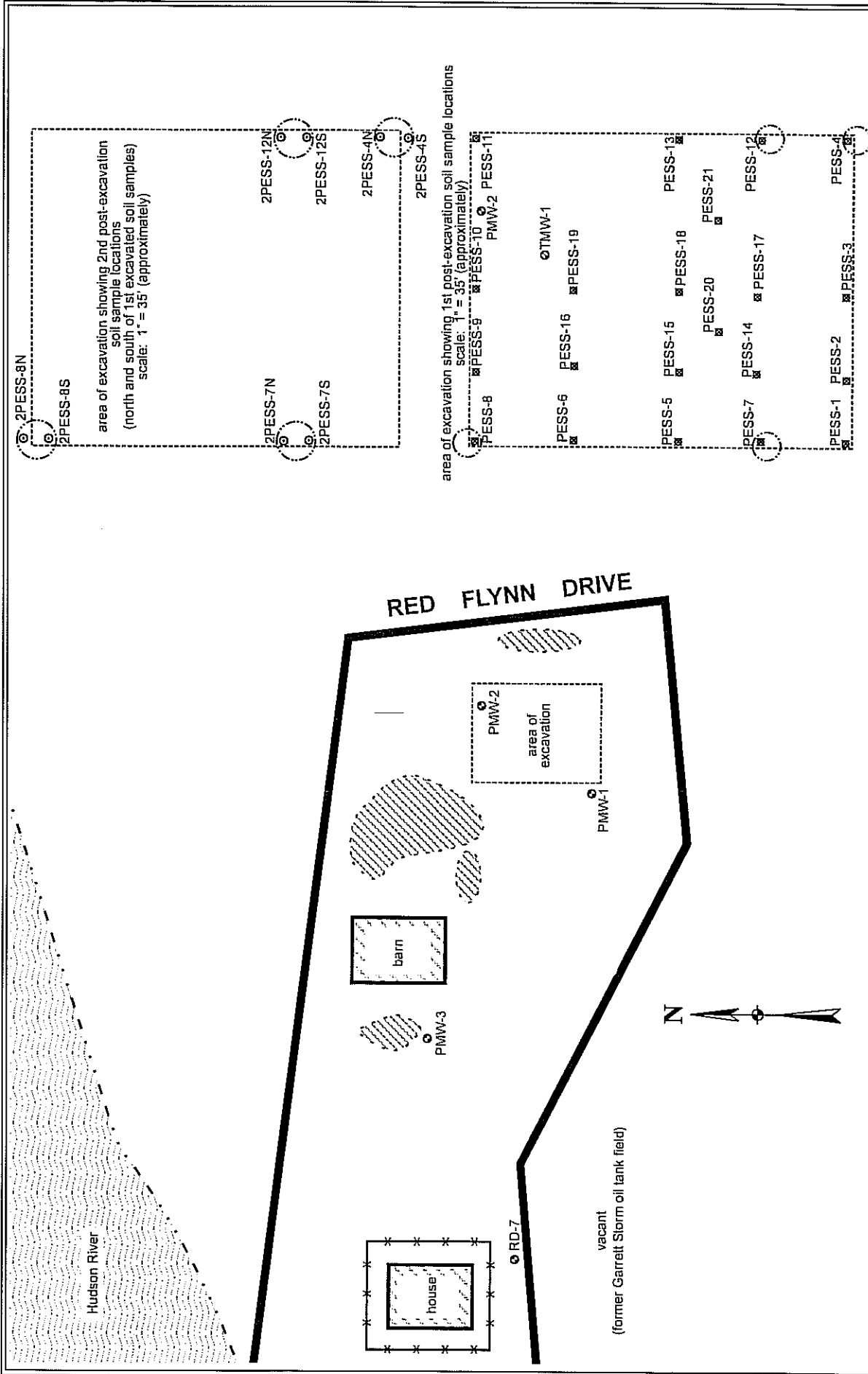


ESI File: SB2096.40

Date: October 2002

Appendix A





Feature locations are approximate.

## Field Work Map

"Beacon Salvage"  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

Legend:

- subject property
- border
- chain-link fence
- structure
- PCB soil stockpile

- monitoring well (RD-7) & (PMW)
- temporary monitoring well (TMW)
- 1st post-excavation soil sample locations (PESS)
- 2nd post-excavation soil sample locations (2PESS)

ESI File: SB2096.40

October 2002

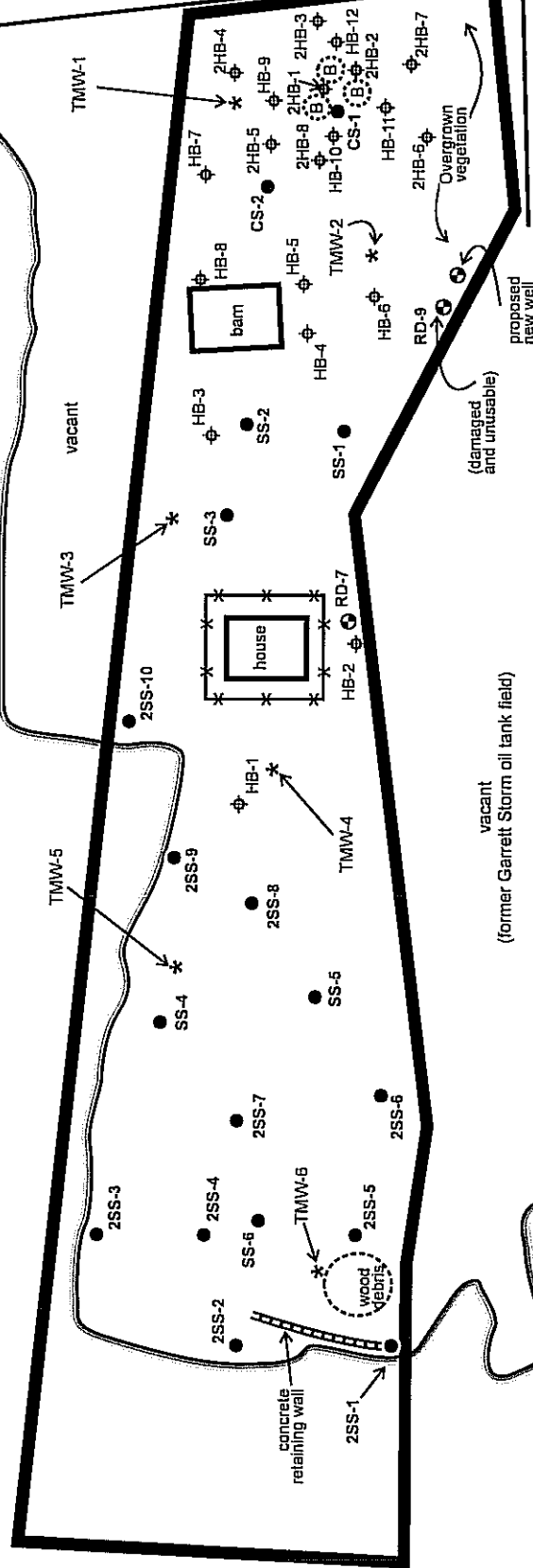
Scale: 1" = 100' (approximate)

Appendix A



HUDSON  
RIVER

RED FLYNN DRIVE



HUDSON  
RIVER

**Note:**

Shaded area indicates PCB-contaminated soils proposed for excavation.

Feature locations are approximate.

**Proposed Remediation Field Work Map**

"Beacon Salvage"  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

**Legend:**

subject property border

former hand boring location/samples taken 6/30/00 HB-2

former hand boring location/samples taken 8/15/00 2HB-2

surface soil SS-1 monitoring well RD-1 composite sample CS-1

Burn spot

Temporary groundwater sampling point

composite sample CS-1

ESI File: SB2096.40

February 2002

Scale: 1" = 100' (approximately)

Appendix A

**SUMMARY REPORT**

**OF**

**REMEDIAL ACTIVITIES**

**Performed on the "Beacon Waterfront" Site  
Formerly Known as the Garret Storm, Inc. MOSF Site**

**Located off**

**Ferry Road  
City of Beacon  
Dutchess County, New York**

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**Prepared By:**

**ECOSYSTEMS STRATEGIES, INC.  
24 DAVIS AVENUE  
POUGHKEEPSIE, NEW YORK 12603  
(845) 452-1658**

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## 1.0 INTRODUCTION

### 1.1 Purpose

This Summary Report of Remedial Activities (Report) summarizes all fieldwork completed by Ecosystems Strategies, Inc. (ESI) and its subcontractors, which was performed to satisfy the Workplan For Site Remediation Activities on the property known as "The Beacon Waterfront" Site, Revised May 1999 (Workplan) during the period from Spring 2000 to April 2003, on the "Beacon Waterfront" Site (formerly known as the Garret Storm, Inc. Major Oil Storage Facility [MOSF]) located at Ferry Road in the City of Beacon, Dutchess County, New York. The work summarized in this Report was performed to address known soil and groundwater petroleum contamination identified by ESI and others during previous investigations of the property conducted from 1989 to the present.

The specific purpose of this Report is to satisfy the requirements set forth in the New York State Department of Environmental Conservation (NYSDEC) Voluntary Cleanup Program and to document all remedial activities performed on a specified portion of the subject property. Remedial activities (see Section 2.1) were deemed necessary based upon information obtained from prior fieldwork, which revealed the presence of petroleum hydrocarbons in localized on-site soils and groundwater. This Report describes all soil excavation, fieldwork methodology, and soil/groundwater sampling procedures, includes discussions of the resulting analytical data from collected soil samples, and provides conclusions and recommendations drawn from the fieldwork and analytical data.

### 1.2 Limitations

This written analysis is a summary of fieldwork activities conducted on a specified portion of the Beacon Waterfront property and is not relevant to other portions of this property or any other property. It is a representation of those portions of the property analyzed as of the respective dates of fieldwork. This Report cannot be held accountable for activities or events resulting in contamination after the dates of fieldwork.

Services summarized in this Report were performed in accordance with generally accepted practices and established NYSDEC protocols. Unless specifically noted, the findings and conclusions contained herein must be considered not as scientific certainties but as probabilities based on professional judgment.

### 1.3 Site Location and Description

The subject property is defined as the approximate 6.9-acre Beacon Waterfront property located off Ferry Road in the City of Beacon, Dutchess County, New York. The property is an irregularly shaped parcel located between the Consolidated Railroad Corp. right-of-way and the Hudson River. An approximately 2.4-acre portion of the property forms a peninsula in the Hudson River. A former MOSF (the Garret Storm, Inc. site) located off the property ceased operations in 1992, and all on-site aboveground storage tanks (ASTs) were removed by July 1994. Former AST cradles and a pump house were removed from the site in October 1999. The western portion of the subject property is currently leased to the Dutchess Boat Club for use as a private marina and boat launch. A one-story clubhouse and shed are located off the peninsula.

The majority of the subject property is situated on a generally level plot with surface elevations ranging from approximately 5 to 10 feet above mean sea level (msl). There is a gradual upwards slope to the east, towards the Ferry Road Bridge. On-site groundwater is tidally influenced; the direction of groundwater flow is to the southwest at times of falling tides and to the northeast at times of rising tides. A map depicting the location of the subject property is provided in Appendix A of this Report.

The specified portion of the property on which soil remedial activities were conducted (hereafter referred to as the "Site") consists of an approximately 100 feet x 50 feet rectangular-shaped area located at the eastern end of the property, which included the former fuel distribution and storage area for the Garret Storm MOSF. Test pits were extended immediately east of soil removal activity. Monitoring wells are located throughout the Site as well as off-site to the north and south. A Fieldwork Map indicating specific site characteristics and sampling locations is located in Appendix A of this Report.

## 1.4 Previous Environmental Investigations

The Site has been the subject of several environmental investigations which have, in the opinion of the NYSDEC and this office, accurately and comprehensively documented on-site environmental conditions. Data from investigations conducted from 1989 to 1998 are summarized in Attachment B of the Workplan. Both soil and groundwater samples were analyzed to document site conditions. Soil data from 1989 (see Table 1 of the Workplan) generally documents the absence of elevated metals in both surface and subsurface soils, with the exception of elevated lead in one (1) surface sample and slightly elevated mercury in most soil samples. In addition, groundwater collected in 1989 (see Table 2 of the Workplan) documented the absence of volatile organic compounds (VOCs). Groundwater data generated in 1989 also documented the absence of polychlorinated bi-phenyls (PCBs).

Based on all work conducted prior to issuance of the of the Workplan, the following environmental conditions were known to exist on the Site:

- *Presence of Petroleum Hydrocarbons in Localized On-Site Soils*

Surface and subgrade soils in the former fuel distribution area were known to contain concentrations of semi-volatile petroleum hydrocarbons, which resulted from former on-site fuel storage and handling activities. Test pits and borings extended on the Site documented the presence of petroleum-contaminated soils in the vicinity of the former fuel distribution area, with olfactory and visual evidence of contamination decreasing in soils to the south, east, and west (see the Fieldwork Map in Appendix A, for investigative and remedial locations). It was estimated that an area of approximately 5,000 square feet in the former fuel distribution/storage area was likely to contain significantly elevated hydrocarbon contamination.

The Workplan recommended soil removal and subsequent soil sampling to document the integrity of remaining soils.

- *Presence of Dissolved Petroleum Hydrocarbons in On-site Groundwater*

Groundwater on the Site, as documented by 1994 and 1997 data, contained low levels of dissolved semi-volatile petroleum hydrocarbons at the two (2) monitoring wells located in the fuel distribution area (wells RD-2 and RD-6). Data from 1994 groundwater sampling of RD-2 documented that NYSDEC water quality standards were exceeded for three (3)

hydrocarbons: naphthalene (120 parts per billion [ppb, or µg/l], 1-methyl naphthalene (380 ppb), and 2-methyl naphthalene (480 ppb). Data from 1994 groundwater sampling of RD-6 documented that water quality standards were exceeded for one (1) hydrocarbon: 2-methyl naphthalene (120 ppb). Groundwater samples analyzed in January 1997 documented the presence of methyl naphthalene in monitoring well RD-2 at 10 ppb and in monitoring well RD-6 at 5 ppb.

The source of these dissolved hydrocarbons was considered by this office and the NYSDEC to be the contaminated soil in the former fuel distribution area. The excavation of hydrocarbon-contaminated soils (see Section 2.0, below) reduced the likelihood of dissolved hydrocarbons remaining in on-site groundwater.

The Workplan recommended periodic groundwater monitoring, including the replacement of any wells damaged by soil removal activities.

- *Possible Presence of Undissolved Petroleum on Shallow Groundwater*

Petroleum sheens were noted in on-site wells in November 1994 and petroleum odors from purge water were noted during fieldwork conducted in January 1997. No periodic monitoring of petroleum sheens has been conducted to document temporal variations.

This office and the NYSDEC considered the source of documented sheens to be petroleum-contaminated soils, which were present on the Site. The removal of this contaminated soil reduced the likelihood of future sheening on groundwater.

## **2.0 Summary of Remediation Services**

### **2.1 Summary of Services**

ESI conducted the following remedial activities on the Site, which were identified and approved in the Remedial Action Workplan approved under the Voluntary Cleanup Agreement:

1. Supervised the demolition and removal of the on-site AST cradles and pump house;
2. Determined the presence or absence of an additional underground storage or overfill tank in the vicinity of the former fuel-distribution area;
3. Coordinated the excavation of a total of approximately 582 tons of petroleum contaminated soil from the former fuel-distribution area identified at the east end of the property, documenting proper off-site disposition; and,
4. Installed an additional groundwater monitoring well in the north portion of the excavated area to replace monitoring well RD-2, and monitored groundwater quality on a periodic basis.

### **2.2 Demolition Activities**

#### **2.2.1 Methodology**

Demolition activity to remove the former on-site pump house and concrete AST cradles was conducted on October 18 and 19, 1999. Prior to commencement of demolition activity, personnel from the local electric utility disconnected overhead power lines, which had serviced the pump house structure. Subsequent to the removal of the power lines, H.B. Wiltse Contracting, Inc. (Wiltse) demolished the on-site pump house building and twenty-four (24) concrete AST cradles. All solid waste generated from the pump house demolition activity was transferred to a waste disposal container provided by Royal Carting Company. Several days after the completion of demolition, the container was removed by Royal Carting Company. Concrete demolition material from the AST cradles was utilized as on-site fill material in the area of excavation described in the following paragraphs.

#### **2.2.2 Observations**

Surface soils located beneath the former pump house exhibited no visual or olfactory evidence of contamination. However, significant staining was noted in the area below the concrete AST cradles and in the area directly north of the former pump house in the fuel delivery area.

## **2.3 Excavation of Petroleum-Contaminated Soil**

### **2.3.1 Site Preparation Services**

Prior to the initiation of fieldwork, a request for a complete utility markout of the subject property was submitted by ESI, as required by New York State Department of Labor regulations. Confirmation of underground utility locations was secured, and a field check of the utility markout was conducted prior to excavation and removal of soil.



### **2.3.2 Excavation Methodology and Observations**

Soil excavation was conducted by Wiltse (under the supervision of ESI personnel) on October 18, 19, and 20, 1999. All excavation was completed utilizing a track-mounted excavator. An assessment of subsurface soil characteristics, including soil type, the presence of foreign materials, field indications of contamination, and instrument indications of contamination (i.e., photo-ionization detector (PID) readings), was made by ESI personnel during the soil excavation. ESI personnel maintained field logs documenting the physical characteristics of the encountered soil, PID readings, and any field indications of contamination for all encountered material.

The approximate excavation area (located at the eastern end of the property) extended approximately 60 feet to the south and approximately 50 feet to the east from a point beneath the former pump house building. Maximum depth of the excavation was five (5) feet below surface grade (bsg). Excavated material encountered during remedial soil work consisted mostly of a medium to dark-brown soil and gravel mix containing high concentrations of black ash, slag and coal.

Based on field observations and previous laboratory data, excavated soils were stockpiled on, and covered with, 6-mil plastic sheeting at a designated on-site location pending off-site removal.

During soil excavation activities, monitoring wells RD-2 and RD-6, located in the former fuel storage and distribution area, were destroyed. The loss of these wells was anticipated in the Workplan.

The excavation site was backfilled utilizing on-site fill from a location approximately 30 feet west of the excavation. Fill material was comprised of medium-brown sand intermixed with cobbles, boulders, and concrete rubble. Due to the water content and instability of existing soils, this fill material was considered suitable. It was not necessary to import fill material from off-site during site restoration activities. A bulldozer was utilized to re-grade the entire area after backfilling.

On April 26, 2000, a total of approximately 582 tons of petroleum-contaminated stockpiled soil material was removed from the site by Mangiardi Brothers Trucking and delivered to TT Materials Corp. for proper disposal. Soil disposal manifests are included in Appendix B of this Report.

### **2.3.3 Sample Collection**

After completion of the excavation described above, and prior to backfilling and site re-grading, confirmatory endpoint soil samples were collected from the excavation. All soil samples were collected in a manner consistent with NYSDEC sample collection protocols. Decontaminated stainless steel trowels and dedicated gloves were used at each sample location to place the material into clean laboratory supplied jars. All sample collection equipment was properly decontaminated prior to the initiation of sampling and between sample locations to avoid cross-contamination.

After all sample collection, the sample containers were placed in a cooler prior to transport to the laboratory. The soil samples were transported via courier to York Analytical Laboratories, Inc. (ELAP Certification Number 10854) for chemical analyses. Appropriate chain of custody procedures were followed.

Three (3) soil samples were collected from the excavation following the initial excavation activity during October 1999. Soil samples S-1 and S-3 were collected from the walls of the excavation. Sample Base 6' was collected from the base of the excavation. Upon completion of excavation services, standing water was noted in the excavation at a depth from 1-3 feet bsg. A petroleum sheen was observed on the water surface.

Five (5) additional soil samples were collected from the former excavation area on March 27, 2003 as required by the NYSDEC to provide additional post excavation soil data. Soil samples 2PE-1, 2PE-2, 2PE-3, 2PE-4 and 2PE-5 were collected from various points throughout the former excavation from 5-7 feet in depth. Complete Laboratory Reports are provided in Appendix C.

### **2.3.4 Laboratory Analysis of Post-Excavation Samples**

#### **Laboratory Submission**

Soil samples S-1, S-3, and Base 6', collected on October 19 and 20, 1999, were analyzed for a fraction of semi-volatile organic compounds (SVOCs) known as poly-nuclear aromatic hydrocarbons (PAHs), utilizing USEPA method 8270. Soil samples 2PE-1 (5-7') through 2PE-5 (5-7') collected on March 27, 2003 were analyzed for VOCs and PAHs (utilizing USEPA Methods 8021 and 8270, respectively) and RCRA metals. Laboratory analytical results are provided in Tables 4, 5, and 6 of Appendix D of this report.

#### **Laboratory Results**

##### *October 1999 Preliminary Confirmatory Sampling*

Soil samples S-1 and S-3 exhibited concentrations of four (4) PAHs below NYSDEC recommended soil cleanup objectives. Soil sample Base (6') did not exhibit concentrations of PAHs above minimum detection limits.

##### *March 2003 Follow-up Confirmatory Sampling*

Soil samples 2PE-1 (5-7'), 2PE-2 (5-7'), 2PE-4 (5-7') and 2PE-5 (5-7') exhibited concentrations of five (5) PAHs below NYSDEC recommended soil cleanup objectives. No PAHs were detected in soil sample 2PE-3 (5-7'). All five (5) soil samples exhibited concentrations of 1-5 VOCs at concentrations below NYSDEC recommended soil cleanup objectives. All soil samples exhibited concentrations of metals below NYSDEC recommended cleanup objectives, with the exception of marginal exceedences for arsenic and selenium in soil sample 2PE-1 (5-7').

### **2.3.5 Stockpile Analysis and Soil Disposal**

Three (3) soil samples (SS-1, SS-2, and SS-3) were collected from the soil stockpile and were submitted for analysis of total petroleum hydrocarbons (TPH), VOCs, SVOCs, RCRA metals, PCBs, total sulphur, total cyanide, and PH in accordance with the requirements of the waste disposal facility.

Results of the sampling indicated the presence of chemical compounds (VOCs and PAHs) typically encountered in petroleum-contaminated soils. In addition to these petroleum contaminants, arsenic and lead were detected at concentrations exceeding established NYSDEC recommended soil cleanup objectives. Arsenic levels in the stockpile samples had a peak concentration of 35.2 parts per million (ppm, or mg/Kg) (recommended soil cleanup objective 7.5 ppm) and total lead levels had a peak concentration of 8,390 ppm (recommended soil cleanup objective is site background, typically 250 ppm in urban soils).

According to the soil repository guidelines, the identified levels of lead in the stockpiled soil exceeded established limits for total weight lead and additional testing was warranted. Arsenic was identified in the samples at acceptable concentrations.

As a result of the laboratory findings, ESI conducted additional sampling of the stockpiled soil. Twelve additional soil samples were collected from the stockpile. Grab samples were collected in a manner designed to determine the presence or absence of "hot spots" where lead levels may

be uncharacteristically high. Samples S1, S2, S3, S4, S5, and S6 were collected from the southern side of the stockpile and samples N1, N2, N3, N4, N5, and N6 were collected from the northern side of the soil stockpile. All samples were collected at 8' to 10' lateral intervals.

All soil samples were analyzed for total weight lead and leachable lead. Laboratory analysis of the soil samples indicated the presence of total lead levels ranging from 78.6 ppm to 3,390 ppm. Leachable lead is present at levels of 0.082 mg/l to 7.72 mg/l in the soil samples. Lead levels identified in soil sample S-2 exceeded the NYSDEC designated maximum contaminant level (MCL) for TCLP lead of 5.0 mg/l. The source of elevated lead levels in these stockpiled soil samples is unknown. Full laboratory reports for all analyzed soil samples are included in Appendix C of this Report.

Based upon the low lead levels detected in the majority of the stockpiled soil samples, a statistical analysis was submitted to the NYSDEC with a request that the stockpiled soil be disposed of as non-hazardous. After consideration of the analytical analysis submitted, the NYSDEC concurred that the on-site stockpile could be treated as non-hazardous petroleum contaminated soil. Despite written authorization from the NYSDEC, the soil repository would not accept the stockpiled soil.

TT Materials, a company which treats and recycles soil for use as paving material in the Earthpave system, was contacted regarding acceptance of the stockpiled soil. After several additional samples were submitted to meet TT Material's soil disposal analytical criteria (for TPH), the soil was accepted and processed by TT Materials (see Appendix C for laboratory results).

Approximately 142 tons of stockpiled soil was transferred to TT Materials between April 21 and April 22, 2000. The remainder of the stockpiled soil, approximately 440 tons, was transferred to TT Materials on April 26, 2000. Waste disposal manifests are included as Appendix B of this Report.

### **2.3.6 Site Restoration Activities**

In October 1999, ESI personnel directed restoration activities at the eastern excavated portion of the Site, including the backfilling and re-grading of approximately 500 tons of imported, clean fill materials. Concrete rubble from the former tank cradles was used as suitable base fill material due to the presence of water in the excavation.

## **2.4 Underground Storage Tank Investigation**

On October 20, 1999, test pits were extended in the eastern area of the property in the vicinity of soil piles that were suspected of containing an underground storage tank or overfill tank.

### **2.4.1 Methodology**

Five (5) test pits were extended by Wiltse in areas suspected of containing USTs or petroleum overfill tanks. (The tanks were reportedly removed by the former property owner; the test pits were extended, however, to confirm this information). The suspected tank(s) were reportedly located in the eastern section of the property where a soil berm or pile was visible. The test pits were extended to a maximum depth of 7 feet bsg utilizing a track-mounted excavator. Material encountered during the extension of the test pits included coarse gravel, coal ash, and slag.

### **2.4.2 Observations**

A petroleum odor and sheen were consistently noted on groundwater encountered at three (3) feet bsg during the excavation of test pits. No subsurface storage tanks (or related piping) were encountered during the extension of test pits.

## **2.5 Groundwater Monitoring**

This section of the Report summarizes the installation and sampling of groundwater monitoring wells on the Site. Field observations of groundwater quality, and laboratory water quality data, are presented below.

### **2.5.1 Installation and Monitoring of Groundwater Observation/Recovery Sumps**

Following excavation activity on the subject property in October 1999, two (2) groundwater well observation/recovery sumps (O/RW-1 and O/RW-2) were installed on the Site. The sumps were installed within the perimeter of the excavation and soil removal activity area with the expressed purpose of establishing a potential product skimming and recovery system in the event that measurable and recoverable concentrations of petroleum were encountered. NYSDEC representatives Larry Ricci and Pete DiCicco inspected the Site between October 18 and October 20, 1999 during the installation of the sumps. The NYSDEC endorsed the installation of the sumps as observation/recovery points.

The sumps were constructed of 18-inch diameter, 0.3-inch slotted ABS plastic pipe (schedule 40), and were approximately ten (10) feet in length. Two (2) pits were excavated to a depth of approximately seven (7) feet bsg. A sump pipe was inserted vertically into each of these pits with approximately three (3) feet of pipe protruding above surface grade. The area surrounding each of the pipes was then backfilled with existing on-site material and restored to grade. Each sump was fitted with a plastic end cap.

A petroleum sheen and droplets of free product were observed on groundwater in the excavation at a depth of 2-3 feet bsg during the installation of the sumps in October 1999. Observations in November and December 1999 indicated the limited presence of petroleum droplets in the sumps and absorbent material was utilized to remove the free product. Further observation during the February 1, 2000 inspection indicated a recurrence of petroleum droplets and a slight sheen. No measurable volume of free product was observed in either of the sumps following installation through early 2000.

Observations were made during quarterly groundwater-sampling events conducted from December 1999 through Fall 2001. A written log was kept for each visit and observation. The protocol for well observation included opening the well cap and screening the headspace with a PID. Wells were sampled with disposable bailers and examined in the field for indications of floating or measurable product levels. During the period of January 9, 2001 and April 17, 2002 the wells were visited and monitored seven (7) times. PID readings during this period ranged from 0.0 ppm to 30 ppm. A slight petroleum odor and sheen was consistently noted at both wells during each visit. No significant volume of measurable product was observed at either well during this period of monitoring. Absorbent booms were inserted into the wells commencing on January 9, 2001 and changed within several months. Observations made during monthly inspections of the observation/recovery wells O/RW-1 and O/RW-2 indicated the continued presence of varying intensities of petroleum odors and visible evidence of contamination consisting of oil staining on the recovery booms. Bailers inserted into the product recovery wells continued to indicate the absence of measurable levels of free product in the well column. Observations of the saturated booms indicated that only a small volume of product was being recovered. No detectable difference was noted in the sheen or odors recorded at the wells following the use of absorbent materials. The use of absorbent booms was discontinued after October 8, 2001. Observation/monitoring logs are included as Appendix D of this document.

### **2.5.2 Monitoring Well Sampling Regiment and Temporary Well Installation**

Four (4) on-site monitoring wells (installed by ESI in 1994) existed in January 1997: RD-2, RD-3, RD-4, and RD-6. Four (4) off-site monitoring wells were located off adjacent properties, including RD-7 and RD-9 (installed by ESI in 1994) on the adjoining property to the north, and RD-K1 and RD-K2 (installed prior to 1994) on the adjoining property to the south.

Laboratory data from the groundwater sampling events referenced below are presented in Tables 1, 2, and 3 in Appendix D.

#### **January 1997 Sampling Event**

On January 15, 1997 ESI sampled on-site monitoring wells RD-2, RD-3, RD-4 and RD-6, and off-site monitoring wells RD-7, RD-9, RD-K1 and RD-K2 to document the presence or absence of on-site groundwater contamination and to determine the potential for off-site migration of contaminated groundwater. One (1) petroleum contaminant, 1-methyl naphthalene, was detected at concentrations at or below the NYSDEC groundwater protection standard of 10 ppb in RD-2 (10 ppb) and in RD-6 (5 ppb). No other PAHs were detected in water samples from RD-2 or from RD-6. PAHs were not detected in any of the other four (4) monitoring wells. Detection limits were either at or below NYSDEC groundwater protection standards for all analyzed compounds.

Laboratory analysis of these wells in October 1994 had previously documented the presence of several petroleum contaminants at concentrations above NYSDEC groundwater protection standards. Naphthalene (120 ppb), 1-methyl naphthalene (380 ppb), and 2-methyl naphthalene (480 ppb) were detected in RD-2, and 2-methyl naphthalene (120 ppb) was detected in RD-6. These data indicate a decrease in contaminant concentrations in these wells from 1994 to January 1997. For both sampling events, petroleum contamination was only detected in the wells in the immediate vicinity of the fuel storage and distribution area (RD-2 and RD-6).

#### **April 1997 Groundwater Sampling Event**

On-site monitoring wells RD-2, RD-3, RD-4 and RD-6, and off-site monitoring wells RD-7 and RD-9 (located to the north of the Site) were sampled on April 17, 1997. As in the January 1997 sampling event, 1-methyl naphthalene was detected at low concentrations in RD-2 (9 ppb) and in RD-6 (13ppb). No other PAHs were detected in water samples from RD-2 or from RD-6. PAHs were not detected in any of the other four (4) monitoring wells. Detection limits were either at or below NYSDEC groundwater protection standards for all analyzed compounds. Laboratory data from the April 1997 sampling event are consistent with the previous January 1997 data and do not indicate significant changes in groundwater quality.

The presence of only low levels of detectable dissolved petroleum hydrocarbons in water samples collected from within the area of known contamination suggests that petroleum hydrocarbons in the soil are not fully dissolving in the groundwater. The continued absence of detectable concentrations of petroleum hydrocarbons in the off-site wells located off the adjoining property to the north suggest that contaminated groundwater has not migrated off-site.

Laboratory data are consistent with field observations which identified petroleum odors and sheens on the purgewater collected from RD-2 and RD-6. However, laboratory data appear to contradict field observations of contamination (odors) that were noted in the other on-site wells (no elevated levels of petroleum hydrocarbons were detected in these wells).

### **October 2000 Groundwater Sampling Event**

Monitoring wells RD-2 and RD-6, located in the former fuel storage and distribution area, were destroyed during soil removal activities in 1999. On October 13, 2000, remaining on-site monitoring wells RD-3 and RD-4, and remaining off-site wells RD-7 and RD-9, were sampled. No VOCs or PAHs were detected in any samples submitted for analysis. Petroleum odors, however, were noted in monitoring wells RD-3 and RD-4. The observation/recovery wells located south of the former fuel storage and distribution area also exhibited field indications of petroleum contamination, including petroleum odors and visible sheens on the surface water.

Given the loss of monitoring wells RD-2 and RD-6 located in the former fuel storage and distribution area, a useful comparison of groundwater data from October 2000 with previously generated data could not be conducted. The presence of field indications of petroleum contamination, including a strong petroleum odor and visible sheen in water observed in the observation/recovery wells located south of the former fuel storage and distribution area, is an indication that some petroleum hydrocarbons were present at unknown concentrations in this portion of the property.

### **2001 Temporary Groundwater Monitoring Well Installation and Sampling Event**

On February 12, 2001, a temporary groundwater monitoring well (RD-10) was installed in the vicinity of the former fuel storage and distribution area at a location approximately midway between former wells RD-2 and RD-6 (destroyed during soil removal activities). The boring for this well was completed using a hand-held, direct push sampling spoon. The well was constructed using 1-inch internal diameter PVC well casing and slotted well screening. RD-10 was completed as a stick-up well and was secured with a well cap.

### **March 2001/June 2001 Groundwater Sampling Event**

Monitoring wells RD-3, RD-4, RD-7, RD-9, and RD-10 were sampled during March and June, 2001. Of the five (5) sampling locations, only RD-3 and RD-10 (both of which are on-site wells) were found to have elevated contaminant concentrations.

RD-3 exhibited one (1) elevated VOC concentration (naphthalene at 58 ppb, NYSDEC groundwater protection standard of 10 ppb) in the June 2001 sampling. RD-3 also exhibited VOC concentrations of 1,2,4-trimethylbenzene at the NYSDEC groundwater protection standard of 5 ppb. Two (2) other VOCs (1,3,5-trimethylbenzene, and total xylenes), both below NYSDEC groundwater protection standards, were also detected in RD-3. No other VOCs or PAHs were detected in RD-3 during the June 2001 or March 2001 groundwater sampling events.

RD-10 exhibited elevated concentrations of seven (7) VOCs during the March 2001 sampling event. 1,2,4-trimethylbenzene (10 ppb), 1,3,5-trimethylbenzene (37 ppb), Ethylbenzene (7 ppb), isopropylbenzene (17 ppb), n-butylbenzene (190 ppb), sec-butylbenzene (41 ppb), and tert-butylbenzene (49 ppb) were detected above the NYSDEC groundwater protection standard of 5 ppb for these compounds. By comparison, RD-10 exhibited one (1) VOC (toluene at 9 ppb, NYSDEC groundwater protection standard of 5 ppb) in the June 2001 sampling.

RD-10 exhibited concentrations of five (5) PAHs during the March 2001 sampling event. PAHs including acenaphthene (36 ppb), anthracene (17 ppb), fluorine (81 ppb), phenanthrene (79 ppb), and pyrene (22 ppb) were detected above the NYSDEC groundwater protection standard of 5 ppb for these compounds. By comparison, RD-10 exhibited concentrations of two (2) PAHs including anthracene (24 ppb) and phenanthrene (67 ppb) during the June 2001 sampling event. No other PAHs were detected in RD-10 during the March 2001 or June 2001 sampling events.

These data indicated a decrease in the number of detected compounds with only slight fluctuations in concentrations, suggesting that local groundwater conditions have been subjected to seasonal and/or tidal influences.

No detectable concentrations of contaminants were identified during the March 2001 or June 2001 sampling events in water samples from monitoring wells RD-4 (an on-site well located to the south and down-gradient of the former fuel storage and distribution area), or in samples from RD-7 or RD-9 (off-site wells located to the north and up-gradient of the fuel storage and distribution area).

#### **October 2001 Groundwater Sampling Event**

On October 19, 2001, the three (3) remaining on-site monitoring wells (RD-3, RD-4 and RD-10) the off-site monitoring well, located to the north of the subject property (RD-7) were sampled. Monitoring well RD-9, formerly located north of the subject property, was destroyed during debris removal activity on the former "Beacon Salvage" Property.

Laboratory data of groundwater samples obtained from RD-3, RD-4, and RD-7 do not document any measurable concentrations of VOC or PAH contamination above laboratory method detection limits. Detection limits were generally below NYSDEC action levels for VOCs but were above NYSDEC actions levels for some PAH compounds. Purge water from RD-3 and RD-4 exhibited a slight petroleum odor and sheen. No visual or olfactory evidence of contamination was observed during the screening of monitoring well RD-7.

Groundwater samples obtained from monitoring well RD-10 exhibited no detectable concentrations of PAHs and low levels of a three (3) VOCs (isopropylbenzene, n-butylbenzene and n-propylbenzene). The concentrations of all three (3) compounds were below their respective NYSDEC groundwater protection standards. Purge water from RD-10 (temporary monitoring well located in the former fuel storage distribution area) exhibited an obvious odor and sheen.

#### **2.5.3 Comparison with Previous Groundwater Data**

With the installation of temporary monitoring well RD-10 in the vicinity of the former fuel oil storage and distribution area, an accurate ongoing profile and comparison of groundwater conditions was obtainable using data from the October 2000, March 2001, June 2001, and October 2001 sampling events. Provided below is a comparative summary of laboratory data from these previous sampling events.

Of the four (4) remaining sampling locations (RD-3, RD-4, RD-7 and RD-10), only RD-3 and RD-10 (both of which are on-site wells) were ever found to have detectable concentrations of petroleum hydrocarbons. No detectable concentrations of petroleum hydrocarbons have been identified in samples collected from on-site well RD-4 or from off-site wells RD-7 and RD-9 (destroyed during scrap metal and debris removal activities). In June 2001, low concentrations of a few VOCs were found in RD-3; no VOCs or SVOCs were found in this well during either the March 2001 or October 2001 sampling rounds. The concentrations of VOCs found in RD-10 during the October 2001 sampling round ranged from non-detectable to 2 ppb; the previous June 2001 and March 2001 sampling rounds at RD-10 indicated higher concentrations of several VOCs. During the October 2001 sampling round no detected PAHs were identified; previous sampling events indicated two (2) exceedences in June 2001 and five (5) exceedences in March 2001. This data indicates a general decrease in the number of detected compounds with only minimal fluctuations, possibly due to seasonal and/or tidal influences on local groundwater conditions.

### 3.0 CONCLUSIONS AND RECOMMENDATIONS

This office has completed the services summarized in Section 2.0 for the specified portion of the "Beacon Waterfront" property located off Ferry Road in the City of Beacon, Dutchess County, New York. All work was completed in coordination with New York State Department of Environmental Conservation (NYSDEC) personnel and consistent with the Workplan for Site Remediation Activities (Revised May 1999) prepared by ESI, and approved by the NYSDEC (Voluntary Clean-up Index: D3-0004-99-01). Remedial activity outlined in the Workplan commenced during October 1999: petroleum contaminated soil was excavated, stockpiled, and disposed of at a licensed repository; confirmatory samples were collected and analyzed; test pits were extended; groundwater monitor wells were installed (prior to and post 1999), developed, and sampled; observation/recovery wells were installed and monitored; and, all activities were documented in the final Summary Report of Remedial Activities.

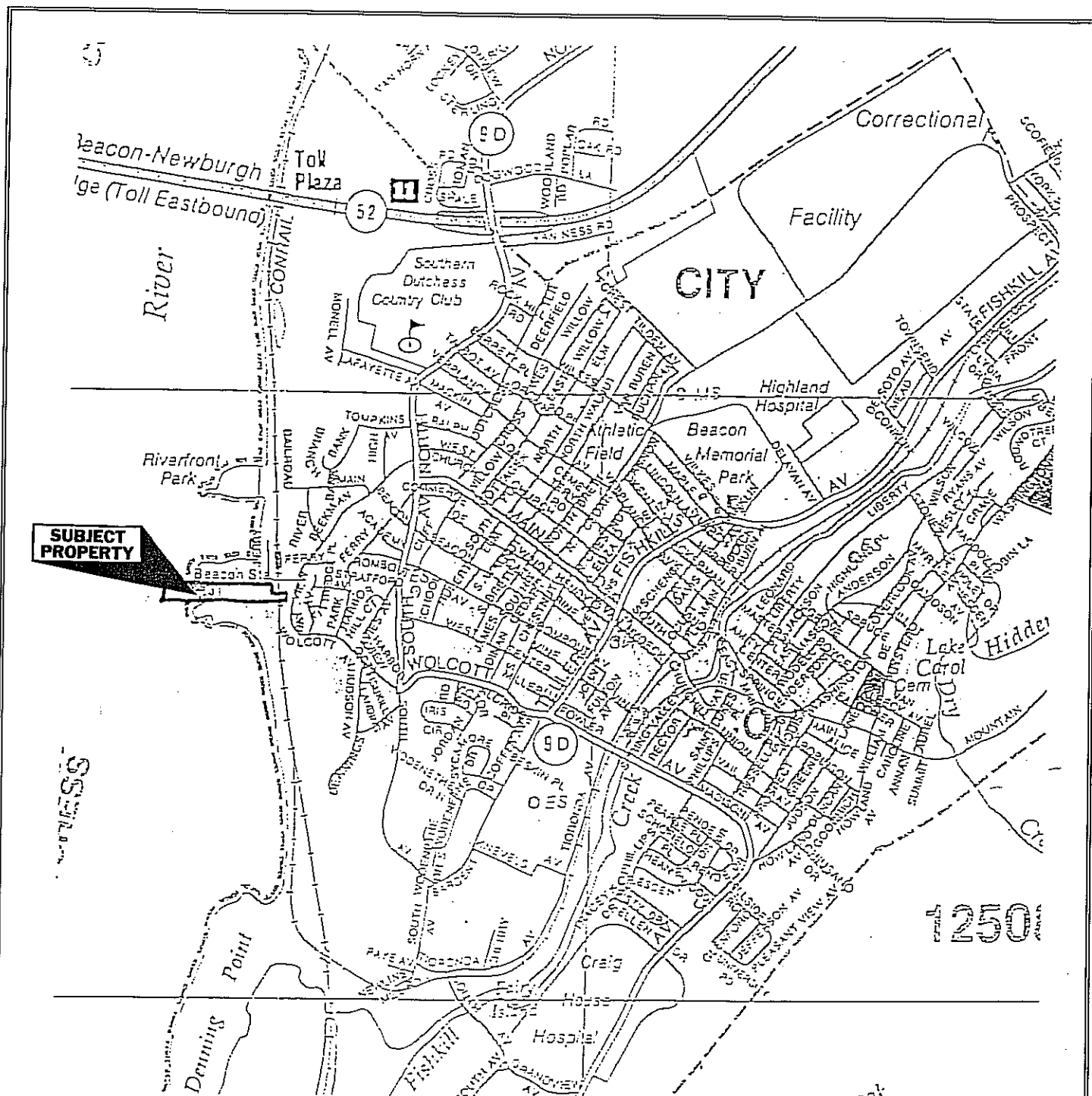
Based on the services provided and data generated, the following conclusions have been made:

1. Approximately 582 tons of petroleum-contaminated soil was removed from the Site in the area of the former fuel storage and distribution area during remedial activities conducted in 1999. Confirmatory endpoint sampling conducted in October 1999 and March 2003 indicate the continued presence of PAHs at concentrations below NYSDEC recommended cleanup objectives. Confirmatory endpoint samples collected in March 2003 indicate the presence of VOCs below NYSDEC recommended soil cleanup objectives.
2. Laboratory data document the absence of any detectable concentrations of VOCs or PAHs in off-site wells (RD-K1, RD-K2, RD-7 and the former RD-9) or in on-site well RD-4. Concentrations of VOCs and SVOCs have been detected in RD-10 (temporary well) and RD-3 throughout the sampling regiment at concentrations above NYSDEC groundwater protection standards. The groundwater data collected from 1994 to 2001 indicate a general decrease in the number of detected compounds, with only minimal fluctuations in concentrations. These data support the conclusion that remaining on-site hydrocarbons are predominately bound to soil particles and do not represent a threat to on-site or off-site groundwater quality.
3. Petroleum odors and an occasional petroleum film continue to be present in the observation/recovery wells, suggesting that low levels of petroleum hydrocarbons remain on the Site in the former fuel storage and distribution area. The petroleum may be present in soil below the seasonal water table, generating odors but not releasing hydrocarbons into the column. This theory is supported by the absence of any measurable thickness of product throughout the observation period in the recovery wells located in the former fuel distribution area.

The following recommendations are made:

1. No further soil remediation is recommended based on the following:
  - Post excavation ("end point") sampling document levels of PAHs below NYSDEC guidance values.
  - Soils containing these low levels of PAHs are currently under two (2) feet of compacted soil cover, with additional soils proposed to be imported prior to site development. As a result, no direct contact with these soils will occur.
  - Remaining contaminants do not represent a source of significant groundwater contamination (see Paragraph 2, below).
2. No active groundwater remediation is recommended, based on continued groundwater quality data documenting limited contamination, but no off-site migration of hydrocarbons.
3. No groundwater monitoring is recommended, based on the absence of significant variation in groundwater quality over the past three (3) years. The absence of on-site groundwater usage supports the recommendations to cease monitoring efforts and to properly close on-site wells.





Source: Hagstrom Map Company, dated 1997

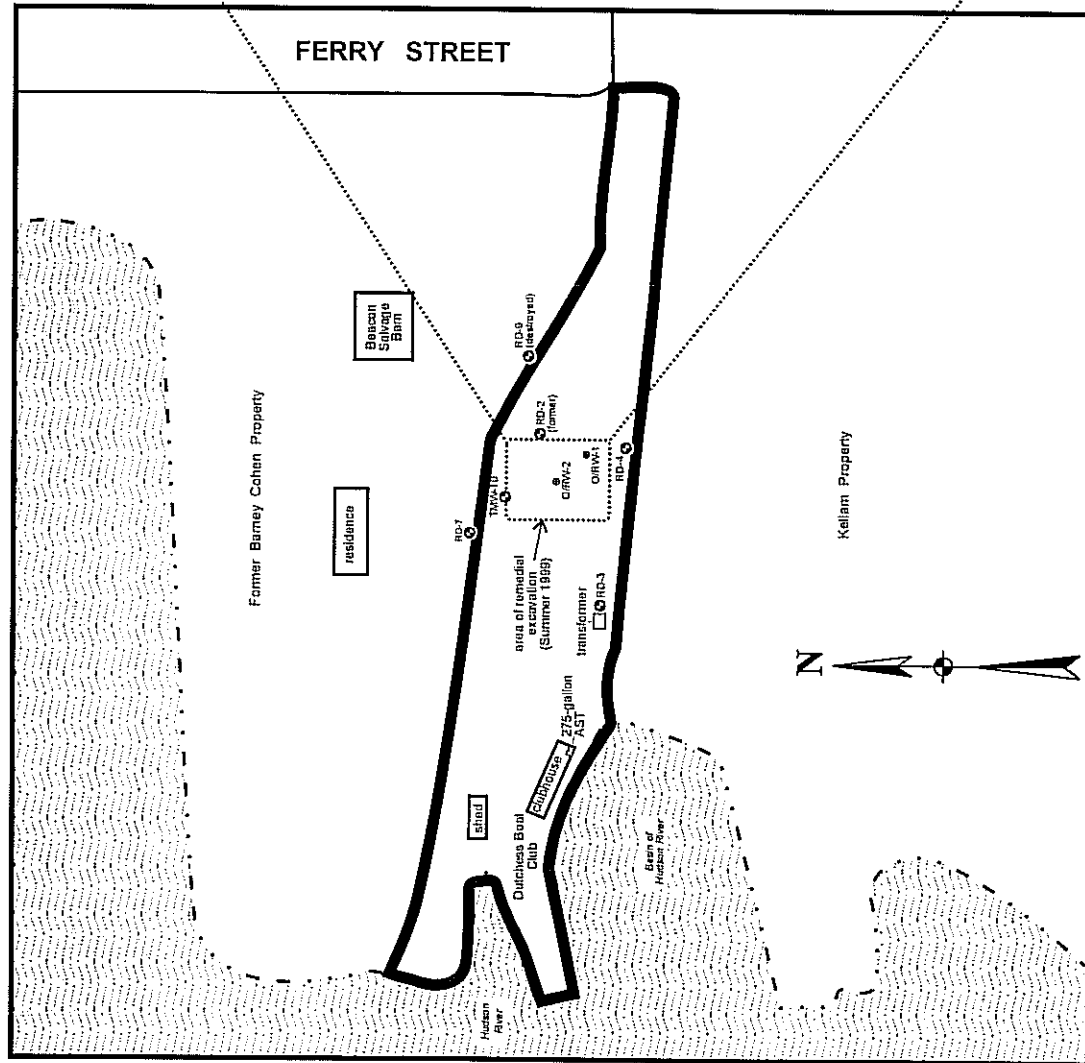
**Site Location Map**  
 Beacon Waterfront Site  
 Former Garret Storm, Inc. MOSF Site  
 Ferry Street  
 City of Beacon  
 Dutchess County, New York



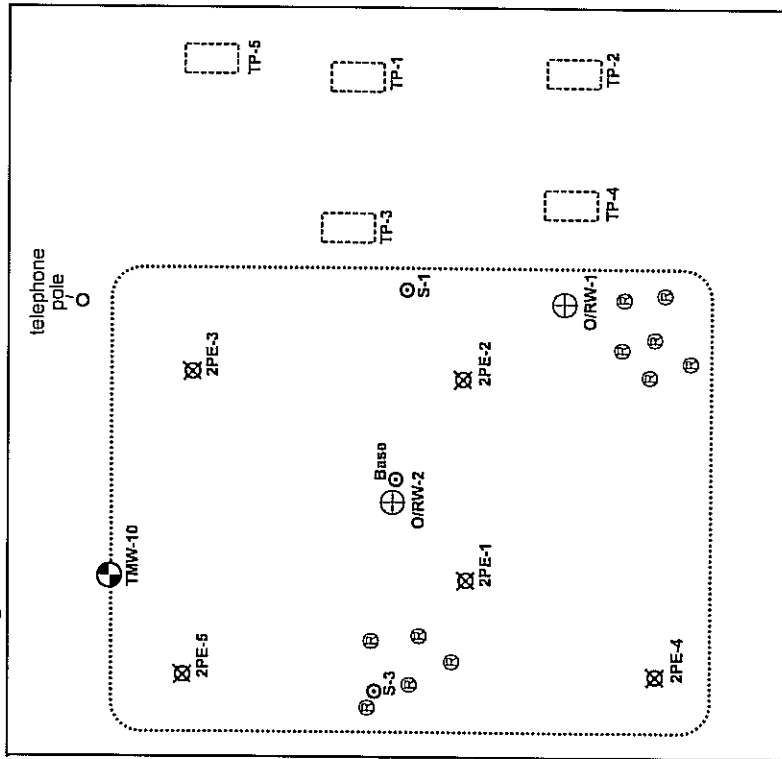
ESI File: SG96152.50R

Date: August 2003

Appendix A



Enlarged View



Feature locations are approximate.

# Fieldwork Map - March 2003

Beacon Waterfront Site  
Former Garret Storm, Inc. MOSF  
Ferry Road  
City of Beacon  
Dutchess County, New York

Legend:

- subject property border
- observation/recovery well
- active or temporary monitoring well
- soil sample (October 1999)
- test pit (October 1999)
- post excavation soil sample (March 2003)
- refusal locations (unable to dig at subsurface levels)

ESI File: SG96152.50R

June 2003 (Revised August 2003)

Not to Scale

Appendix A

**Table 1: Summary of Detected PAHs for RD-2, RD-3, RD-4, and RD-6 for Garret Storm**

All concentrations are expressed in parts per billion (ppb). Results in **bold** exceed designated action levels.

Compound (USEPA Method 8270)	Action Level <sup>1</sup>	RD-2				RD-3				RD-4						RD-6								
		10/ 1994	01/ 1997	10/ 2000	03/ 2001	10/ 1994	01/ 1997	10/ 2000	03/ 2001	06/ 2001	10/ 2001	10/ 1994	01/ 1997	10/ 1994	03/ 2001	06/ 2001	10/ 2001	10/ 1994	01/ 1997	10/ 2000				
Acenaphthene	5	ND	ND	Monitoring Well Destroyed During 1999 Soil Excavation												ND	ND	ND	ND	ND	ND			
Acenaphthylene	5	ND	ND	Monitoring Well Destroyed During 1999 Soil Excavation												ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	5	ND	ND	Monitoring Well Destroyed During 1999 Soil Excavation												ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Anthracene	.002 <sup>2</sup>	ND	ND	Monitoring Well Destroyed During 1999 Soil Excavation												ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Pyrene	.002 <sup>2</sup>	ND	ND	Monitoring Well Destroyed During 1999 Soil Excavation												ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (b) Fluoranthene	.002 <sup>2</sup>	ND	ND	Monitoring Well Destroyed During 1999 Soil Excavation												ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (g,h,i) Perylene	.002 <sup>2</sup>	ND	ND	Monitoring Well Destroyed During 1999 Soil Excavation												ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (k) Fluoranthene	5	ND	ND	Monitoring Well Destroyed During 1999 Soil Excavation												ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	.002 <sup>2</sup>	ND	ND	Monitoring Well Destroyed During 1999 Soil Excavation												ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenz (a,h) Anthracene	5	ND	ND	Monitoring Well Destroyed During 1999 Soil Excavation												ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	5	ND	ND	Monitoring Well Destroyed During 1999 Soil Excavation												ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	5	ND	ND	Monitoring Well Destroyed During 1999 Soil Excavation												ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno (1,2,3-cd) Pyrene	.002 <sup>2</sup>	ND	ND	Monitoring Well Destroyed During 1999 Soil Excavation												ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	5	120	ND	Monitoring Well Destroyed During 1999 Soil Excavation												ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Methylnaphthalene	10	380	5	Monitoring Well Destroyed During 1999 Soil Excavation												ND	NA	NA	ND	ND	NA	NA	ND	10
2-Methylnaphthalene	5	480	ND	Monitoring Well Destroyed During 1999 Soil Excavation												ND	NA	NA	ND	ND	NA	NA	ND	120
Phenanthrene	5	ND	ND	Monitoring Well Destroyed During 1999 Soil Excavation												ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	5	ND	ND	Monitoring Well Destroyed During 1999 Soil Excavation												ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

1. Source: NYSDEC Water Quality Regulations Surface Water and Groundwater Classifications and Standards, New York State Codes, Rules and Regulations, Title 6, Chapter X parts 700-706, including amendments through August 4, 1999.  
ND - Compound not detected  
NA - Not Analyzed

Notes:

- Source: NYSDEC Water Quality Regulations Surface Water and Groundwater Classifications and Standards, New York State Codes, Rules and Regulations, Title 6, Chapter X parts 700-706, including amendments through August 4, 1999.
- ND - Compound not detected
- NA - Not Analyzed

**Table 2: Summary of Detected PAHs for RD-7, RD-9, RD-10 (as a replacement for RD-2 and RD-6), RD-K1, and RD-K2 for Garret Storm**  
All concentrations are expressed in parts per billion (ppb). Results in **bold** exceed designated action levels.

Compound (USEPA Method 8270)	Action Level <sup>1</sup>	RD-7								RD-9				RD-10			RD-K1		RD-K2	
		10/ 1994	01/ 1997	10/ 2000	03/ 2001	06/ 2001	10/ 2001	10/ 1994	01/ 1997	10/ 2000	03/ 2001	06/ 2001	10/2001	10/ 1994	01/ 1997	10/2000 and 03/2001	01/ 1997	10/2000 and 03/2001		
Acenaphthene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	No sample collected		
Acenaphthylene	5	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Anthracene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Benzo (a) Anthracene	.002 <sup>2</sup>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Benzo (a) Pyrene	.002 <sup>2</sup>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Benzo (b) Fluoranthene	.002 <sup>2</sup>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Benzo (g,h,i) Perylene	.002 <sup>2</sup>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Benzo (k) Fluoranthene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Chrysene	.002 <sup>2</sup>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Dibenz (a,h) Anthracene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Fluoranthene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Fluorene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Indeno (1,2,3-cd) Pyrene	.002 <sup>2</sup>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Naphthalene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
1-Methylnaphthalene	10	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
2-Methylnaphthalene	5	ND	ND	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Phenanthrene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			
Pyrene	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND			

Notes:

1. Source: NYSDEC Water Quality Regulations Surface Water and Groundwater Classifications and Standards, New York State Codes, Rules and Regulations, Title 6, Chapter X parts 700-706, including amendments through August 4, 1999.  
ND - Compound not detected  
NA - Not Analyzed

Notes:

- Source: NYSDEC Water Quality Regulations Surface Water and Groundwater Classifications and Standards, New York State Codes, Rules and Regulations, Title 6, Chapter X parts 700-706, including amendments through August 4, 1999.
- ND - Compound not detected  
NA - Not Analyzed

**Table 3: Summary of Detected VOCs for RD-2, RD-3, RD-4, RD-6, RD-7, RD-9, and RD-10** (as replacement for RD-2 and RD-6) for Garret Storm  
All concentrations are expressed in parts per billion (ppb). Results in **bold** exceed designated action levels.

Detected VOC Compounds	Action Level <sup>1</sup>	RD-2		RD-3			RD-4			RD-6		RD-7			RD-9			RD-10	
		01/1997	10/2000 and 03/2001	10/2000	03/2001	06/2001	10/2001	10/2000	03/2001	06/2001	10/2001	10/2000	03/2001	06/2001	10/2000	03/2001	06/2001	10/2001	06/2001
1,2,4-Trimethylbenzene	5	ND	Monitoring Well Destroyed During 1999 Soil Excavation	ND	ND	5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND		ND	ND	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	0.7	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	5	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	10	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2
Naphthalene	10	ND		ND	ND	58	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1
o-Xylene	5	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2
p-&m-Xylenes	5	ND	Monitoring Well Destroyed During 1999 Soil Excavation	ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	5	ND		ND	ND	2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	5	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	5	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9

Notes:

1. Source: NYSDEC Water Quality Regulations Surface Water and Groundwater Classifications and Standards, New York State Codes, Rules and Regulations, Title 6, Chapter X parts 700-706, including amendments through August 4, 1999.

ND - Compound was analyzed for but was not detected

NA - Not Analyzed

NS - No sample collected

**Table 4: Summary of PAHs in Soil Samples from October 19-20, 1999 and March 27, 2003**All results provided in µg/kg (ppb). Results in **bold** exceed designated action levels.

Compound (USEPA Method 8270)	Action Level <sup>1</sup>	Sample Identification							
		S-1	S-3	Base 6'	2PE-1 (5-7')	2PE-2 (5-7')	2PE-3 (5-7')	2PE-4 (5-7')	2PE-5 (5-7')
Acenaphthene	50,000	3,000	2,100	ND	3,700	3,600	ND	ND	ND
Anthracene	50,000	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (a) Anthracene	224	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
Benzo (a) Pyrene	61	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
Benzo (b) Fluoranthene	1,100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (k) Fluoranthene	1,100	ND	ND	ND	ND	ND	ND	ND	ND
Benzo (g,h,i) Perylene	50,000	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	400	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
Dibenzo (a,h) Anthracene	14	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
Fluoranthene	50,000	ND	ND	ND	ND	ND	ND	4,900	ND
Fluorene	50,000	5,100	3,700	ND	5,300	8,100	ND	ND	ND
Indeno (1,2,3-cd) Pyrene	3,200	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	13,000	ND	2,200	ND	8,200	4,600	ND	ND	ND
Phenanthrene	50,000	8,800	6,500	ND	5,500	14,000	ND	6,300	9,800
Pyrene	50,000	ND	ND	ND	5,700	7,000	ND	ND	ND

Notes:

1. Source: NYSDEC Technical and Administrative Guidance Memorandum #4046 (TAGM) (January 24, 1994) as modified by subsequent, relevant NYSDEC Records of Decision (RODs).

\* = Reported minimum detection levels are above TAGM action levels.

ND = Not Detected.

**Table 5: Summary of Detected VOCs in Soil Samples from March 27, 2003**

All results measured in µg/kg-ppb. Results in **bold** exceed designated action levels.

Compound (USEPA Method 8260)	Action Level <sup>1,2</sup>	Sample Identification				
		2PE-1 (5-7')	2PE-2 (5-7')	2PE-3 (5-7')	2PE-4 (5-7')	2PE-5 (5-7')
Benzene	60	15	ND	ND	ND	ND
Ethylbenzene	5500	350	350	16	39	19
o-Xylene	1200	120	ND	ND	ND	ND
p-&m-Xylenes	1200	980	300	ND	ND	37
Toluene	1500	19	ND	ND	ND	ND
Notes:						
1. Source: <u>NYSDEC Technical and Administrative Guidance Memorandum #4046 (TAGM)</u> (January 24, 1994) as modified by subsequent, relevant NYSDEC Records of Decision (RODs).						
2. Source: <u>NYSDEC Spill Technology and Remediation Series (STARS) Memo #1</u> , July 1993.						
ND = Not Detected						

**Table 6: Summary of RCRA Metals in Soils from March 27, 2003**

All data provided in mg/kg. Concentrations shown in **bold** exceed NYSDEC established action levels.

Metals	Background Levels <sup>1</sup>	Action Levels <sup>1</sup>	Sample Identification				
			2PE-1 (5-7')	2PE-2 (5-7')	2PE-3 (5-7')	2PE-4 (5-7')	2PE-5 (5-7')
Arsenic	3 - 12	7.5	<b>38.1</b>	3.07	6.11	7.48	6.95
Barium	15 -600	300	37.9	20.7	27.6	35.1	32.7
Cadmium	0.1 - 1	1	ND	ND	ND	ND	ND
Chromium	1.5 - 4.0	10	7.43	4.61	6.22	5.73	8.53
Lead	4 - 61	250	48.4	11.8	123	27.3	63.7
Mercury	0.001 - 0.2	0.1	ND	ND	ND	ND	ND
Selenium	0.1 - 3.9	2	<b>2.54</b>	ND	ND	ND	ND
Silver	NP	SB	ND	ND	ND	ND	ND
Notes: 1. Source: NYSDEC <u>Technical and Administrative Guidance Memorandum #4046</u> (January 24, 1994) as modified by subsequent, relevant NYSDEC Records of Decision (RODs) ND = Not detected above specified detection limit SB = Site Background							



## **APPENDIX C**

### **Fieldwork Observation Tables**

**Table 1: Fieldwork Observations (Page 1 of 8)**

(NEC = No odors or visual evidence of contamination. The term fill indicates the presence of non-native material, generally variable in texture.)

Sampling Site	Location (approximate distances)	Depth	Soil Characteristics	Groundwater Encountered	PID Reading (ppm)	Field Observations
SS-1	80' east of the midpoint of the barn's eastern wall	0-2"	Dry, medium brown, sandy loam	No	0.0	NEC
SS-2	17' southeast of the northeast corner of the barn	0-2"	Dry, light, whitish-brown, sand	No	0.0	NEC
SS-3	51' west of point on the western barn wall 12' north of the barn's southwest corner	0-2"	Dry, medium brown, sandy loam with coal	No	0.0	NEC
SS-4	40' north of the northeast corner of house patio, 15' south of the northern property boundary	0-2"	Dry, medium brown, sandy loam with coal	No	0.0	NEC
SS-5	145' northwest of northwest corner of house patio, 27' west of chain link fence	0-2"	Dry, brown to black, sandy loam with coal	No	0.0	NEC
SS-6	95' northeast of northeast corner of concrete pad, 148' north of northeast corner of shed on western portion of property	0-2"	Dry, brown to black, sandy loam with coal	No	0.0	NEC
SS-7	8' east of point on east side of concrete pad 15' south of it's northeast corner	0-2"	Dry, medium brown, sandy loam with coal	No	0.0	NEC
SS-8	8' east of southeast corner of shed on western portion of property, 74' northwest of northwest corner of boathouse	0-2"	Dry, medium brown, loamy sand	No	0.0	NEC
SS-9	23' southwest of southwest corner of shed in central portion of property	0-2"	Dry, medium, brown to black, loamy sand to sandy loam with coal	No	0.0	NEC
SS-10	50' south of point on southern wall of house 14' west of southeast corner of house	0-2"	Dry, dark, blackish brown, medium sand with significant amounts of coal	No	0.0	NEC
SS-11	84' south of a point 12' east of the southeast corner of the barn, 20' from unpaved road	0-2"	Dry, medium brown, loamy sand	No	0.0	NEC
SS-12	113' southeast of the southeast corner of the barn	0-2"	Dry, medium brown, loamy sand	No	0.0	NEC
SB-1	69' east of southeast corner of barn, 40' south of chain link fence	0-5'	Dry, mottled black, loamy sand and fill, with brick, coal and wood	No	0.0	NEC
		5-10'	Dry, grayish black, silt, clay and organic muck with brick and wood	No	0.0	NEC
		10-15'	-	-	-	No recovery
		15-20'	Wet, black, silt, clay and organic muck with traces of sand	Yes	0.0	NEC

**Table 1: Fieldwork Observations (Page 2 of 8)**

(NEC = No odors or visual evidence of contamination. The term fill indicates the presence of non-native material, generally variable in texture.)

Sampling Site	Location (approximate distances)	Depth	Soil Characteristics	Groundwater Encountered	PID Reading (ppm)	Field Observations
SB-2	132' west of southwest corner of house, 29' north of northern edge of the unpaved road	0-5'	Moist, mottled brown, fill with brick, coal and wood	No	0.0	Poor recovery, NEC
		5-10'	Wet, grayish black, sand, silty clay, silt, clay and organic muck	Yes	0.0	Saturated soil 5.5' bsg, NEC
		10-15'	Wet, grayish black, clay and organic muck with medium gravel	Yes	0.0	NEC
		15-20'	Same as above	Yes	0.0	NEC
SB-3	211' west and slightly north of the northwest corner of the house, 40' south of shore	0-5'	Very moist, blackish brown, fill, sand, silt and clay with brick and coal	Yes	0.0	Saturated soil 4.0' bsg, NEC
		5-10'	Wet, grayish black, silt, clay and organic muck with medium gravel	Yes	0.0	NEC
		10-15'	-	-	-	No recovery
		15-20'	Wet, grayish black, clay and organic muck	Yes	0.0	Poor recovery, NEC
SB-4	83' north and slightly east of the northeast corner of the concrete pad, 20' south of shore	0-5'	Very moist, brownish gray, fill, silt, clay and organic muck with brick and coal	Yes	0.0	Saturated soil 3.5' bsg, NEC
		5-10'	Very moist, mottled brown and black, fill with rocks	Yes	0.0	NEC
		10-15'	Same as above	Yes	0.0	NEC
		15-20'	Same as above	Yes	0.0	NEC
SB-5	76' northwest of northwest corner of boathouse, 25' south of southern edge of the unpaved road	0-5'	Moist, brownish black, sandy loam with asphalt	Yes	0.0	Saturated soil 4.3' bsg, NEC
		5-10'	Wet, brown, sand and silt with stone and rock fragments	Yes	0.0	Poor recovery, NEC
		10-15'	Same as above	Yes	0.0	Poor recovery, NEC
SB-6	84' southwest of southwest corner of shed in western portion of property, 124' west of northwest corner of boathouse patio	0-5'	Moist, grayish black, medium sand, silt, clay and organic muck with rock fragments and wood	Yes	0.0	Saturated soil 4.8' bsg, NEC
		5-10'	Wet, brownish gray, medium sand, silty clay loam, clay and high organic content with stones, concrete and coal	Yes	0.0	NEC
		10-15'	Same as above	Yes	0.0	Poor recovery, NEC
		15-20'	Wet, grayish black, silt, clay and organic muck	Yes	0.0	NEC
SB-7	91' east of the southeast corner of the boat house	0-5'	Dry, medium, brownish gray, sandy clay loam with brick	No	0.0	Poor recovery, NEC
		5-10'	Moist, brown, sandy clay with brick and ash	Yes	0.0	Saturated soil 7.2' bsg, slight fuel-oil odor
		10-15'	Very moist, grayish black, silt, clay and organic muck with brick	Yes	5.6	Slight fuel-oil odor
		15-20'	Same as above	Yes	0.0	Poor recovery, NEC
SB-8	122' southwest of southwest corner of house, 61' south of southern edge of unpaved road	0-5'	Very moist, brownish gray, sandy clay loam and fine sand with rock fragments, asphalt and wood	Yes	14.3	Petroleum-like odor, saturated soil 3.0' bsg
		5-10'	Wet, black, fill with gravel, brick, rock fragments and organics	Yes	30.5	Slight fuel-oil odor
		10-15'	-	Yes	47.8	No recovery, slough suspension
		15-20'	Very moist, grayish black, silt, clay and organic muck with brick	Yes	5.1	Poor recovery
SB-9	124' southeast of the southeast corner of the house, 67' south of southern edge of the unpaved road	0-5'	Slightly moist, brown, silty clay loam with stones, gravel and coal	Yes	122	Strong fuel-oil odor, saturated soil 4.4' bsg
		5-10'	Wet, black, fill with gravel and rock fragments	Yes	110	
		10-15'	Same as above	Yes	162	Poor recovery
		15-20'	Wet, grayish black, silt, clay and organic muck	Yes	4.1	

**Table 1: Fieldwork Observations (Page 3 of 8)**

(NEC = No odors or visual evidence of contamination. The term fill indicates the presence of non-native material, generally variable in texture.)

Sampling Site	Location (approximate distances)	Depth	Soil Characteristics	Groundwater Encountered	PID Reading (ppm)	Field Observations
SB-10	25' west of hydrant on southeastern portion of property, 158' southeast of southeast corner of barn	0-5'	Slightly moist, medium brown, loamy sand with stone, organics and coal	No	0.0	NEC
		5-10'	Dry, black, fill with stone and coal and slag	No	0.0	Poor recovery, NEC
		10-15'	Same as above	Yes	0.0	Saturated soil 13.5' bsg, NEC
		15-20'	Same as above	Yes	0.0	NEC
SB-11	55' south of hydrant on southeastern portion of property, 220' southeast of southeast corner of barn	0-5'	Very moist, mottled brown and black, sand with stone, coke and slag	Yes	0.0	Saturated soil 4.2' bsg, NEC
		5-10'	Wet, gray, clay and organic muck with coke and slag	Yes	0.0	NEC
		10-15'	Wet, grayish black, silt, clay and organic muck with woody organics and rock fragments	Yes	0.0	NEC
		15-20'	Very moist, grayish black, clay and organic muck with sand	Yes	0.0	NEC
2SB-1	64' northeast of northeast corner of concrete pad, 84' south of north shore	0-2.8'	Dry, dark black, fill with ash and coal	No	0.0	NEC
		2.8-3'	Moist, brownish yellow, sandy clay with gravel and rock fragments	No	0.0	NEC
		3-4'	Very moist, brownish gray, clay with plastic	No	0.0	NEC
2SB-2	101' northeast of northeast corner of concrete pad, 85' south of north shore	0-1'	Dry, dark brown, fill with ash	No	0.0	NEC, poor recovery
		1-3'	Dry, medium, reddish brown, loamy sand with rock fragments	No	0.0	NEC, poor recovery
2SB-3	109' east of point on east side of concrete pad 10' south of the northeast corner of the pad	0-2.8'	Slightly moist, dark, grayish black, coarse sand with ash	Yes	0.0	NEC, saturated soil 2' bsg
		2.8-3.5'	Wet, brownish red, silty clay with rock fragments	Yes	0.0	NEC
2SB-4	56' east of point on east side of the concrete pad 25' south of the northeast corner of the pad	0-2.2'	Dry, medium, mottled yellow, gray and black, fill with ash	No	0.0	NEC
		2.2-3.2'	Dry, medium, reddish brown, clay	No	0.0	NEC
		3.2-4'	Moist, brownish red, sandy clay	No	0.0	NEC
2SB-5	47' west of point on western wall of the house 4' south of the northwest corner of the house, 55' north of northern edge of unpaved road	0-2'	Dry, yellow and brown, sandy clay	No	0.0	NEC
		2-4'	Wet, mottled gray and black, fill	Yes	0.0	NEC, saturated soil 3.5' bsg
2SB-6	21' northwest of northwest corner of house	0-2'	Dry, brown, sandy clay	No	0.0	NEC
		2-2.5'	Dry, black, fill with sedimentary rock fragments	No	0.0	NEC
		2.5-4'	Dry, mottled gray and black, fill	No	0.0	NEC
2SB-7	8' southwest of southwest corner of house	0-3'	Dry, brownish yellow, loamy sand with rock fragments	No	0.0	NEC
		3-4'	Dry, grayish black, sandy clay with coal	No	0.0	NEC
2SB-8	45' southwest of southwest corner of house, 5' north of northern edge of unpaved road	0-1'	Dry, black, sandy clay	No	0.0	NEC
		1-4'	Dry, black, fill with crystalline rock fragments	No	0.0	NEC
2SB-9	6' south of the midpoint of the south side of house	0-3'	Dry, brownish yellow, loamy sand with rock fragments	No	0.0	NEC
		3-4'	Dry, grayish black, sandy clay with coal	No	0.0	NEC

**Table 1: Fieldwork Observations (Page 4 of 8)**

(NEC = No odors or visual evidence of contamination. The term fill indicates the presence of non-native material, generally variable in texture.)

Sampling Site	Location (approximate distances)	Depth	Soil Characteristics	Groundwater Encountered	PID Reading (ppm)	Field Observations
2SB-10	70' south of point on south side of house 10' east of the southwest corner	0-5'	Slightly moist, yellowish brown, sandy clay with medium gravel and fill	No	0.0	NEC, poor recovery
		5-7'	Wet, brownish black, sandy clay with rock fragments	Yes	30	Fuel-oil odor, heavy sheen, poor recovery
		7-10'	Wet, black oily, wood	Yes	22.4	Fuel-oil odor, sheen, poor recovery
		10-12'	Same as above	Yes	10	Fuel-oil odor, sheen, poor recovery
		12-14'	Wet, black, coarse sand with gravel and fill	Yes	39	Fuel-oil odor, sheen on water
		14-17'	Wet, grayish brown, clay	Yes	0.0	Fuel-oil odor, sheen
2SB-11	119' south of point on south side of house 10' east of the southwest corner	0-5'	Slightly moist, medium brown and gray, silty clay and fill with coarse gravel and rock fragments	Yes	1.5	Saturated soil 4.6' bsg, PID reading at bore hole, refusal at 5' bsg
2SB-11A	120' south of the midpoint of the southern wall of the house	0-5'	Very moist, medium gray, fill and medium sand	Yes	0.0	NEC, saturated soil 3.9' bsg
		5-10'	Wet, dark black, medium coarse, sand with fill and ash	Yes	45	Slight fuel-oil odor and light staining
		10-15'	Wet, dark black, coarse, sand with ash and fill	Yes	1.0	NEC
2SB-12	180' northeast of northeast corner of boathouse, 110' north of northern edge of the closest unpaved road	0-5'	Dry, light brown, silty clay with rock fragments	Yes	0.0	NEC, saturated soil 3.6' bsg
		5-10'	Wet, grayish black, gravel with bricks and rock fragments	Yes	1.5	Slight fuel-oil odor, poor recovery
		10-15'	Wet, gray, clay with brick	Yes	0.0	NEC
2SB-13	232' east of northeast corner of boathouse, 77' north of northern edge of unpaved road	0-5'	Wet, brown, fill with coarse gravel and rock fragments	Yes	0.0	NEC, poor recovery
		5-10'	Wet, brick	Yes	119	Poor recovery
		10-17'	-	Yes	-	No recovery
		17-22'	Wet, gray clay with brick	Yes	50	Sheen
2SB-14	317' east of northeast corner of boathouse, 86' north of northern edge of unpaved road	0-5'	Wet, light gray, coarse gravel	Yes	7.1	Fuel-oil odor and light sheen, saturated soil 3' bsg, poor recovery
		5-8'	Wet, grayish black, gravel with brick	Yes	22.5	Strong fuel-oil odor and sheen Poor recovery
		8-10'	Wet, black sand	Yes	230	
		10-17'	Wet, gray clay	Yes	0.0	
2SB-15	66' east of MW-8, 53' north of northern edge of unpaved road	0-4'	Moist, gray, fill with crystalline rock fragments	Yes	0.0	NEC, saturated soil 4' bsg
		4-5'	Wet, grayish black, coarse sand	Yes	40	Fuel-oil odor and light sheen
		5-10'	Wet, black, coarse sand	Yes	40	Slight fuel-oil odor and sheen, poor recovery
		10-17'	-	-	-	No recovery
		17-20'	Wet, black, clay	Yes	1.5	Slight fuel-oil odor and sheen, poor recovery
2SB-16	128' southeast of southeast corner of house, 70' south of southern edge of unpaved road	0-3'	Moist, brown, sandy loam and sand with concrete and rock fragments	No	0.0	NEC, poor recovery
		5-9'	Wet, black and gray, coarse, fill with rock fragments	Yes	84	Fuel-oil odor and free product
		9-12'	-	-	-	No recovery
		12-17'	Wet, black, coarse fill and gray clay	Yes	78	

**Table 1: Fieldwork Observations (Page 5 of 8)**

(NEC = No odors or visual evidence of contamination. The term fill indicates the presence of non-native material, generally variable in texture.)

Sampling Site	Location (approximate distances)	Depth	Soil Characteristics	Groundwater Encountered	PID Reading (ppm)	Field Observations
2SB-17	228' southeast of southeast corner of house, 89' north of northern edge of the southernmost unpaved road	0-5'	Moist, grayish black, loamy sand	Yes	36	Staining, saturated soil 4' bsg, poor recovery
		5-10'	Wet, black, coarse sand	Yes	10	Fuel-oil odor, poor recovery
		10-20'	Same as above with fine gravel	Yes	5.3	Fuel-oil odor, poor recovery
		20-30'	-	-	-	No recovery
2SB-18	128' southwest of the southwest corner of barn, 196' southeast of southeast corner of house	0-5'	Dry, mottled brown and gray, fill with coal and ash	No	0.0	NEC, poor recovery
		5-10'	Wet, black, fill with coarse gravel and cinders	Yes	3	Saturated soil 8' bsg
		10-15'	Same as above	Yes	15	Slight fuel-oil odor and light sheen, poor recovery
		15-20'	Same as above with medium gray clay	Yes	3	Light sheen, poor recovery
2SB-19	88' west of point on west side of barn 20' north of southwest corner	0-4'	Slightly moist, dark, mottled black, fill with coal and ash	Yes	0.0	NEC, saturated soil 2.5' bsg, poor recovery
2SB-20	34' west of northwest corner of barn	0-4'	Dry, dark, mottled black, fill with coal and ash	Yes	0.0	NEC, saturated soil 3.6' bsg, poor recovery
2SB-21	20' west of point on west wall of barn 10' north of southwest corner	0-4'	Dry, dark black, coarse sandy loam with gravel, coal and ash	No	0.0	NEC, poor recovery
2SB-22	79' southwest of southwest corner of barn, 12' north of unpaved road	1-3'	Dry, dark black, sandy loam with gravel, coal and ash	No	0.0	NEC
		3-4'	Dry, light gray, sandy loam with coarse gravel and sedimentary rock fragments	No	0.0	NEC
2SB-23	57' east of southeast corner of barn	0-4"	Dry, dark black, sandy clay loam with coarse gravel	No	0.0	NEC
		20-24"	Dry, brown, sand	No	0.0	NEC
		36-40"	Dry, mottled, dark black, sand with gravel, ash and rock fragments	No	0.0	NEC
		6-10'	Wet, dark, brownish gray, clay with coal and ash	Yes	0.0	NEC, saturated soil 7.3' bsg
2SB-24	58' east of point on east side of barn 8' south of northeast corner, 18' south of chain link fence	0-1'	Dry, gray, sand with high organic content and coarse gravel	No	0.0	NEC
		1-3.5'	Dry, medium, yellow and black, fill with gravel	No	0.0	NEC
		3.5-5'	Wet, gray, fill with coarse gravel, coal and ash	Yes	0.0	NEC, saturated soil 3.8' bsg
		5-10'	Wet, brown and black, coal, ash and clay	Yes	0.0	NEC, poor recovery
2SB-25	104' east of point on east side of barn 13' south of northeast corner, 22' south of chain link fence	0-5'	Dry, dark gray, coarse sand with coal and ash	No	0.0	NEC
		6-7'	Wet, mottled, gray, coarse sand with ash	Yes	0.0	NEC
		7-10'	Wet, dark brown, clay	Yes	0.0	NEC
2SB-26	90' east of southeast corner of barn, 44' south of chain link fence	0-4"	Dry, light brown, medium sandy clay with coarse gravel	No	0.0	NEC
		20-24"	Same as above	No	0.0	NEC
		36-40"	Slightly moist, dark black, medium sand with rock fragments, coal and ash	No	0.0	NEC
		5-10'	Moist, medium brown, clay	No	0.0	NEC, poor recovery

**Table 1: Fieldwork Observations (Page 6 of 8)**

(NEC = No odors or visual evidence of contamination. The term fill indicates the presence of non-native material, generally variable in texture.)

Sampling Site	Location (approximate distances)	Depth	Soil Characteristics	Groundwater Encountered	PID Reading (ppm)	Field Observations
2SB-27	87' southeast of southeast corner of barn, 57' south of chain link fence	0-4"	Dry, dark, yellowish, dark black, silty clay with coal	No	0.0	NEC
		20-24"	Dry, dark brown, silty clay with rock fragments	No	0.0	NEC
		36-40"	Same as above	No	0.0	NEC
2SB-28	84' southeast of southeast corner of barn, 142' west of Red Flynn Road	0-4"	Dry, medium, yellowish brown, silty clay with medium gravel	No	0.0	NEC
		20-24"	Same as above	No	0.0	NEC
		36-40"	Dry, dark black, medium sand with coal	No	0.0	NEC
2SB-29	96' southeast of southeast corner of barn, 142' west of Red Flynn Road	0-4"	Dry, medium, yellowish brown, silty clay with coarse gravel	No	0.0	NEC
		20-24"	Same as above	No	0.0	NEC
		36-40"	Dry, dark black, coarse sandy clay with coal	No	0.0	NEC
2SB-30	88' west of Red Flynn Road, 140' southeast of southeast corner of barn	0-6"	Slightly moist, medium brown and black, medium sand	No	0.0	NEC
		20-24"	Dry, mottled yellow, black, and gray, fill with fine gravel and ash	No	0.0	NEC
		36-40"	Dry, mottled brown and black, coarse sand with medium gravel	No	0.0	NEC
2SB-31	62' northeast of northeast side of boathouse	0-4'	Dry, mottled, brown, sand and silt with gravel and coal	No	0.0	NEC
		4-5'	Slightly moist, mottled, medium brown and gray, medium sand	No	0.0	NEC
		5-10'	Wet, medium, reddish brown, medium sand and silt with gravel	Yes	0.0	NEC, saturated soil
		10-15'	Wet, greenish gray, coarse sand with brick	Yes	0.0	8.5' bsg, poor recovery NEC
2SB-32	122' northeast of northeast side of boat house, 46' south of southern edge of unpaved road	0-5'	Moist, brown, fill, coarse sand and silt with rock fragments	Yes	0.0	NEC, saturated soil
		5-10'	Wet, gray, black and brown, fill with rock fragments	Yes	0.0	4.5' bsg, poor recovery NEC
		10-15'	Wet brick	Yes	0.0	NEC
		15-19'	Wet, dark brown, clay	Yes	0.0	NEC, poor recovery
2SB-33	85' northeast of northeast side of boathouse, 75' south and slightly west of southwest corner of shed in central portion of property	0-5'	Dry, brown, fill	No	0.0	NEC
		5-6'	Moist, gray, medium sand	No	0.0	NEC, poor recovery
		6-10'	Moist, mottled gray and black, fill with rock fragments, ash and brick	No	0.0	NEC, poor recovery
		10-15'	Wet brick	Yes	0.0	NEC
2SB-34	80' east of point on east side of barn 16' south of northeast corner	0-5'	Dry, dark gray, coarse sand with gravel, coal and ash	No	0.0	NEC
2SB-35	209' south and slightly west of southwest corner of barn, 55' north of northern edge of southernmost unpaved road	0-5'	Wet, black, fill with blackish brown, sandy loam and medium sand	Yes	5	Slight fuel-oil odor and sheen, saturated soil 4' bsg
		5-10'	Wet, black coarse fill	Yes	50	Fuel-oil odor and sheen, poor recovery
		10-19'	Wet, black, fill and clay	Yes	35	Fuel-oil odor and sheen, poor recovery
		19-20'	Wet, black, clay	Yes	1	Fuel-oil odor and sheen
TP-1	64' southwest of southwest corner of barn	0-3.5'	Dry, mottled, brown and black, fill	No	0.0	NEC

**Table 1: Fieldwork Observations (Page 7 of 8)**

(NEC = No odors or visual evidence of contamination. The term fill indicates the presence of non-native material, generally variable in texture.)

Sampling Site	Location (approximate distances)	Depth	Soil Characteristics	Groundwater Encountered	PID Reading (ppm)	Field Observations
TP-2	19' west of point on west side of house 11' north of the house's southwestern corner	0-5.6'	Wet, mottled, brown and black, fill with gravel, brick, concrete and plastic	Yes	0.0	NEC, saturated soil 5.6' bsg
TP-3	81' east of point on east side of concrete pad 11' south of the pad's northeast corner	0-2.5'	Wet, mottled, brown and black, fill with gravel, brick, and wood	Yes	0.0	NEC, saturated soil 2.5' bsg
TP-4	13' east of the midpoint of the eastern wall of the shed in the western portion of the property	0-2.9'	Wet, black, fill with sedimentary and crystalline rock fragments and pieces of wire	Yes	0.0	NEC, saturated soil 2.9' bsg
TP-5	97' east of the midpoint of the eastern wall of the shed in western portion of the property, 42' south of southern edge of unpaved road	0-5.8'	Dry, black, fill with brick, stones and coal	Yes	0.0	NEC, saturated soil 5.8' bsg
TP-6	22' southwest of southwest corner of shed in central portion of property, 104' northeast of northeast side of boathouse	0-8.5'	Dry to moist, black, fill with asphalt	Yes	76.0	Strong fuel-oil odor, heavy staining, saturated soil 8.5' bsg
TP-7	124' south of southwest corner of house	0-5.9' 5.9'	Dry, brown fill with concrete, coal and wood Dry, black fill with brick and coal	Yes	0.0 2.0	NEC NEC
TP-8	196' southeast of southeast corner of house, 80' north of northern edge of southernmost unpaved road	0-5.3'	Wet, black, fill with brick, concrete and wood	Yes	0.0	NEC, saturated soil 3.0' bsg
TP-9	182' southeast of the southeast corner of house, 96' north of southern property boundary	0-4.7'	Very moist, grayish black, fill with large amounts of coal	Yes	280	Strong fuel-oil odor
Core-1	57' southwest of southwest corner of boathouse, 122' south of southeast corner of shed in western portion of property	0-1' 1-5' 5-6'	Dark, black and gray, fine silt and organic muck with fine gravel Same as above Same as above with organic matter	Not Applicable	0.0 0.0 0.0	NEC NEC NEC
Core-2	108' south of southeast corner of concrete pad, 95' southwest of northwest corner of shed in western portion of property	0-7.1'	Grayish black, silt, clay and organic muck with coal and organic matter	Not Applicable	0.0	Slight petroleum-like odor
Core-3	45' northwest of the NW corner of the concrete slab, 45' west of western shore	0-4' 4-5' 5-7'	Grayish black, silt, clay and organic muck with organic matter Same as above Same as above	Not Applicable	0.0 0.0 0.0	NEC NEC Petroleum-like odor



**Table 1: Fieldwork Observations (Page 8 of 8)**

(NEC = No odors or visual evidence of contamination. The term fill indicates the presence of non-native material, generally variable in texture.)

Sampling Site	Location (approximate distances)	Depth	Soil Characteristics	Groundwater Encountered	PID Reading (ppm)	Field Observations
Core-4	128' northwest of the NW corner of the house, just north of piers, 180' west of northeast corner of small concrete pad in northern portion of property	0-3.6'	Grayish black, silt, clay and organic muck with organic matter	Not Applicable	0.0	NEC
		3.6'	Black, medium sand		0.0	NEC
		3.6-5'	Grayish black, silt, clay and organic muck with organic matter		0.0	NEC
		5'	Black, medium sand		0.0	NEC
		5-6'	Grayish black, silt, clay and organic muck with shells, organic matter and coal		0.0	Slight petroleum-like odor
		6'	Black, medium sand		0.0	Slight petroleum-like odor
		6-7.4'	Grayish black, silt, clay and organic muck with shells and organic matter		0.0	Slight petroleum-like odor
Core-5	230' south of a point on the south side of concrete slab 25' from the southeast corner	0-1.5'	Grayish black, silt, organic muck and medium sand with organic matter	Not Applicable	0.0	NEC
		1.5-7.5'	Same as above		0.0	NEC
Core-6	285' southwest of southwestern corner of shed in western portion of property, 404' west of southeast corner of boathouse	0-5.5'	Grayish black, silt, clay and organic muck with organic matter	Not Applicable	0.0	NEC
		5.5-7.7'	Same as above with white clay inclusions		0.0	NEC
Core-7	268' west of the northwestern corner of boathouse	0-7'	Grayish black, silt, clay and organic muck with organic matter	Not Applicable	0.0	NEC
Core-8-1	38' southwest of the southwest corner of the concrete slab	0-1.2'	Grayish black, silt, clay and organic muck with medium to fine gravel	Not Applicable	0.0	NEC
Core-8-2	38' southwest of the southwest corner of the concrete slab	5'	Grayish black, silt, clay and organic muck with organic matter	Not Applicable	0.0	NEC
Core-9	127' west of southwest corner of concrete pad	0-2.6'	Grayish black, silt, clay and organic muck with medium to fine gravel and organic matter	Not Applicable	0.0	NEC
		2.6'	Grayish black organic muck		0.0	NEC
		2.6-7'	Grayish black, silt, clay and organic muck with organic matter		0.0	NEC
Core-10	160' northwest of northwest corner of concrete pad	0-1'	Grayish black, silt, clay and organic muck with organic matter	Not Applicable	0.0	NEC
		1-6.3'	Same as above		0.0	NEC
Core-11	161' north of a point 30' east of northeast corner of concrete pad, 58' north of north shore	0-3'	Grayish black, silt, clay and organic muck with organic matter	Not Applicable	0.0	NEC
		3-6.4'	Same as above		0.0	Slight petroleum-like odor.
Core-12	118' west of northwest corner of small concrete pad in northern portion of property, 30' north of north shore	0-3'	Grayish black, silt, clay and organic muck with organic matter	Not Applicable	0.0	NEC
		3-5'	Same as above		0.0	NEC
		5-6.4'	Same as above with shale fragments		0.0	Slight petroleum-like odor

**Table 2: Groundwater Elevations and Fluctuations**

Well Number	Surveyed Top of Casing (feet)	Distance from Top of PVC to Top of Casing (inches)	Low Tide				High Tide				Groundwater Fluctuation (feet)
			Date	Time	Water Level from Top of PVC (feet)	Water Elevation (feet) MSL	Date	Time	Water Level from Top of PVC (feet)	Water Elevation (feet) MSL	
1	8.29	13.60	8/16/2007	10:43	5.03	2.13	8/16/2007	15:04	5.09	-0.32	-0.06
2	8.24	5.30	8/16/2007	10:27	7.06	0.74	8/16/2007	15:09	4.79	0.68	2.27
3	7.23	3.50	8/16/2007	10:21	6.57	0.37	8/16/2007	15:12	4.07	1.76	2.50
4	7.82	5.50	8/16/2007	10:17	7.11	0.25	8/16/2007	15:17	4.41	2.71	2.70
5*	11.65	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
6	6.07	4.50	8/16/2007	10:31	3.87	1.83	8/16/2007	15:21	3.56	4.85	0.31
7	9.21	5.90	8/16/2007	10:13	8.14	0.58	8/16/2007	15:16	5.79	5.60	2.35
8	6.39	3.30	8/16/2007	10:35	4.53	1.59	8/16/2007	15:23	3.98	6.83	0.55
9	6.78	2.50	8/16/2007	10:10	5.63	0.94	8/16/2007	15:27	4.43	7.79	1.20
10	8.89	2.50	8/16/2007	10:03	6.58	2.10	8/16/2007	15:30	6.62	8.61	-0.04

Notes:

\* MW-5 damaged and could not be measured.

NM = Not measured

**Table 4: Summary of Field Evidence of Contamination (Page 1 of 2)**

(NEC = No odors or visual evidence of contamination.)

Sampling Site	Location (approximate distances)	Depth	PID Reading (ppm)	Field Observations
SB-7	8' southwest of southwest corner of house	0-5'	0.0	NEC
		5-10'	0.0	NEC
		10-15'	5.6	Slight fuel-oil odor
		15-20'	0.0	NEC
SB-8	45' southwest of southwest corner of house, 5' north of northern edge of unpaved road	0-5'	14.3	Petroleum-like odor
		5-10'	30.5	Slight fuel-oil odor
		10-15'	47.8	NEC
		15-20'	5.1	NEC
SB-9	6' south of the midpoint of the south side of house	0-5'	122	Strong fuel-oil odor
		5-10'	110	NEC
		10-15'	162	NEC
		15-20'	4.1	NEC
2SB-10	70' south of point on south side of house 10' east of the southwest corner	0-5'	0.0	NEC
		5-7'	30	Fuel-oil odor, heavy sheen
		7-10'	22.4	Fuel-oil odor, sheen
		10-12'	10	Fuel-oil odor, sheen
		12-17'	39	Slight fuel-oil odor, sheen on clay
2SB-11A	120' south of the midpoint of the southern wall of the house	0-5'	0.0	NEC
		5-10'	45	Slight fuel-oil odor and light staining
		10-15'	1.0	NEC
2SB-12	180' northeast of northeast corner of boathouse, 110' north of northern edge of the closest unpaved road	0-5'	0.0	NEC
		5-10'	1.5	Slight fuel-oil odor
		10-15'	0.0	NEC
2SB-13	232' east of northeast corner of boathouse, 77' north of northern edge of unpaved road	0-5'	0.0	NEC
		5-10'	119	NEC
		10-17'	-	No recovery
		17-22'	50	NEC
2SB-14	317' east of northeast corner of boathouse, 86' north of northern edge of unpaved road	0-5'	7.1	Fuel-oil odor and light sheen
		5-8'	22.5	NEC
		8-10'	230	Strong fuel-oil odor and sheen
		10-17'	0.0	NEC
2SB-15	66' east of MW-8, 53' north of northern edge of unpaved road	0-4'	0.0	NEC
		4-5'	40	Fuel-oil odor and light sheen
		5-10'	40	Slight fuel-oil odor and sheen
		10-17'	-	No recovery
		17-20'	1.5	Slight fuel-oil odor and sheen
2SB-16	128' southeast of southeast corner of house, 70' south of southern edge of unpaved road	0-3'	0.0	NEC
		5-9'	84	Fuel-oil odor and free product
		9-12'	-	No recovery
		12-17'	78	NEC
2SB-17	228' southeast of southeast corner of house, 89' north of northern edge of the southernmost unpaved road	0-5'	36	Staining
		5-10'	10	Fuel-oil odor
		10-20'	5.3	Fuel-oil odor
		20-30'	-	No recovery
2SB-18	128' southwest of the southwest corner of barn, 196' southeast of southeast corner of house	0-5'	0.0	NEC
		5-10'	3	NEC
		10-15'	15	Slight fuel-oil odor and light sheen
		15-20'	3	Light sheen
2SB-35	209' south and slightly west of southwest corner of barn, 55' north of northern edge of southernmost unpaved road	0-5'	5	Slight fuel-oil odor and sheen
		5-10'	50	Fuel-oil odor and sheen
		10-19'	35	Fuel-oil odor and sheen
		19-20'	1	Fuel-oil odor and sheen

**Table 4: Summary of Field Evidence of Contamination (Page 2 of 2)**

(NEC = No odors or visual evidence of contamination.)

Sampling Site	Location (approximate distances)	Depth	PID Reading (ppm)	Field Observations
TP-6	22' southwest of southwest corner of shed in central portion of property, 104' northeast of northeast side of boathouse	0-8.5'	76.0	Strong fuel-oil odor, heavy staining
TP-9	196' southeast of southeast corner of house, 80' north of northern edge of southernmost unpaved road	0-4.7'	280	Strong fuel-oil odor

**Table 5: XRF Screening Data for Metals in Soil (August 2006)**

(Field measurements provided in mg/kg)

Metal	Guidance Level	Background Concentrations	Sample Identification					
			SS-3 (Run 1)	SS-3 (Run 2)	SS-6 (Run 1)	SS-6 (Run 2)	SS-10 (Run 1)	SS-10 (Run 2)
Arsenic	16	7.4 (HV)	93	109	28	BDL	40	21
Copper	270	23.4 (HV)	2,057	1,468	258	86	BDL	BDL
Iron	2,000* or SB	2,000 - 550,000	30,137	31,630	17,479	12,235	21,037	24,562
Lead	1,000	72.5** (HV)	1,692	1,586	409	192	415	276
Manganese	10,000	50 - 5,000	BDL	BDL	BDL	14	BDL	BDL
Zinc	10,000	87.1 (HV)	262	618	609	323	226	99

Notes:

HV = Background levels based on NYSDEC draft data for metals in Lower Hudson Valley soils (90% upper confidence limit).

\*\* Background lead concentrations in urban settings typically range from 200 to 500 ppm.

BDL = Below Detection Limit

**Table 6: XRF Screening Data for Metals in Soil (February 2007)**

(Field measurements provided in mg/kg)

Metal	Guidance Level	Background Concentrations	Sample Identification												
			2SB-01 (1-2') Run 1	2SB-01 (1-2') Run 2	2SB-02 (0-3') Run 1	2SB-02 (0-3') Run 2	2SB-03 (0.5-1.5') Run 1	2SB-03 (0.5-1.5') Run 2	2SB-04 (1-4') Run 1	2SB-04 (1-4') Run 2	2SB-05 (36-40") Run 1	2SB-06 (0-1') Run 1	2SB-07 (20-24") Run 1	2SB-08 (0-4") Run 1	2SB-09 (20-24") Run 1
Arsenic	16	7.4 (HV)	BDL	BDL	BDL	36.29	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Cadmium	9.3	0.22 (HV)	BDL	BDL	BDL	97.07	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Copper	270	23.4 (HV)	BDL	BDL	182.49	245.52	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Iron	2,000* or SB	2,000 - 550,000	14,312.98	11,460.65	44,500.49	25,303.00	13,554.52	12,705.83	17,541.05	23,820.95	19,727.72	15,607.79	31,714.12	18,665.81	30,164.65
Lead	1,000	72.5** (HV)	180.08	111.02	289.19	313.32	95.36	142.50	BDL	BDL	106.61	59.81	BDL	81.53	BDL
Zinc	10,000	87.1 (HV)	57.12	51.72	643.28	554.38	BDL	BDL	BDL	BDL	BDL	96.81	BDL	100.94	61.77
Metal	Guidance Level	Background Concentrations	Sample Identification												
			2SB-15 (1-3') Run 1	2SB-15 (1-3') Run 2	2SB-17 (2-5') Run 1	2SB-17 (2-5') Run 2	2SB-18 (0-4') Run 1	2SB-18 (0-4') Run 2	2SB-19 (0-3') Run 1	2SB-19 (0-3') Run 2	2SB-20 (0.5-1') Run 1	2SB-20 (0.5-1') Run 2	2SB-21 (0-2') Run 1	2SB-21 (0-2') Run 2	2SB-22 (2-3') Run 1
Arsenic	16	7.4 (HV)	BDL	BDL	BDL	BDL	BDL	BDL	135.88	BDL	74.41	99.64	60.44	55.91	24.48
Cadmium	9.3	0.22 (HV)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Copper	270	23.4 (HV)	BDL	BDL	BDL	BDL	BDL	BDL	5,267.40	719.76	277.52	713.45	1,625.87	BDL	BDL
Iron	2,000* or SB	2,000 - 550,000	22,447.59	19,714.97	25,630.11	20,972.27	13,995.77	10,776.29	23,082.70	13,474.79	57,109.80	41,630.00	37,838.16	26,337.59	48,688.91
Lead	1,000	72.5** (HV)	81.77	113.95	111.35	334.62	31.45	38.16	1,837.54	552.27	571.80	879.74	1,124.05	287.99	BDL
Zinc	10,000	87.1 (HV)	BDL	BDL	67.18	51.44	BDL	BDL	4,682.86	1,038.98	233.12	525.20	702.40	100.46	BDL
Metal	Guidance Level	Background Concentrations	Sample Identification												
			2SB-22 (2-3') Run 2	2SB-23 (2-4') Run 1	2SB-23 (2-4') Run 2	2SB-23 (6-7') Run 1	2SB-23 (6-7') Run 2	2SB-24 (2') Run 1	2SB-24 (2') Run 2	2SB-25 (1-2') Run 1	2SB-25 (1-2') Run 2	2SB-25 (6-7') Run 1	2SB-25 (6-7') Run 2	2SB-26 (4-5') Run 1	2SB-26 (4-5') Run 2
Arsenic	16	7.4 (HV)	BDL	BDL	BDL	139.20	108.42	BDL	BDL	BDL	50.80	148.10	158.17	BDL	BDL
Cadmium	9.3	0.22 (HV)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	73.63	83.63	BDL	BDL
Copper	270	23.4 (HV)	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	593.83	BDL
Iron	2,000* or SB	2,000 - 550,000	66,737.46	12,766.34	14,748.07	16,124.97	11,364.63	11,958.30	28,627.50	27,564.52	36,607.74	7,439.40	9,313.03	22,798.60	18,750.49
Lead	1,000	72.5** (HV)	44.12	50.70	66.75	141.55	23.75	39.98	62.77	187.69	297.33	114.72	323.77	259.66	226.88
Silver	1,500	NP	125.31	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL	BDL
Zinc	10,000	87.1 (HV)	BDL	BDL	49.58	248.87	68.65	BDL	BDL	96.44	85.88	BDL	39.44	119.58	118.03

Notes:

HV = Background levels based on NYSDEC draft data for metals in Lower Hudson Valley soils (90% upper confidence limit).

\*\* Background lead concentrations in urban settings typically range from 200 to 500 ppm.

NP = Not Provided    BDL = Below Detection Limit

**APPENDIX D**  
**Fieldwork Logs**

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID: **SS-1**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg

Depth (feet bsg) Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

## Soil Profile and Field Observations

	Texture:	sand / loamy sand / <u>sandy loam</u> / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed)	Sand Size v. coarse / coarse / med / fine / v. fine
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray	
Sampled	Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other	
Grab _____ ft	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy)	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed)	Sand Size v. coarse / coarse / med / fine / v. fine
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray	
Sampled	Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other	
Grab _____ ft	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy)	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed)	Sand Size v. coarse / coarse / med / fine / v. fine
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray	
Sampled	Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other	
Grab _____ ft	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy)	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed)	Sand Size v. coarse / coarse / med / fine / v. fine
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray	
Sampled	Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other	
Grab _____ ft	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy)	



# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID: **SS-2**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_ ft bsg

Refusal: not encountered / refusal at \_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

	Texture: <u>sand</u> / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size: v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color: Intensity <u>light</u> / medium / dark Hue yellow / orange / red / <u>brown</u> / black / gray	
Sampled	Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Grab	Moisture: <u>dry</u> / slightly moist / moist / very moist / wet	Soil Density: non-cohesive / loose / dense / plastic / cemented
	Notes: PID ____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy)	
	free product (LNAPL / DNAPL) Other:	

WHITE

	Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size: v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray	
Sampled	Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Grab	Moisture: dry / slightly moist / moist / very moist / wet	Soil Density: non-cohesive / loose / dense / plastic / cemented
	Notes: PID ____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy)	
	free product (LNAPL / DNAPL) Other:	

	Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size: v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray	
Sampled	Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Grab	Moisture: dry / slightly moist / moist / very moist / wet	Soil Density: non-cohesive / loose / dense / plastic / cemented
	Notes: PID ____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy)	
	free product (LNAPL / DNAPL) Other:	

	Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size: v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray	
Sampled	Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Grab	Moisture: dry / slightly moist / moist / very moist / wet	Soil Density: non-cohesive / loose / dense / plastic / cemented
	Notes: PID ____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy)	
	free product (LNAPL / DNAPL) Other:	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
**Long Dock  
Beacon, NY**

Location ID: **SS-3**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg

Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID: **SS-4**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

	Texture:	sand / loamy sand / <u>sandy loam</u> / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam silty clay / silt / clay / organic muck / high organic content		Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other			
S/S/A (except)	Color:	Intensity	light / medium / dark	Hue	yellow / orange / red / brown / black / gray
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet			
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:			
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam silty clay / silt / clay / organic muck / high organic content		Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other			
S/S/A (except)	Color:	Intensity	light / medium / dark	Hue	yellow / orange / red / brown / black / gray
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet			
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:			
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam silty clay / silt / clay / organic muck / high organic content		Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other			
S/S/A (except)	Color:	Intensity	light / medium / dark	Hue	yellow / orange / red / brown / black / gray
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet			
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:			
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam silty clay / silt / clay / organic muck / high organic content		Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other			
S/S/A (except)	Color:	Intensity	light / medium / dark	Hue	yellow / orange / red / brown / black / gray
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet			
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:			

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID: SS-5

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg

Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
**Long Dock  
Beacon, NY**

Location ID:

**SS-6**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

	Texture:	sand / loamy sand / <u>sandy loam</u> / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / <u>coal</u> / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / <u>brown</u> / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	<u>dry</u> / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm <u>N.E.C.</u> / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
**Long Dock  
Beacon, NY**

Location ID: **SS-7**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

	Texture:	sand / loamy sand / <u>sandy loam</u> / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / <u>coal</u> / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity <u>light</u> / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
**Long Dock  
Beacon, NY**

Location ID: **SS-8**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark	Hue yellow / orange / red / brown / black / gray
	Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark	Hue yellow / orange / red / brown / black / gray
	Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark	Hue yellow / orange / red / brown / black / gray
	Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark	Hue yellow / orange / red / brown / black / gray
	Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
**Long Dock  
Beacon, NY**

Location ID: **SS-9**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content		Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other			
S/S/A (except)	Color:	Intensity	light / medium / dark	Hue	yellow / orange / red / brown / black / gray
		Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other		
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet			
Grab	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:			
ft					
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content		Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other			
S/S/A (except)	Color:	Intensity	light / medium / dark	Hue	yellow / orange / red / brown / black / gray
		Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other		
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet			
Grab	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:			
ft					
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content		Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other			
S/S/A (except)	Color:	Intensity	light / medium / dark	Hue	yellow / orange / red / brown / black / gray
		Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other		
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet			
Grab	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:			
ft					
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content		Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other			
S/S/A (except)	Color:	Intensity	light / medium / dark	Hue	yellow / orange / red / brown / black / gray
		Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other		
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet			
Grab	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:			
ft					



# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
**Long Dock  
Beacon, NY**

Location ID: **SS-10**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content		Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other			
S/S/A (except)	Color:	Intensity	light / medium / dark	Hue	yellow / orange / red / brown / black / gray
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet			
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:			
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content		Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other			
S/S/A (except)	Color:	Intensity	light / medium / dark	Hue	yellow / orange / red / brown / black / gray
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet			
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:			
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content		Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other			
S/S/A (except)	Color:	Intensity	light / medium / dark	Hue	yellow / orange / red / brown / black / gray
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet			
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:			
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content		Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other			
S/S/A (except)	Color:	Intensity	light / medium / dark	Hue	yellow / orange / red / brown / black / gray
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet			
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:			

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
**Long Dock  
Beacon, NY**

Location ID: **SS-11**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
**Long Dock  
Beacon, NY**

Location ID: **SS-12**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
**Long Dock  
Beacon, NY**

Location ID: **SB-1**

**Boring / Test Pit / Sediment Sample Location:**

**19.3' From SS-1**

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-5'	Texture: <b>FILL</b>	sand / <del>loamy sand</del> / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / <del>wood</del> / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
5-10'	Texture: <b>FILL</b>	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size v. coarse / coarse / med / fine / v. fine
Recovery <b>3</b>	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / <del>wood</del> / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
10-13'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
15-20'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
**Long Dock  
Beacon, NY**

Location ID: **SB-2**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other: **5**

Depth to saturated soil: not encountered / **5.5** ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

<b>0-5'</b>	Texture: <b>ALL</b> sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery <b>1.5'</b>	Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/SIA (except)	Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture: dry / slightly moist (moist) very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cement
Grab	Notes: PID <b>0.0</b> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:
<b>5-10'</b>	Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery <b>3'</b>	Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/SIA (except)	Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cement
Grab	Notes: PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:
<b>10-15'</b>	Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/SIA (except)	Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cement
Grab	Notes: PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:
<b>15-20'</b>	Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/SIA (except)	Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cement
Grab	Notes: PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
**Long Dock  
Beacon, NY**

Location ID:

SB-3

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / 4.0 ft bsg

Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-5'	Texture: <u>Full</u> sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery 3.1'	Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture: dry / slightly moist / moist / <u>very moist</u> / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab ft	Notes: PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:
5-10'	Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery 3.5'	Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture: dry / slightly moist / moist / very moist / <u>wet</u> Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab ft	Notes: PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:
10-15'	Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery 0	Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab ft	Notes: PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:
15-20'	Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery 2"	Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture: dry / slightly moist / moist / very moist / <u>wet</u> Soil Density: non-cohesive / loose / dense / plastic / cemented
ft	Notes: PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
SG96152.50

Site Location  
Long Dock  
Beacon, NY

Location ID: SB-4

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / 3.5 ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-5'	Texture: <u>FILL</u>	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size v. coarse / coarse / med / fine / v. fine
Recovery <u>2.5'</u>	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: <u>brick</u> / asphalt / concrete / <u>coal</u> / wood / metal / plastic / other	
S/S/A (except)	Color: Intensity light / medium / dark	Hue <u>yellow</u> / orange / red / brown / black / gray	
Sampled	Moisture: dry / slightly moist / moist / very moist / wet	Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab <u>3.6-3.7</u> ft	Notes: PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:		
5-10'	Texture: <u>FILL</u>	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size v. coarse / coarse / med / fine / v. fine
Recovery <u>4.0</u>	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color: Intensity light / medium / dark	Hue <u>yellow</u> / orange / red / brown / black / gray	
Sampled	Moisture: dry / slightly moist / moist / very moist / wet	Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes: PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:		
10-15'	Texture: <u>SA</u>	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color: Intensity light / medium / dark	Hue <u>yellow</u> / orange / red / brown / black / gray	
Sampled	Moisture: dry / slightly moist / moist / very moist / wet	Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes: PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:		
15-20'	Texture: <u>SA</u>	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color: Intensity light / medium / dark	Hue <u>yellow</u> / orange / red / brown / black / gray	
Sampled	Moisture: dry / slightly moist / moist / very moist / wet	Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes: PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:		

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID:  
**S8-5**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / 4.3 ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-5'	Texture:	sand / loamy sand / <u>sandy loam</u> / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 2.5'	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / <u>asphalt</u> / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark <u>Hue yellow</u> / orange / red / brown / black / gray Modifier yellowish / reddish / <u>brownish</u> / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet <u>Soil Density:</u> non-cohesive / loose / dense / plastic / cemented	
Grab 3.2-3.8 ft	Notes:	PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
5-10'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / <u>silt</u> / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 1.9'	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark <u>Hue yellow</u> / orange / red / brown / black / gray Modifier yellowish / reddish / <u>brownish</u> / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet <u>Soil Density:</u> non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
10-15'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 1.6'	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark <u>Hue yellow</u> / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet <u>Soil Density:</u> non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark <u>Hue yellow</u> / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet <u>Soil Density:</u> non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	



# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
**Long Dock  
Beacon, NY**

Location ID: **SB-6**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / 0.4-0.8 ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

**10-5'** Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery **2.5** Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab Notes: PID 0.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

**5-10'** Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery **2.3** Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab Notes: PID 0.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

**10-15'** Texture: SA 5-8/14.4 sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery **1.7'** Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab Notes: PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

**15-20'** Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery **5'** Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab Notes: PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
**Long Dock  
Beacon, NY**

Location ID: **SB-7**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / 2.2 ft bsg

Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-5'	Texture:	sand / loamy sand / sandy loam / <del>sandy clay loam</del> / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 1.4	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>00</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
5-10	Texture:	sand / loamy sand / sandy loam / sandy clay loam / <del>sandy clay</del> / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 3.10	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other <u>ASH 4 / LMS 40-0 7-1-8.6'</u>	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
10-15'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 3.1	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other <u>13.3-15'</u>	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>5.6</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
15-20'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 6	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
**Long Dock  
Beacon, NY**

Location ID: **SB-8**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / **3.0** ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations **CRITTER SAND 24.9**

0-5'	Texture:	sand / loamy sand / sandy loam / <u>sandy clay loam</u> / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size	v. coarse / coarse / med / <u>fine</u> / v. fine
Recovery 3.7'	Inclusions:	gravel (coarse / med / fine) / stones / <u>rock frags</u> (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / <u>asphalt</u> / concrete / coal / wood / metal / plastic / other		
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray		
Sampled	Moisture:	dry / slightly moist / moist / <u>very moist</u> / wet	Soil Density:	non-cohesive / loose / dense / plastic / cemented
Grab 2.9-3.6 ft	Notes:	PID <u>14.3</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other: <u>ASPHALT</u>		
5-10'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery 2.2'	Inclusions:	gravel (coarse / med / fine) / stones / <u>rock frags</u> (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / <u>asphalt</u> / concrete / coal / wood / metal / plastic / other		
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray		
Sampled	Moisture:	dry / slightly moist / moist / <u>very moist</u> / wet	Soil Density:	non-cohesive / loose / dense / plastic / cemented
Grab ft	Notes:	PID <u>30.5</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other: <u>ASPHALT</u>		
10-15'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery 0'	Inclusions:	gravel (coarse / med / fine) / stones / <u>rock frags</u> (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / <u>asphalt</u> / concrete / coal / wood / metal / plastic / other		
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray		
Sampled	Moisture:	dry / slightly moist / moist / <u>very moist</u> / wet	Soil Density:	non-cohesive / loose / dense / plastic / cemented
Grab 10-15 ft	Notes:	PID <u>47.8</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other: <u>ASPHALT</u>		
15-20'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery 1.9'	Inclusions:	gravel (coarse / med / fine) / stones / <u>rock frags</u> (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / <u>asphalt</u> / concrete / coal / wood / metal / plastic / other		
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray		
Sampled	Moisture:	dry / slightly moist / moist / <u>very moist</u> / wet	Soil Density:	non-cohesive / loose / dense / plastic / cemented
Grab ft	Notes:	PID <u>51</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other: <u>ASPHALT</u>		

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID:  
**SB-9**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / 4.4 ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

**0-5'** Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery **2.7** Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab 4.5-5' ft Notes: PID 122 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

**5-10'** Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab \_\_\_\_\_ ft Notes: PID 110 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

**10-15'** Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery **0.4'** Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab \_\_\_\_\_ ft Notes: PID 162 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

**15-20'** Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery **4.1'** Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab \_\_\_\_\_ ft Notes: PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
**Long Dock  
Beacon, NY**

Location ID: **SB-10**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes: **38' FROM H<sup>2</sup>O RANT**

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / **19.5** ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

<b>0-5'</b>	<b>Texture:</b>	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content <b>Sand Size</b> v. coarse / coarse / med / fine / v. fine
Recovery <b>2.5'</b>	<b>Inclusions:</b>	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other <b>4, 7, 5'</b>
S/S/A (except)	<b>Color:</b>	<b>Intensity</b> light / medium / dark <b>Hue</b> yellow / orange / red / brown / black / gray <b>Modifier</b> yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	<b>Moisture:</b>	dry / slightly moist / moist / very moist / wet <b>Soil Density:</b> non-cohesive / loose / dense / plastic / cemented
Grab <b>3.4-4.5 ft</b>	<b>Notes:</b>	PID <b>0.0</b> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) <b>Other:</b>
<b>5-10'</b>	<b>Texture:</b>	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content <b>Sand Size</b> v. coarse / coarse / med / fine / v. fine
Recovery <b>6.4'</b>	<b>Inclusions:</b>	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other <b>COKE SLAG, COAL DUST</b>
S/S/A (except)	<b>Color:</b>	<b>Intensity</b> light / medium / dark <b>Hue</b> yellow / orange / red / brown / black / gray <b>Modifier</b> yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	<b>Moisture:</b>	dry / slightly moist / moist / very moist / wet <b>Soil Density:</b> non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	<b>Notes:</b>	PID <b>0.0</b> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) <b>Other:</b>
<b>10-15'</b>	<b>Texture:</b>	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content <b>Sand Size</b> v. coarse / coarse / med / fine / v. fine
Recovery <b>2.7'</b>	<b>Inclusions:</b>	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	<b>Color:</b>	<b>Intensity</b> light / medium / dark <b>Hue</b> yellow / orange / red / brown / black / gray <b>Modifier</b> yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	<b>Moisture:</b>	dry / slightly moist / moist / very moist / wet <b>Soil Density:</b> non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	<b>Notes:</b>	PID <b>0.0</b> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) <b>Other:</b>
<b>15-20'</b>	<b>Texture:</b>	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content <b>Sand Size</b> v. coarse / coarse / med / fine / v. fine
Recovery	<b>Inclusions:</b>	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	<b>Color:</b>	<b>Intensity</b> light / medium / dark <b>Hue</b> yellow / orange / red / brown / black / gray <b>Modifier</b> yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	<b>Moisture:</b>	dry / slightly moist / moist / very moist / wet <b>Soil Density:</b> non-cohesive / loose / dense / plastic / cemented
Grab <b>3.5 ft</b>	<b>Notes:</b>	PID <b>0.0</b> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) <b>Other:</b>

**SA ABOVE MED CHANGE 19.6 → 20**

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID:  
**SB-11**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / **4.2** ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-5'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 3'	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other <b>ROCK + SLAB</b>	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab 3.3-5 ft	Notes:	PID <b>0.0</b> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
5-10'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 3.1	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other <b>COARSE SLAB</b>	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ft	Notes:	PID <b>0.0</b> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
10-15'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 3.5	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other <b>COARSE SLAB</b>	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ft	Notes:	PID <b>0.0</b> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
15-20'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 3.6	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other <b>COARSE SLAB</b>	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ft	Notes:	PID <b>0.0</b> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
Red Flynn Drive  
Beacon, NY

Location ID: 2SB-

Boring Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

## Soil Profile and Field Observations

0-2'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	
Recovery 100%	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark	Hue yellow / orange / red / brown / black / gray
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	
Grab _____ ft	Notes:	PID 1.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
2-3'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark	Hue yellow / orange / red / brown / black / gray
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	
Grab _____ ft	Notes:	PID 1.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
3-4'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark	Hue yellow / orange / red / brown / black / gray
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	
Grab _____ ft	Notes:	PID 1.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark	Hue yellow / orange / red / brown / black / gray
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
Red Flynn Drive  
Beacon, NY

Location ID: **2SB- 2** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg

Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

1-3	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / <u>dark</u>	Hue yellow / orange / red / <u>brown</u> / black / gray
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	
Grab _____ ft	Notes:	PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
0-1	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / <u>rock frags</u> (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / <u>medium</u> / dark	Hue yellow / orange / red / <u>brown</u> / black / gray
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	
Grab _____ ft	Notes:	PID <u>1.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark	Hue yellow / orange / red / brown / black / gray
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark	Hue yellow / orange / red / brown / black / gray
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	



# Soil Sample Log And Collection Record

ESI Job Number

SG96152.50 - SRIWP

Site Location

Red Flynn Drive  
Beacon, NY

Location ID: 2SB- 3

Boring

Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/ auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg

Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg

Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-2.8 Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery 3.8 Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other Ash

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab Notes: PID 0-0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

2.8-3.5 Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab Notes: PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab Notes: PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab Notes: PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

Wet  
021

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
**Red Flynn Drive  
Beacon, NY**

Location ID: **2SB-4** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

## Soil Profile and Field Observations

0-2.2	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 100	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other Ash	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
2.2-4.2	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
3.2-4	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID 114 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	

# Soil Sample Log And Collection Record

ESI Job Number

SG96152.50 - SRIWP

Site Location

Red Flynn Drive  
Beacon, NY

Location ID: 2SB-

Boring

Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg

Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg

Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-2	Texture:	sand / loamy sand / sandy loam / sandy clay loam / <u>sandy clay</u> / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	
		Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity	light / medium / dark
		Hue	<u>yellow</u> / orange / red / <u>brown</u> / black / gray
		Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	<u>dry</u> / slightly moist / moist / very moist / wet	
		Soil Density:	non-cohesive / loose / <u>dense</u> / plastic / cemented
Grab _____ ft	Notes:	PID <u>0-0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
2-4	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	
		Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity	light / medium / dark
		Hue	yellow / orange / red / brown / <u>black</u> / gray
		Modifier	yellowish / reddish / brownish / <u>grayish</u> / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	
		Soil Density:	non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID <u>0-0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	
		Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity	light / medium / dark
		Hue	yellow / orange / red / brown / black / gray
		Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	
		Soil Density:	non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	
		Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity	light / medium / dark
		Hue	yellow / orange / red / brown / black / gray
		Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	
		Soil Density:	non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	

Fill  
Net,  
3.5

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
Red Flynn Drive  
Beacon, NY

Location ID: **2SB-6** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

## Soil Profile and Field Observations

0-2	Texture:	sand / loamy sand / sandy loam / sandy clay loam / <u>sandy clay</u> / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine		
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other		
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / <u>brown</u> / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other		
Sampled	Moisture:	<u>dry</u> / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented		
Grab _____ ft	Notes:	PID <u>1.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:		
2-2.5	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine		
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / <u>rock frags</u> (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other		
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other		
Sampled	Moisture:	<u>dry</u> / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented		
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:		
2.5-4 ft	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine		
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other		
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / <u>black</u> / gray Modifier yellowish / reddish / brownish / <u>grayish</u> / blackish / <u>mottled</u> / other		
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented		
Grab _____ ft	Notes:	PID <u>2.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:		
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine		
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other		
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other		
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented		
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:		

# Soil Sample Log And Collection Record

ESI Job Number

SG96152.50 - SRIWP

Site Location

Red Flynn Drive  
Beacon, NY

Location ID: 2SB- 7

Boring

Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg

Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg

Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-3'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other		
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray		
	Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other		
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	Soil Density:	non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID 0.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:		
3-4'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other		
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray		
	Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other		
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	Soil Density:	non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID 0.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:		
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other		
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray		
	Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other		
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	Soil Density:	non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:		
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other		
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray		
	Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other		
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	Soil Density:	non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:		

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
Red Flynn Drive  
Beacon, NY

Location ID: **2SB-8** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-4	Texture:	sand / loamy sand / sandy loam / sandy clay loam / <u>sandy clay</u> / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / <u>black</u> / gray Modifier yellowish / reddish / brownish / grayish / <u>blackish</u> / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: <u>non-cohesive</u> / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:
1-4	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	<u>dry</u> / slightly moist / moist / very moist / wet Soil Density: non-cohesive / <u>loose</u> / dense / plastic / cemented
Grab _____ ft	Notes:	PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
Red Flynn Drive  
Beacon, NY

Location ID: **2SB-9** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0 - 13	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID 0-0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
3-4	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID 0-0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
**Red Flynn Drive  
Beacon, NY**

Location ID: **2SB-10** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-5	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 60%	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID 1.7 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
5-7	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 50%	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID 3.9 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
8-10	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID 12.4 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
10-12	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	

12-17

green

clay at 14 to 17 possible slight odor

coarse sand w gravel, black-fill.

PID 3.9, since one like four.



# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
**Red Flynn Drive  
Beacon, NY**

Location ID: **2SB- //** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-5	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>A.S</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	

Fill  
not at 4.6"  
@5'  
refsd,  
PID-5  
fin hole

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
Red Flynn Drive  
Beacon, NY

Location ID: **2SB-11A** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_ ft bsg Void

Depth (feet bsg)	Soil Profile and Field Observations	
0-5	Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes: PID <u>40</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
5-10	Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes: PID <u>45</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
10-15	Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes: PID <u>1.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes: PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	

Water  
194

2-  
7-8  
one of

Ash/Fill  
Ash/Fill

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
**Red Flynn Drive  
Beacon, NY**

Location ID: **2SB-12** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

**0-5'** Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery **75%** Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab \_\_\_\_\_ ft Notes: PID 1.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

**5-10** Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery **50%** Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab **6-7** ft Notes: PID 1.5 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other: 14'

**10-15** Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab \_\_\_\_\_ ft Notes: PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab \_\_\_\_\_ ft Notes: PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

FLYNN  
INSUR  
3-6"

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
Red Flynn Drive  
Beacon, NY

Location ID: **2SB-17** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-5	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
5-10	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID 119 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
17	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID 10 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

17-19 Brick  
19-22 clay

at 17 - in clay beneath brick

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
Red Flynn Drive  
Beacon, NY

Location ID: **2SB-14** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-5	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity <u>light</u> / medium / dark Hue yellow / orange / red / brown / black <u>gray</u> Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>7.1</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen ( <u>light</u> / heavy) free product (LNAPL / DNAPL) Other:	
5-8	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / <u>wet</u> Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>22.5</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
8-10	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / <u>wet</u> Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>230</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen ( <u>light</u> / heavy) free product (LNAPL / DNAPL) Other: <u>V</u>	
10-17	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	

dry  
fine  
silty  
clay

clay @ 15'

# Soil Sample Log And Collection Record

ESI Job Number

SG96152.50 - SRIWP

Site Location

Red Flynn Drive  
Beacon, NY

Location ID: 2SB-

Boring

Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg

Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-4 Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab Notes: PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

4-5 Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab Notes: PID 40 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

5-10 Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab Notes: PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

10-20 Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab Notes: PID 1 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

Went down to 30 clay @ 17 clay @ 17



# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
**Red Flynn Drive  
Beacon, NY**

Location ID: **2SB-16** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth (feet bsg) **Top soil to 6"**

## Soil Profile and Field Observations

0-3	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 3	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
5-10	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 1	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other <i>fill case</i>	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>84</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
10-17	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 100%	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>78</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	

5-13  
 15-17  
 clay

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
**Red Flynn Drive  
Beacon, NY**

Location ID: **2SB-** 7 **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

	Texture:	sand / <u>loamy sand</u> / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / <u>coarse</u> / med / fine / v. fine	
Recovery <u>50%</u>	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / <u>black</u> / gray Modifier yellowish / reddish / brownish / <u>grayish</u> / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / <u>dense</u> / plastic / cemented	
Grab _____ ft	Notes:	PID <u>46</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / <u>staining</u> or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
<u>5-10'</u>	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / <u>coarse</u> / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>10</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
<u>10-20</u>	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / <u>coarse</u> / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / <u>fine</u> ) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / <u>blackish</u> / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: <u>non-cohesive</u> / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>5.3</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
<u>20-30</u>	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
Red Flynn Drive  
Beacon, NY

Location ID: **2SB-18** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-5'	Texture:	Fill	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery 3-5'	Inclusions:		gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other Ash
S/S/A (except)	Color:		Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:		dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:		PID 1.5 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
5-10'	Texture:	Fill	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:		gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:		Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:		dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:		PID 15 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
10-15'	Texture:		sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:		gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:		Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:		dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:		PID 15 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
15-20'	Texture:		sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:		gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:		Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:		dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:		PID 2 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other: clay at 20'

contaminated by 5/10/15/20'

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
Red Flynn Drive  
Beacon, NY

Location ID: **2SB-19** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-1'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 2'3"	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other ash	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID 0.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	

vet 1' from tip

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
Red Flynn Drive  
Beacon, NY

Location ID: **2SB-** 20 **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-4'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other Ash
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other: Wet at 3'6"
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
**Red Flynn Drive  
Beacon, NY**

Location ID: **2SB-21** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-2'	Texture:	sand / loamy sand / <del>sandy loam</del> / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. <del>coarse</del> / coarse / med / fine / v. fine	
Recovery 2'	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / <del>coal</del> / wood / metal / plastic / other <del>DM</del>	
S/S/A (except)	Color:	Intensity light / medium / <del>dark</del> Hue yellow / orange / <del>red</del> / brown / black / gray Modifier yellowish / reddish / brownish / grayish / <del>blackish</del> / mottled / other	
Sampled	Moisture:	<del>dry</del> / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>0.6</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	



# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID: 2SB-22 Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other: 5 ft

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

3.5'

1-3'	Texture:	sand / loamy sand / <u>sandy loam</u> / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / <u>coal</u> / wood / metal / plastic / other <u>ash</u>		
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / <u>black</u> / gray	Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	Soil Density:	non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:		
3-4'	Texture:	sand / loamy sand / <u>sandy loam</u> / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other		
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / <u>gray</u>	Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	Soil Density:	non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:		
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other		
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray	Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	Soil Density:	non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:		
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content	Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other		
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray	Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	Soil Density:	non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:		

# Soil Sample Log And Collection Record

ESI Job Number

SG96152.50 - SRIWP

Site Location

Red Flynn Drive  
Beacon, NY

Location ID: 2SB-23

Boring

Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg

Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-4'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID 0.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
20-24'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID 0.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
36-40'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID 0.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
5-10'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab 7-7.5 ft	Notes:	PID 6.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
**Red Flynn Drive  
Beacon, NY**

Location ID: **2SB-24** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-1'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / <u>high organic content</u> Sand Size v. coarse / <u>coarse</u> / med / fine / v. fine	
Recovery 100%	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID <u>0-0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
1-3.5	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / <u>coarse</u> / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / <u>medium</u> / dark Hue yellow / orange / red / brown / <u>black</u> / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID <u>0-0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
3.5-5	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / <u>coarse</u> / med / fine / v. fine	
Recovery	Inclusions:	gravel ( <u>coarse</u> / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / <u>coal</u> / wood / metal / plastic / other <u>Ash</u>	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: <u>non-cohesive</u> / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID <u>0-0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
5-10	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / <u>clay</u> / organic muck / high organic content Sand Size v. coarse / <u>coarse</u> / med / fine / v. fine	
Recovery 3'	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / <u>wet</u> Soil Density: non-cohesive / loose / dense / <u>plastic</u> / cemented	
Grab ____ ft	Notes:	PID <u>1-5</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
**Red Flynn Drive  
Beacon, NY**

Location ID: **2SB-29** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-5	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other ash	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID 0.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
6-7	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 100	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other ash	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab 6-7 ft	Notes:	PID 0.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
7-10	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID 0.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	

3-4"  
20-24"  
36-40"

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
Red Flynn Drive  
Beacon, NY

Location ID: **2SB-26** Boring Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-4"	Texture:	sand / loamy sand / sandy loam / sandy clay loam / <u>sandy clay</u> / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / <u>med</u> / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity <u>light</u> / medium / dark Hue yellow / orange / red / <u>brown</u> / black / gray Modifier yellowish / reddish / <u>brownish</u> / grayish / blackish / mottled / other
Sampled	Moisture:	<u>dry</u> / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
10-24"	Texture:	sand / loamy sand / sandy loam / sandy clay loam / <u>sandy clay</u> / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / <u>med</u> / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity <u>light</u> / medium / dark Hue yellow / orange / red / <u>brown</u> / black / gray Modifier yellowish / reddish / <u>brownish</u> / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
36-40"	Texture:	<u>sand</u> / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / <u>med</u> / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / <u>dark</u> Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / <u>blackish</u> / mottled / other
Sampled	Moisture:	dry / <u>slightly moist</u> / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
5-10	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / <u>clay</u> / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery <u>SDP</u>	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / <u>medium</u> / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / <u>moist</u> / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab <u>5-10</u> ft	Notes:	PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
Red Flynn Drive  
Beacon, NY

Location ID: **2SB-27** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-4'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>2.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
20-24'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>2.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
36-40'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>2.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	



# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
Red Flynn Drive  
Beacon, NY

Location ID: **2SB-28** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-4"	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab 0-4" ft	Notes:	PID 0.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
20-24"	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab 20-24 ft	Notes:	PID 0.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
36-40"	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID 0.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
Red Flynn Drive  
Beacon, NY

Location ID: **2SB-29** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-4"	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 100%	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab 0-4" ft	Notes:	PID 0.5 ppm (N.E.C.) / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
10-24"	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 100%	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab 10-24 ft	Notes:	PID 0.1 ppm (N.E.C.) / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
36-40"	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 100%	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab 36-40 ft	Notes:	PID 0.1 ppm (N.E.C.) / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm (N.E.C.) / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
**Red Flynn Drive  
Beacon, NY**

Location ID: **2SB-30** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-6"	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / <u>med</u> / fine / v. fine	
Recovery 100%	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / <u>medium</u> / dark Hue yellow / orange / red / brown / <u>black</u> / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / <u>slightly moist</u> / moist / very moist / wet Soil Density: <u>non-cohesive</u> / loose / dense / plastic / cemented	
Grab 0-6" ft	Notes:	PID <u>0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
26-28"	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 100%	Inclusions:	gravel (coarse / med / <u>fine</u> ) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / <u>black</u> / <u>gray</u> Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / <u>slightly moist</u> / moist / very moist / wet Soil Density: <u>non-cohesive</u> / loose / dense / plastic / cemented	
Grab 26-28" ft	Notes:	PID <u>11</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
36-40"	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. <u>coarse</u> / coarse / med / fine / v. fine	
Recovery 100%	Inclusions:	gravel (coarse / <u>med</u> / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / <u>slightly moist</u> / moist / very moist / wet Soil Density: <u>non-cohesive</u> / loose / dense / plastic / cemented	
Grab 36-40" ft	Notes:	PID <u>0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / <u>slightly moist</u> / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
**Red Flynn Drive  
Beacon, NY**

Location ID: **2SB-31** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-4	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / <u>silt</u> / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 100	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / <u>coal</u> / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / <u>brownish</u> / grayish / blackish / <u>mottled</u> / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>1.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
4-5	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / <u>med</u> / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / <u>medium</u> / dark Hue yellow / orange / red / <u>brown</u> / black / <u>gray</u> Modifier yellowish / reddish / brownish / grayish / blackish / <u>mottled</u> / other	
Sampled	Moisture:	dry / <u>slightly moist</u> / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>0.4</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / <u>silt</u> / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery 2'	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / <u>medium</u> / dark Hue yellow / orange / red / <u>brown</u> / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / <u>mottled</u> / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
10-15	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. <u>coarse</u> / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: <u>brick</u> / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / <u>gray</u> Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other <u>off-center</u>	
Sampled	Moisture:	dry / slightly moist / moist / very moist / <u>wet</u> Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>1.1</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	

PID background drive track

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di

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
Red Flynn Drive  
Beacon, NY

Location ID: **2SB-32** Boring Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-5	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery 60%	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other FILE 1A 415
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other then silt
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab ____ ft	Notes:	PID 0.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery 10%	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab ____ ft	Notes:	PID 0.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
10-15	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery 10%	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab ____ ft	Notes:	PID 0.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
15-19	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab ____ ft	Notes:	PID ____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
Red Flynn Drive  
Beacon, NY

Location ID: **2SB- 33** **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-5	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other <i>Fill</i>
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
5-6	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
6-10	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other <i>Fill ash, brick and dirt</i>
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
10-15	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other <i>Brick throughout</i>
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:



# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID: 2 SB-34

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-5'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size <u>v. coarse</u> / coarse / med / fine / v. fine	
Recovery 100%	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other <u>ash</u>	
S/S/A (except)	Color:	Intensity light / medium / <u>dark</u> Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / <u>grayish</u> / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	

0-2'  
2-5'

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
Red Flynn Drive  
Beacon, NY

Location ID: **2SB-35** Boring Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-5	Texture:	sand / loamy sand / <u>sandy loam</u> / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / <u>med</u> / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / <u>brown</u> / black / gray Modifier yellowish / reddish / brownish / grayish / <u>blackish</u> / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / <u>dense</u> / plastic / cemented
Grab _____ ft	Notes:	PID <u>5</u> ppm N.E.C. / odor ( <u>slight</u> / strong / fuel-oil / gas / chemical) / staining or <u>sheen</u> (light / heavy) free product (LNAPL / DNAPL) Other:
5-10	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. <u>coarse</u> / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / <u>black</u> / gray Modifier yellowish / reddish / brownish / grayish / <u>blackish</u> / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab <u>3/4</u> ft	Notes:	PID _____ ppm N.E.C. / odor ( <u>slight</u> / strong / fuel-oil / gas / chemical) / staining or <u>sheen</u> (light / heavy) free product (LNAPL / DNAPL) Other:
10-20	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor ( <u>slight</u> / strong / fuel-oil / gas / chemical) / staining or <u>sheen</u> (light / heavy) free product (LNAPL / DNAPL) Other: <u>cleaning up @ fire</u>
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

wet at 4'

Fill to 16 then clay

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID: TP-1

Boring / Test Pit / Sediment Sample Location: TP-1

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-3.5' (FILL)	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity	light / medium / dark Hue yellow / orange / red / brown / black / gray
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity	light / medium / dark Hue yellow / orange / red / brown / black / gray
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity	light / medium / dark Hue yellow / orange / red / brown / black / gray
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity	light / medium / dark Hue yellow / orange / red / brown / black / gray
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet	Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID:

TP-2

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe / pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-5.6'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other FABRIC	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab 2.5 ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other: GWD 5.6'	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
**Long Dock  
Beacon, NY**

Location ID: **PP-3**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth (feet bsg) **0-2.5**

## Soil Profile and Field Observations

0-2.5'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content		Sand Size	v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other			
S/S/A (except)	Color:	Intensity	light / medium / dark	Hue	yellow / orange / red / brown / black / gray
		Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other		
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet			
Grab _____ ft	Notes:	PID <b>0.0</b> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other: <b>blue 2.5</b>			
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content			
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other			
S/S/A (except)	Color:	Intensity	light / medium / dark	Hue	yellow / orange / red / brown / black / gray
		Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other		
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet			
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:			
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content			
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other			
S/S/A (except)	Color:	Intensity	light / medium / dark	Hue	yellow / orange / red / brown / black / gray
		Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other		
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet			
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:			
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content			
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other			
S/S/A (except)	Color:	Intensity	light / medium / dark	Hue	yellow / orange / red / brown / black / gray
		Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other		
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet			
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:			

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
SG96152.50

Site Location  
Long Dock  
Beacon, NY

Location ID: TP-4

Boring / Test Pit / Sediment Sample Location:

8.95' E of SKED

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-2.9'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID 12.0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other: CW 2.9	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	



# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
**Long Dock  
Beacon, NY**

Location ID:

TP-5

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0.55' **Texture:** sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam  
**FILL** silty clay / silt / clay / organic muck / high organic content **Sand Size** v. coarse / coarse / med / fine / v. fine

Recovery **Inclusions:** gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed)  
debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A **Color:** **Intensity** light / medium / dark **Hue** yellow / orange / red / brown / black / gray  
(except) **Modifier** yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled **Moisture:** dry / slightly moist / moist / very moist / wet **Soil Density:** non-cohesive / loose / dense / plastic / cemented

Grab **Notes:** PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy)  
2 ft free product (LNAPL / DNAPL) **Other:**

**Texture:** sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam  
silty clay / silt / clay / organic muck / high organic content **Sand Size** v. coarse / coarse / med / fine / v. fine

Recovery **Inclusions:** gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed)  
debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A **Color:** **Intensity** light / medium / dark **Hue** yellow / orange / red / brown / black / gray  
(except) **Modifier** yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled **Moisture:** dry / slightly moist / moist / very moist / wet **Soil Density:** non-cohesive / loose / dense / plastic / cemented

Grab **Notes:** PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy)  
\_\_\_\_\_ ft free product (LNAPL / DNAPL) **Other:**

**Texture:** sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam  
silty clay / silt / clay / organic muck / high organic content **Sand Size** v. coarse / coarse / med / fine / v. fine

Recovery **Inclusions:** gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed)  
debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A **Color:** **Intensity** light / medium / dark **Hue** yellow / orange / red / brown / black / gray  
(except) **Modifier** yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled **Moisture:** dry / slightly moist / moist / very moist / wet **Soil Density:** non-cohesive / loose / dense / plastic / cemented

Grab **Notes:** PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy)  
\_\_\_\_\_ ft free product (LNAPL / DNAPL) **Other:**

**Texture:** sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam  
silty clay / silt / clay / organic muck / high organic content **Sand Size** v. coarse / coarse / med / fine / v. fine

Recovery **Inclusions:** gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed)  
debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A **Color:** **Intensity** light / medium / dark **Hue** yellow / orange / red / brown / black / gray  
(except) **Modifier** yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled **Moisture:** dry / slightly moist / moist / very moist / wet **Soil Density:** non-cohesive / loose / dense / plastic / cemented

Grab **Notes:** PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy)  
\_\_\_\_\_ ft free product (LNAPL / DNAPL) **Other:**

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
**Long Dock  
Beacon, NY**

Location ID:

**TP-6**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-8.5' **Texture:** sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content **Sand Size** v. coarse / coarse / med / fine / v. fine

Recovery **Inclusions:** gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) **Color:** **Intensity** light / medium / dark **Hue** yellow / orange / red / brown / black / gray **Modifier** yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled **Moisture:** dry / slightly moist / moist / very moist / wet **Soil Density:** non-cohesive / loose / dense / plastic / cemented

Grab 4/8 ft **Notes:** PID 76 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other: **GR 8.5' CORRELATION AS LO DEPT**

**Texture:** sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content **Sand Size** v. coarse / coarse / med / fine / v. fine

Recovery **Inclusions:** gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) **Color:** **Intensity** light / medium / dark **Hue** yellow / orange / red / brown / black / gray **Modifier** yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled **Moisture:** dry / slightly moist / moist / very moist / wet **Soil Density:** non-cohesive / loose / dense / plastic / cemented

Grab \_\_\_\_\_ ft **Notes:** PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

**Texture:** sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content **Sand Size** v. coarse / coarse / med / fine / v. fine

Recovery **Inclusions:** gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) **Color:** **Intensity** light / medium / dark **Hue** yellow / orange / red / brown / black / gray **Modifier** yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled **Moisture:** dry / slightly moist / moist / very moist / wet **Soil Density:** non-cohesive / loose / dense / plastic / cemented

Grab \_\_\_\_\_ ft **Notes:** PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

**Texture:** sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content **Sand Size** v. coarse / coarse / med / fine / v. fine

Recovery **Inclusions:** gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) **Color:** **Intensity** light / medium / dark **Hue** yellow / orange / red / brown / black / gray **Modifier** yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled **Moisture:** dry / slightly moist / moist / very moist / wet **Soil Density:** non-cohesive / loose / dense / plastic / cemented

Grab \_\_\_\_\_ ft **Notes:** PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID: TP-7

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-5.9'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
5.9'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab 5.9' ft	Notes:	PID <u>2.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID: **TP-8**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

5.3'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other: <b>61-23</b>	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID: TP-9

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

4.7

## Soil Profile and Field Observations

	<b>Texture:</b>	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content <b>Sand Size</b> v. coarse / coarse / med / fine / v. fine	
Recovery	<b>Inclusions:</b>	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	<b>Color:</b>	<b>Intensity</b> light / medium / dark <b>Hue</b> yellow / orange / red / brown / black / gray <b>Modifier</b> yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	<b>Moisture:</b>	dry / slightly moist / moist / very moist / wet <b>Soil Density:</b> non-cohesive / loose / dense / plastic / cemented	
Grab <u>1.5</u> ft	<b>Notes:</b>	PID <u>180</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) <b>Other:</b>	
	<b>Texture:</b>	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content <b>Sand Size</b> v. coarse / coarse / med / fine / v. fine	
Recovery	<b>Inclusions:</b>	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	<b>Color:</b>	<b>Intensity</b> light / medium / dark <b>Hue</b> yellow / orange / red / brown / black / gray <b>Modifier</b> yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	<b>Moisture:</b>	dry / slightly moist / moist / very moist / wet <b>Soil Density:</b> non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	<b>Notes:</b>	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) <b>Other:</b>	
	<b>Texture:</b>	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content <b>Sand Size</b> v. coarse / coarse / med / fine / v. fine	
Recovery	<b>Inclusions:</b>	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	<b>Color:</b>	<b>Intensity</b> light / medium / dark <b>Hue</b> yellow / orange / red / brown / black / gray <b>Modifier</b> yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	<b>Moisture:</b>	dry / slightly moist / moist / very moist / wet <b>Soil Density:</b> non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	<b>Notes:</b>	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) <b>Other:</b>	
	<b>Texture:</b>	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content <b>Sand Size</b> v. coarse / coarse / med / fine / v. fine	
Recovery	<b>Inclusions:</b>	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	<b>Color:</b>	<b>Intensity</b> light / medium / dark <b>Hue</b> yellow / orange / red / brown / black / gray <b>Modifier</b> yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	<b>Moisture:</b>	dry / slightly moist / moist / very moist / wet <b>Soil Density:</b> non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	<b>Notes:</b>	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) <b>Other:</b>	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID: MW-7 Boring / Test Pit / Sediment Sample Location: AUGER ONLY

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / 27 ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-5'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / <u>med / fine</u> / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / <u>asphalt</u> / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue <u>yellow</u> / orange / red / brown / black / gray Modifier <u>yellowish</u> / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	<u>dry</u> / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
5-10'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other <u>see SILT CLAY</u>	
S/S/A (except)	Color:	Intensity light / medium / dark Hue <u>yellow</u> / orange / red / brown / black / gray Modifier <u>yellowish</u> / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>0.2</u> ppm N.E.C. / <u>odor</u> (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other: <u>NO ODR OR PID AFTER 7.5'</u>	
10-12'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	



# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID:  
*MJ-8*

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

<i>05'</i>	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:
<i>5-6'</i>	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:
<i>6-12"</i>	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
**Red Flynn Drive  
Beacon, NY**

Location ID: MW-9 **Boring** Test Pit / Sediment Sample Location: South of MW-8

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth (feet bsg)	Soil Profile and Field Observations	
0-6"	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab ft	Notes:	PID <u>80</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:
6'-12"	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab ft	Notes:	PID <u>80</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:
1'-3'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab ft	Notes:	PID <u>80</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:
3'-10'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab ft	Notes:	PID <u>80</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
Red Flynn Drive  
Beacon, NY

Location ID: MW-10 0-5 **Boring** Test Pit / Sediment Sample Location: South of MW-5

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth (feet bsg)	Soil Profile and Field Observations	
0-6"	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery 4'	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:
1-2	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:
2-3	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:
3-5'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:

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at  
31

# Soil Sample Log And Collection Record

ESI Job Number  
**SG96152.50 - SRIWP**

Site Location  
**Red Flynn Drive  
Beacon, NY**

Location ID: MW10 5-10 **Boring** Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth (feet bsg)	Soil Profile and Field Observations	
5-8.5	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery 90%	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID <u>10</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:
8.5-10	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID <u>10</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:
10-15	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery 2-4	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID <u>10</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:

10-15  
panel  
fall in  
from  
above  
is full  
sample  
note

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
**Long Dock  
Beacon, NY**

Location ID: 601E  
SGD-1

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s): VIBRA CORE - 8

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg

Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-1' Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine (v. fine)

Recovery Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab Notes: PID 00 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

1-5' Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab Notes: PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

5-6' Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other — ORGANIC CONT 7%

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab Notes: PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab Notes: PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID:

*CONE-2*

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

*7' REC*

Depth to saturated soil: not encountered / \_\_\_\_ ft bsg

Refusal: not encountered / refusal at \_\_\_\_ ft bsg

Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

<i>0-1'</i>	<b>Texture:</b>	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content <b>Sand Size</b> v. coarse / coarse / med / fine / v. fine
Recovery	<b>Inclusions:</b>	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	<b>Color:</b>	<b>Intensity</b> light / medium / dark <b>Hue</b> yellow / orange / red / brown / black / gray <b>Modifier</b> yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	<b>Moisture:</b>	dry / slightly moist / moist / very moist / wet <b>Soil Density:</b> non-cohesive / loose / dense / plastic / cemented
Grab ____ ft	<b>Notes:</b>	PID ____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) <b>Other:</b>
	<b>Texture:</b>	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content <b>Sand Size</b> v. coarse / coarse / med / fine / v. fine
Recovery	<b>Inclusions:</b>	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	<b>Color:</b>	<b>Intensity</b> light / medium / dark <b>Hue</b> yellow / orange / red / brown / black / gray <b>Modifier</b> yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	<b>Moisture:</b>	dry / slightly moist / moist / very moist / wet <b>Soil Density:</b> non-cohesive / loose / dense / plastic / cemented
Grab ____ ft	<b>Notes:</b>	PID ____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) <b>Other:</b>
	<b>Texture:</b>	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content <b>Sand Size</b> v. coarse / coarse / med / fine / v. fine
Recovery	<b>Inclusions:</b>	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	<b>Color:</b>	<b>Intensity</b> light / medium / dark <b>Hue</b> yellow / orange / red / brown / black / gray <b>Modifier</b> yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	<b>Moisture:</b>	dry / slightly moist / moist / very moist / wet <b>Soil Density:</b> non-cohesive / loose / dense / plastic / cemented
Grab ____ ft	<b>Notes:</b>	PID ____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) <b>Other:</b>
	<b>Texture:</b>	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content <b>Sand Size</b> v. coarse / coarse / med / fine / v. fine
Recovery	<b>Inclusions:</b>	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	<b>Color:</b>	<b>Intensity</b> light / medium / dark <b>Hue</b> yellow / orange / red / brown / black / gray <b>Modifier</b> yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	<b>Moisture:</b>	dry / slightly moist / moist / very moist / wet <b>Soil Density:</b> non-cohesive / loose / dense / plastic / cemented
Grab ____ ft	<b>Notes:</b>	PID ____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) <b>Other:</b>



# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID:

CONE-3

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

7' REC

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-1'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>170</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
1-4'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>00</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
4-5'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>00</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
5-7'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID <u>00</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other: <u>SLT VOL DPOIL</u>	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID:

CORE-4

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other: 2' 5"

Depth to saturated soil: not encountered / \_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-3'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
3-7'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
7-15'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
SAND 5' 11"	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID:  
**CONE - 4 (COW)**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

5'-6'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other: <b>SHELL</b>	
6'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
6'-7'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
**Long Dock  
Beacon, NY**

Location ID:  
**CONE-05**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes: **7.5' RECOVER?**

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-1.5	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / <u>fine</u> / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other <b>SAND</b>
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab ____ ft	Notes:	PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other: <b>SAND</b>
1.5-7.5	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab ____ ft	Notes:	PID <u>0.0</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab ____ ft	Notes:	PID ____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented
Grab ____ ft	Notes:	PID ____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

Soil/Sediment Sample Log And Collection Record		ESI Job Number SG96152.50	Site Location Long Dock Beacon, NY
Location ID: <u>Cone-06</u>		Boring / Test Pit / Sediment Sample Location:	
Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):			
Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:			
Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other: <u>7'8" RECOLLECT</u>			
Depth to saturated soil: not encountered / _____ ft bsg		Refusal: not encountered / refusal at _____ ft bsg Void	
Depth (feet bsg)	Soil Profile and Field Observations		
<u>0-5.5</u>	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / <u>silt / clay</u> / organic muck / high organic content Sand Size v. coarse / coarse / med / fine <u>v. fine</u>	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / <u>organics (veg / woody / decayed)</u> / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / <u>orange / red</u> / brown / black / gray Modifier yellowish / reddish / brownish / <u>grayish / blackish</u> / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
<u>5.5-7.5</u>	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / <u>organics (veg / woody / decayed)</u> / debris: brick / asphalt / concrete / coal / wood / metal / plastic / <u>other</u> <u>WHITE CLAY BODIES</u>	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID:

C9E-07

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

7' recovery

Depth to saturated soil: not encountered / \_\_\_\_ ft bsg

Refusal: not encountered / refusal at \_\_\_\_ ft bsg

Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-7'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / <del>silt / clay / organic muck / high organic content</del> Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID 0-0 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID ____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID ____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID ____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID:

CORE 8-1

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other:

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

01.2	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	



# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
SG96152.50

Site Location  
Long Dock  
Beacon, NY

Location ID:

Cone 4-2

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other: 5' sec

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg

Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab Notes: PID 012 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab Notes: PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab Notes: PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

Texture: sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine

Recovery Inclusions: gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other

S/S/A (except) Color: Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other

Sampled Moisture: dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented

Grab Notes: PID \_\_\_\_\_ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID:

Core 9

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other: 7' REC

Depth to saturated soil: not encountered / \_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

0-2'7"	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity	light / medium / dark Hue yellow / orange / red / brown / black / gray
		Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID 00 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
2'7"	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity	light / medium / dark Hue yellow / orange / red / brown / black / gray
		Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID 00 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
2'7"	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity	light / medium / dark Hue yellow / orange / red / brown / black / gray
		Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID 00 ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity	light / medium / dark Hue yellow / orange / red / brown / black / gray
		Modifier	yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID ____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) free product (LNAPL / DNAPL) Other:	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID:  
**CONC - 10**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other: **6' 4"**

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth (feet bsg)	Soil Profile and Field Observations	
<b>0'</b>	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. f
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decay debris: brick / asphalt / concrete / coal / wood / metal / plastic / other <b>TRAC</b>
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cement
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy free product (LNAPL / DNAPL) Other: <b>SAP</b>
<b>1'-6"</b>	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. f
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decay debris: brick / asphalt / concrete / coal / wood / metal / plastic / other <b>TARE</b>
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cement
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy free product (LNAPL / DNAPL) Other:
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. f
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decay debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cement
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy free product (LNAPL / DNAPL) Other:
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. f
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decay debris: brick / asphalt / concrete / coal / wood / metal / plastic / other
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cement
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy free product (LNAPL / DNAPL) Other:

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID: **Cone -11**

Boring / Test Pit / Sediment Sample Location:

Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):

Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:

Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other: **6.4 REC**

Depth to saturated soil: not encountered / \_\_\_\_\_ ft bsg Refusal: not encountered / refusal at \_\_\_\_\_ ft bsg Void

Depth  
(feet bsg)

## Soil Profile and Field Observations

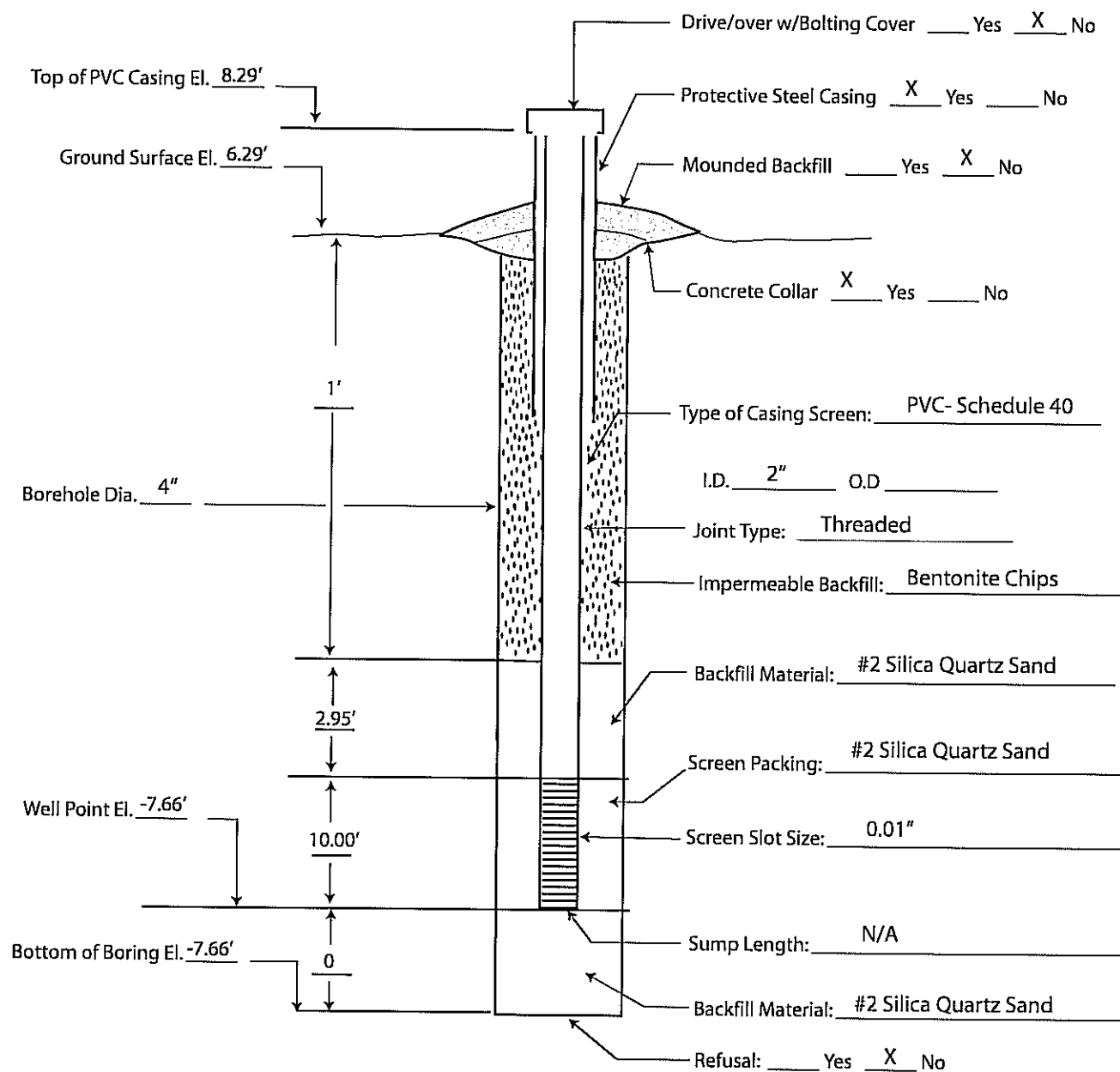
0-3'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other <b>CLINEL 1 + 3</b>	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
3-6.4'	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / wet Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab _____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	

# Soil/Sediment Sample Log And Collection Record

ESI Job Number  
**SG96152.50**

Site Location  
Long Dock  
Beacon, NY

Location ID: <u>COLE-12</u>		Boring / Test Pit / Sediment Sample Location:	
Equipment Used: Geoprobe (Hand / mechanized) / drill rig / excavator / back hoe pre-probe/auger depth(s):			
Surface Material: bare soil / asphalt / concrete / surface gravel / bedrock / organic material Notes:			
Sample Collection Interval: discreet surface sample / 2 feet (sleeve) / 4 feet (sleeve) / other: <u>6'7" REC</u>			
Depth to saturated soil: not encountered / ____ ft bsg		Refusal: not encountered / refusal at ____ ft bsg / Void	
Depth (feet bsg)	Soil Profile and Field Observations		
<u>0-3'</u>	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / <del>silt / clay</del> / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other <u>H/COCH</u>	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / <del>red</del> / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / <u>wet</u> Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID <u>00</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
<u>3-5'</u>	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / <del>silt / clay</del> / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other <u>COVER</u>	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / <u>wet</u> Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID <u>00</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
<u>5-6.4'</u>	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / <del>silt / clay</del> / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other <u>CESS + CHALK</u>	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / <u>wet</u> Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID <u>00</u> ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	
	Texture:	sand / loamy sand / sandy loam / sandy clay loam / sandy clay / loam / silt loam / clay loam / silty clay loam / silty clay / silt / clay / organic muck / high organic content Sand Size v. coarse / coarse / med / fine / v. fine	
Recovery	Inclusions:	gravel (coarse / med / fine) / stones / rock frags (sedimentary / crystalline) / organics (veg / woody / decayed) / debris: brick / asphalt / concrete / coal / wood / metal / plastic / other	
S/S/A (except)	Color:	Intensity light / medium / dark Hue yellow / orange / red / brown / black / gray Modifier yellowish / reddish / brownish / grayish / blackish / mottled / other	
Sampled	Moisture:	dry / slightly moist / moist / very moist / <u>wet</u> Soil Density: non-cohesive / loose / dense / plastic / cemented	
Grab ____ ft	Notes:	PID _____ ppm N.E.C. / odor (slight / strong / fuel-oil / gas / chemical) / staining or sheen (light / heavy) / free product (LNAPL / DNAPL) Other:	



## Materials Used:

Screen (PVC)	Bentonite Chips
Riser (PVC)	Concrete Mix
Plug (PVC)	Locking Exp. Plug
Silica Sand	Lock
	S/U

**Monitor Well MW-1 Installation Detail**

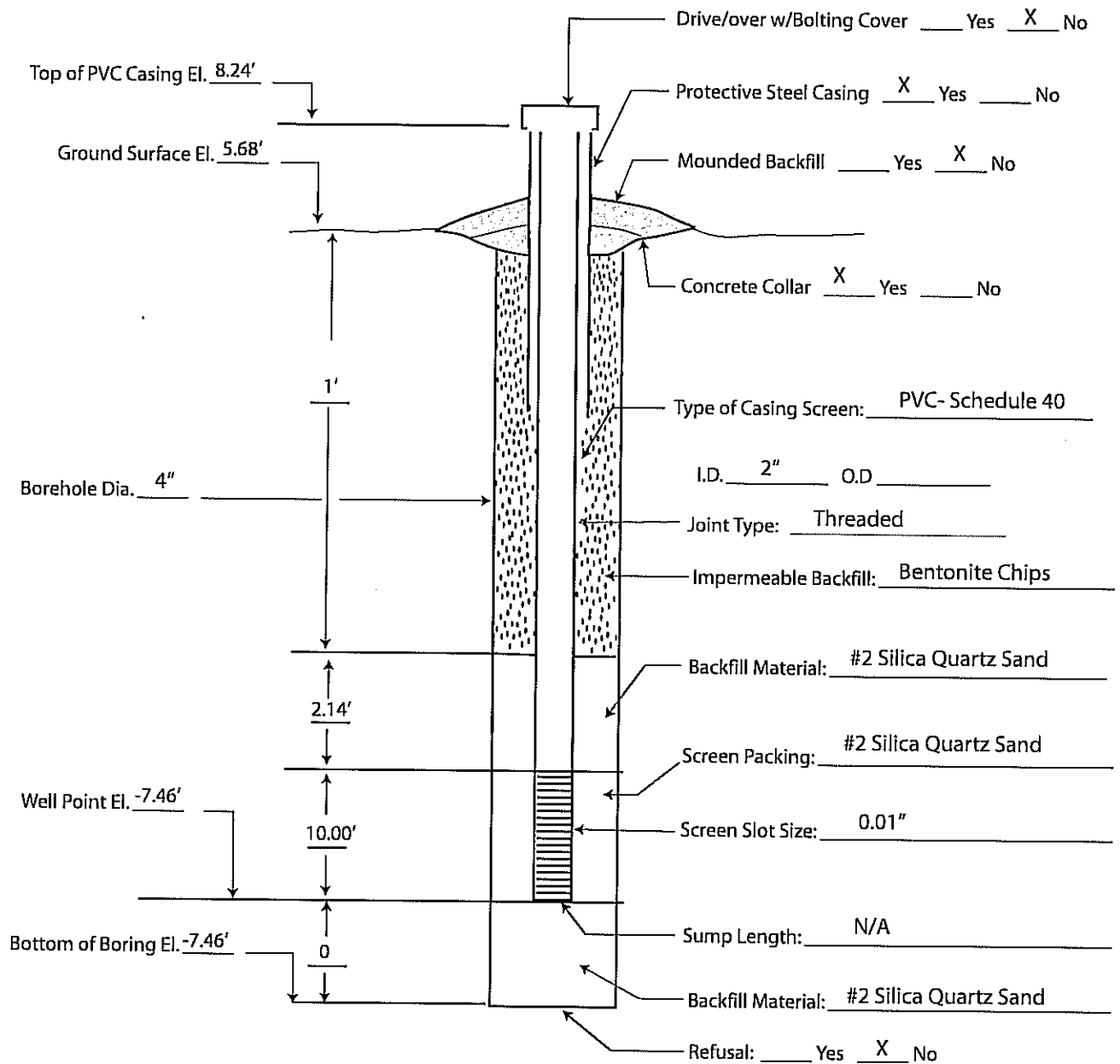
Long Dock Beacon Site  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

ESI File: SG96152.51

January 2007

Not to scale

Attachment



## Materials Used:

Screen (PVC)	Bentonite Chips
Riser (PVC)	Concrete Mix
Plug (PVC)	Locking Exp. Plug
Silica Sand	Lock
	S/U

**Monitor Well MW-2 Installation Detail**

Long Dock Beacon Site  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

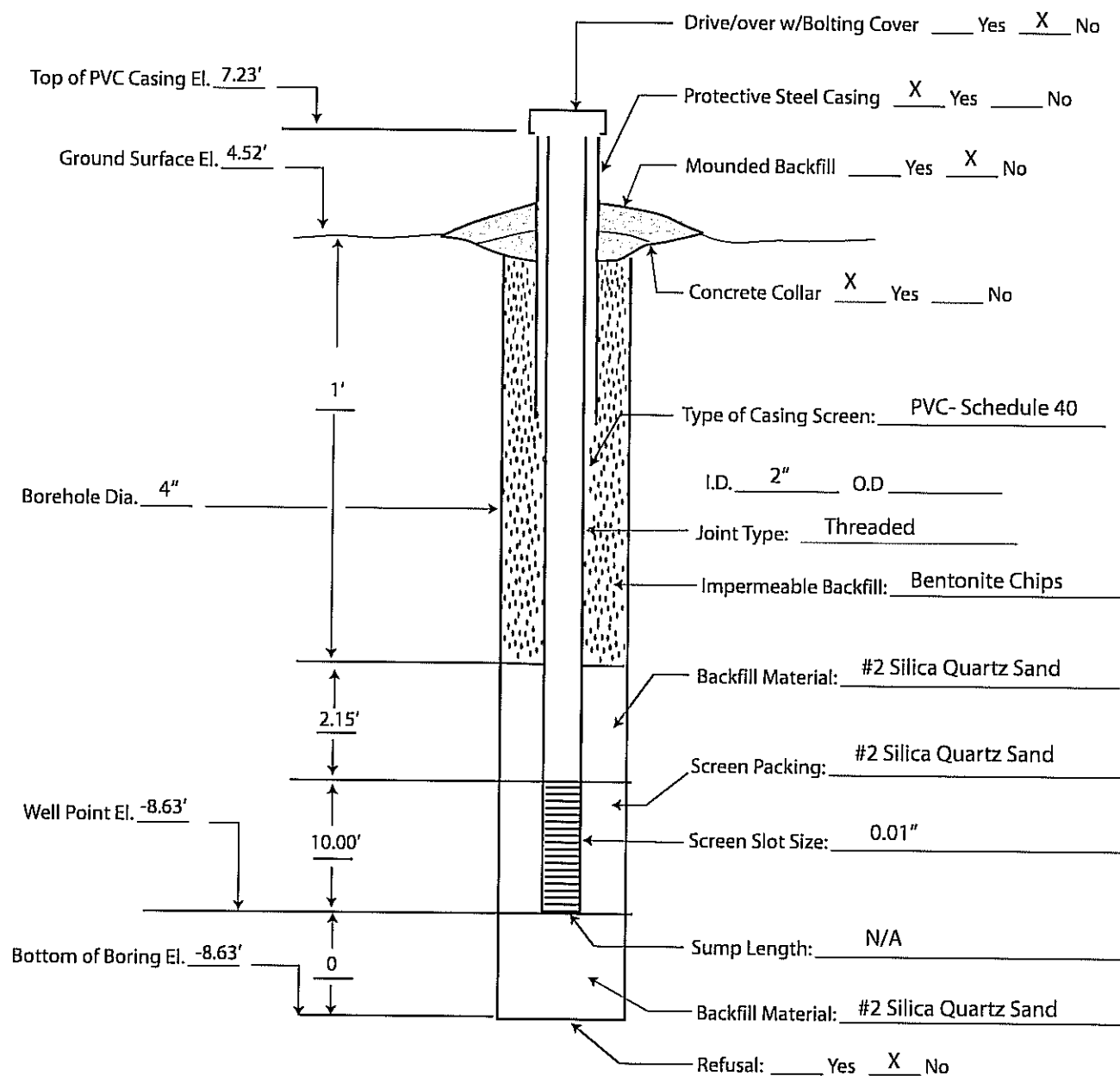
ESI File: SG96152.51

January 2007

Not to scale

Attachment





## Materials Used:

Screen (PVC)	Bentonite Chips
Riser (PVC)	Concrete Mix
Plug (PVC)	Locking Exp. Plug
Silica Sand	Lock
	S/U

**Monitor Well MW-3 Installation Detail**

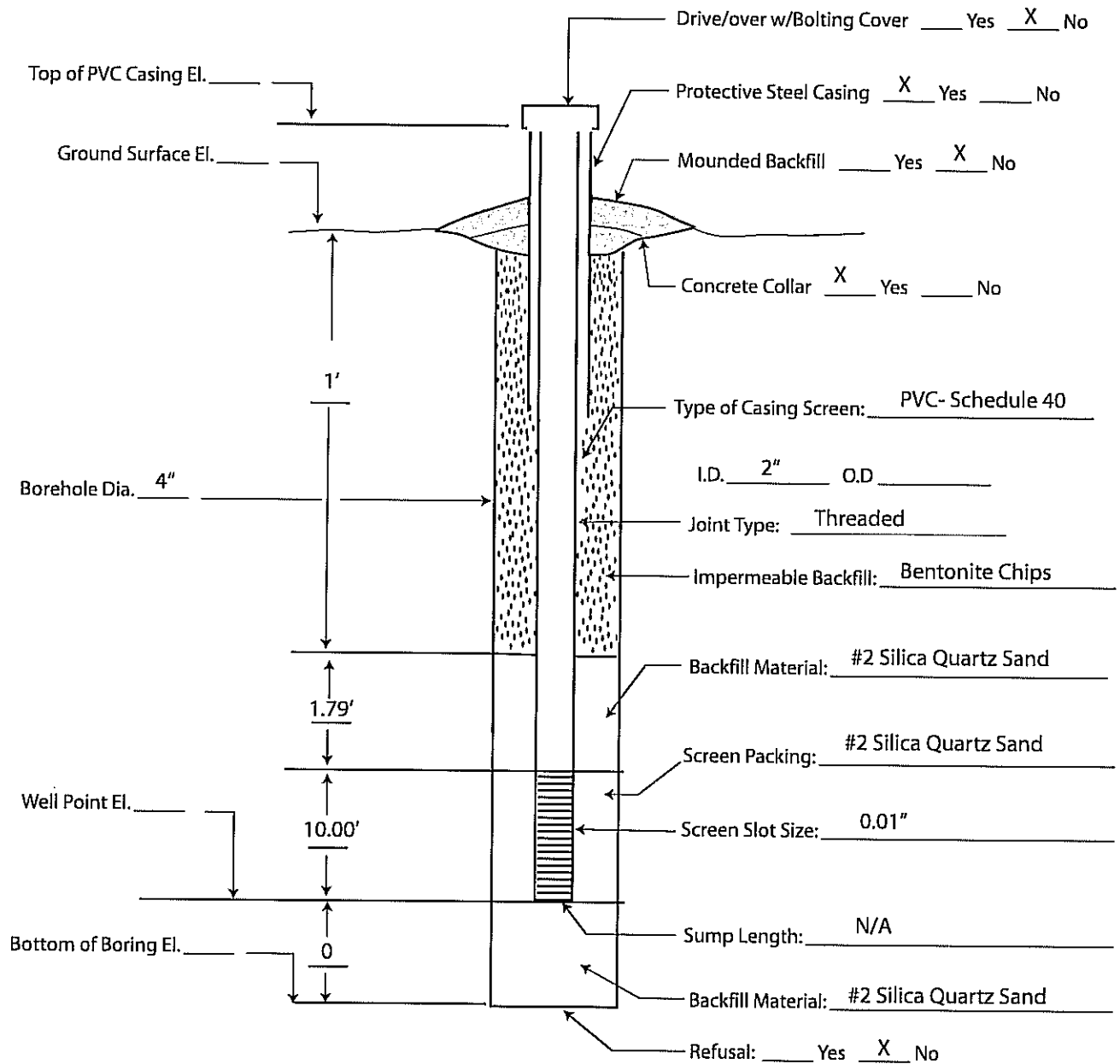
Long Dock Beacon Site  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

ESI File: SG96152.51

January 2007

Not to scale

Attachment



## Materials Used:

Screen (PVC)	Bentonite Chips
Riser (PVC)	Concrete Mix
Plug (PVC)	Locking Exp. Plug
Silica Sand	Lock
	S/U

**Monitor Well MW-4 Installation Detail**

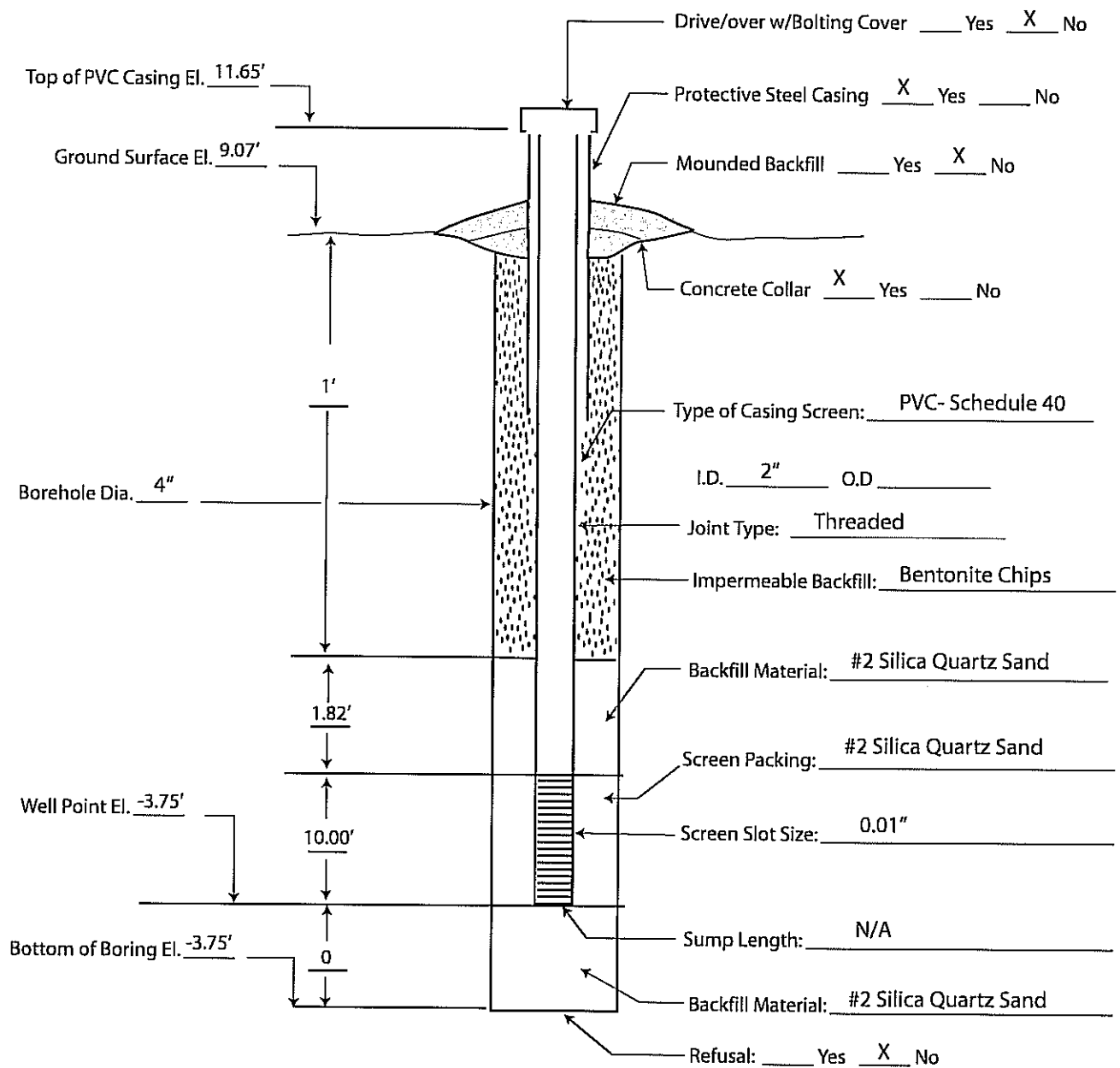
Long Dock Beacon Site  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

ESI File: SG96152.51

January 2007

Not to scale

Attachment



## Materials Used:

Screen (PVC)	Bentonite Chips
Riser (PVC)	Concrete Mix
Plug (PVC)	Locking Exp. Plug
Silica Sand	Lock
	S/U

**Monitor Well MW-5 Installation Detail**

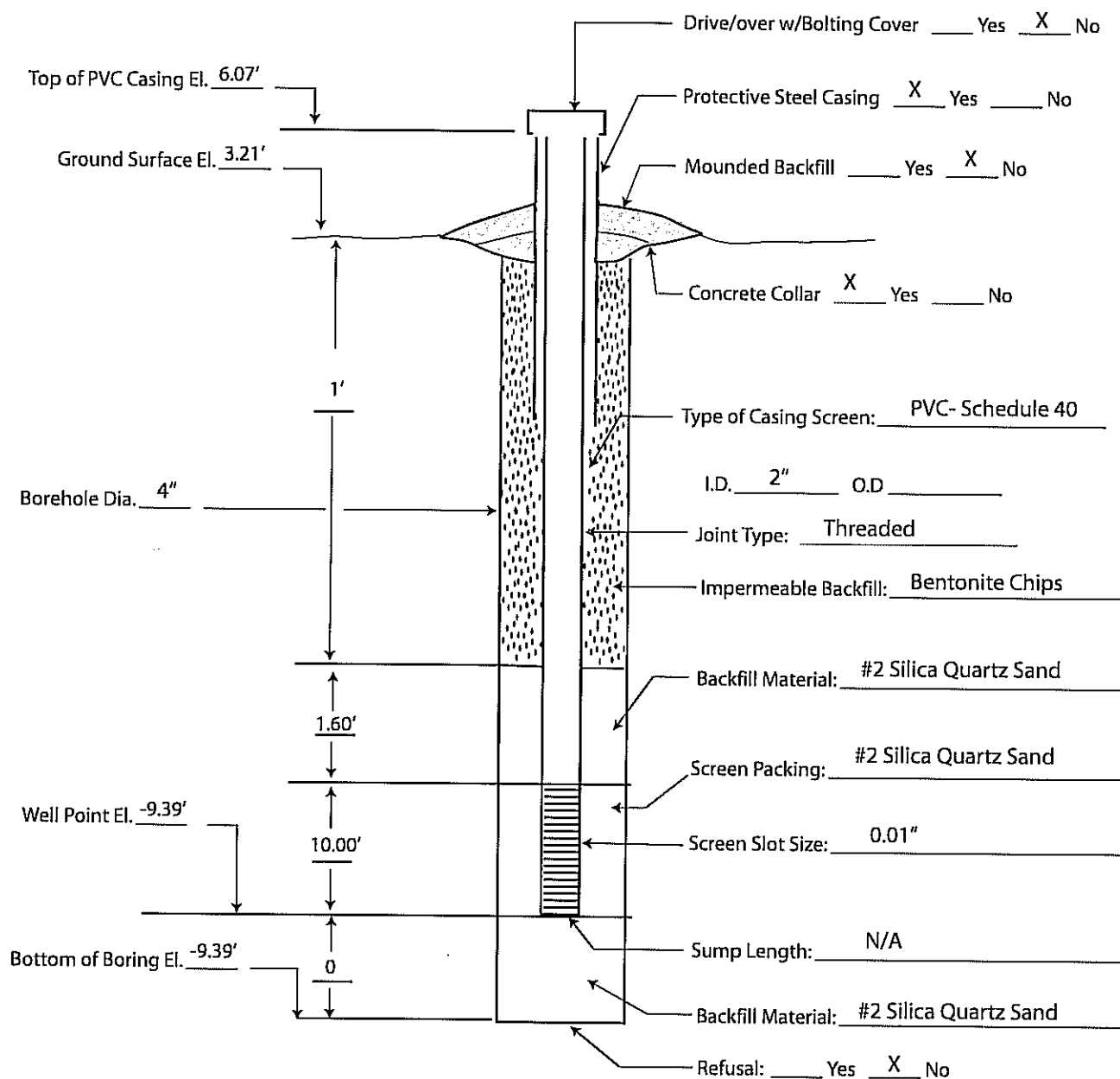
Long Dock Beacon Site  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

ESI File: SG96152.51

January 2007

Not to scale

Attachment



## Materials Used:

Screen (PVC)	Bentonite Chips
Riser (PVC)	Concrete Mix
Plug (PVC)	Locking Exp. Plug
Silica Sand	Lock
	S/U

**Monitor Well MW-6 Installation Detail**

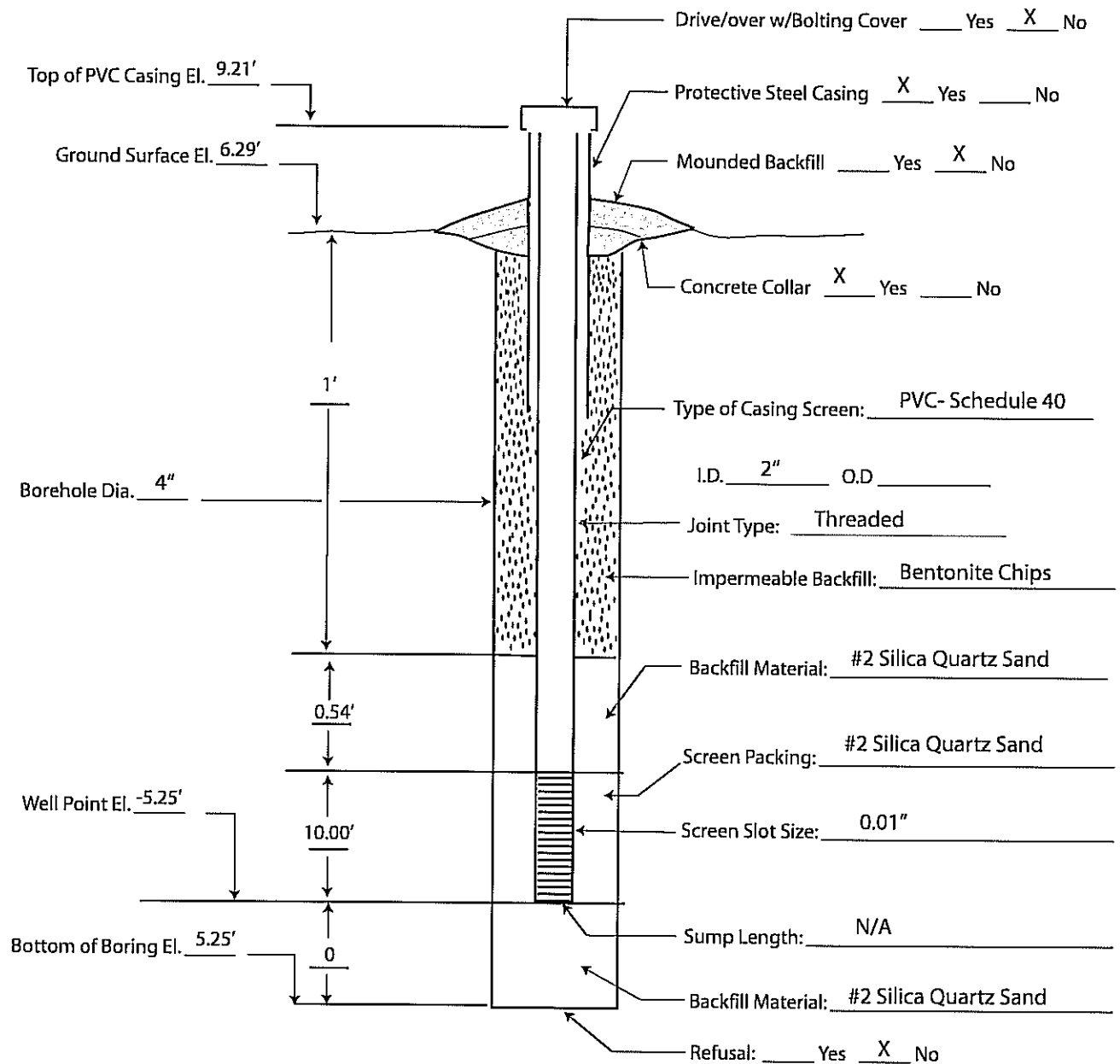
Long Dock Beacon Site  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

ESI File: SG96152.51

January 2007

Not to scale

Attachment



## Materials Used:

Screen (PVC)	Bentonite Chips
Riser (PVC)	Concrete Mix
Plug (PVC)	Locking Exp. Plug
Silica Sand	Lock
	S/U

**Monitor Well MW-7 Installation Detail**

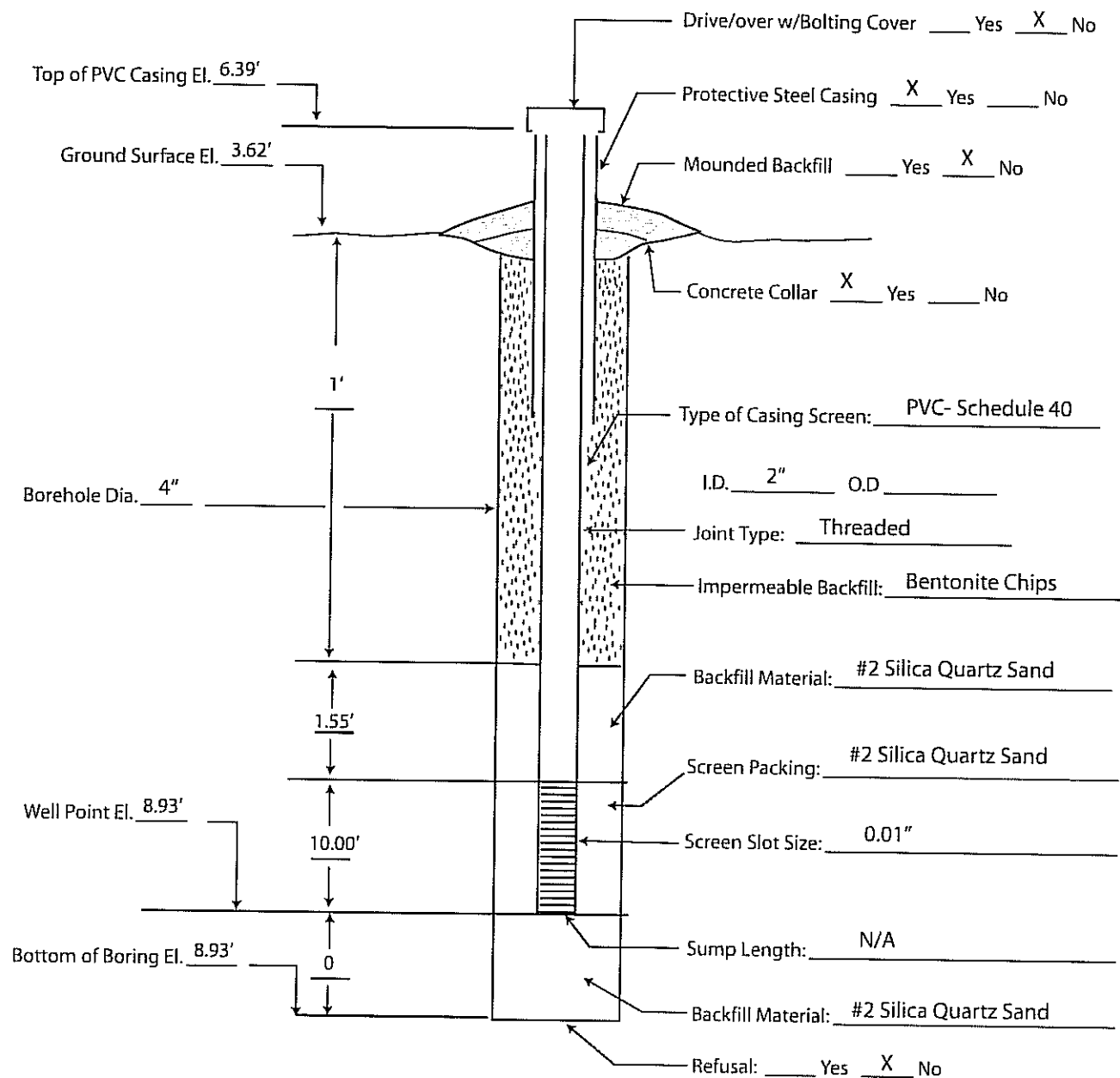
Long Dock Beacon Site  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

ESI File: SG96152.51

January 2007

Not to scale

Attachment



## Monitor Well MW-8 Installation Detail

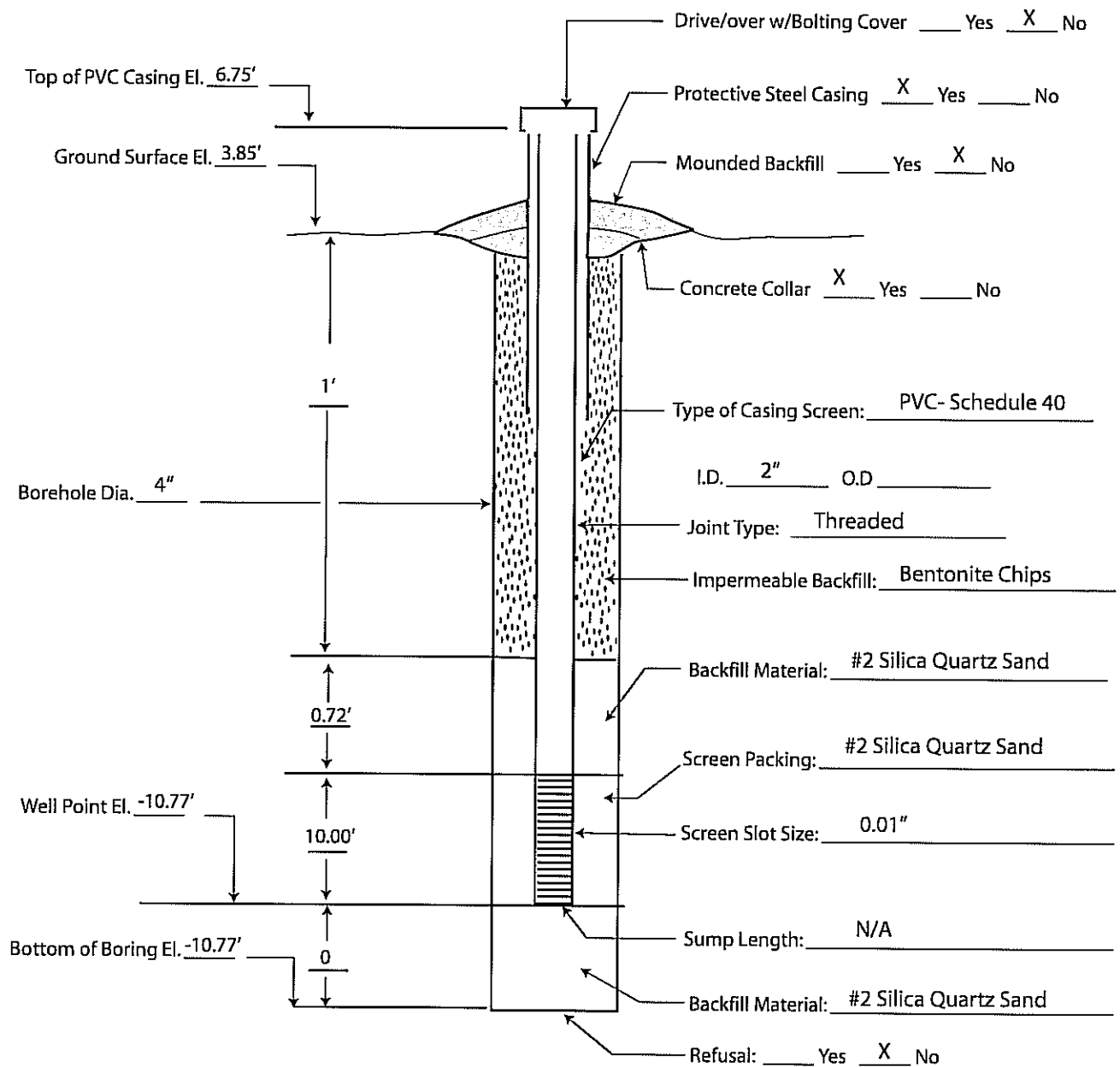
Long Dock Beacon Site  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

ESI File: SG96152.51

January 2007

Not to scale

Attachment



### Monitor Well MW-9 Installation Detail

Long Dock Beacon Site  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

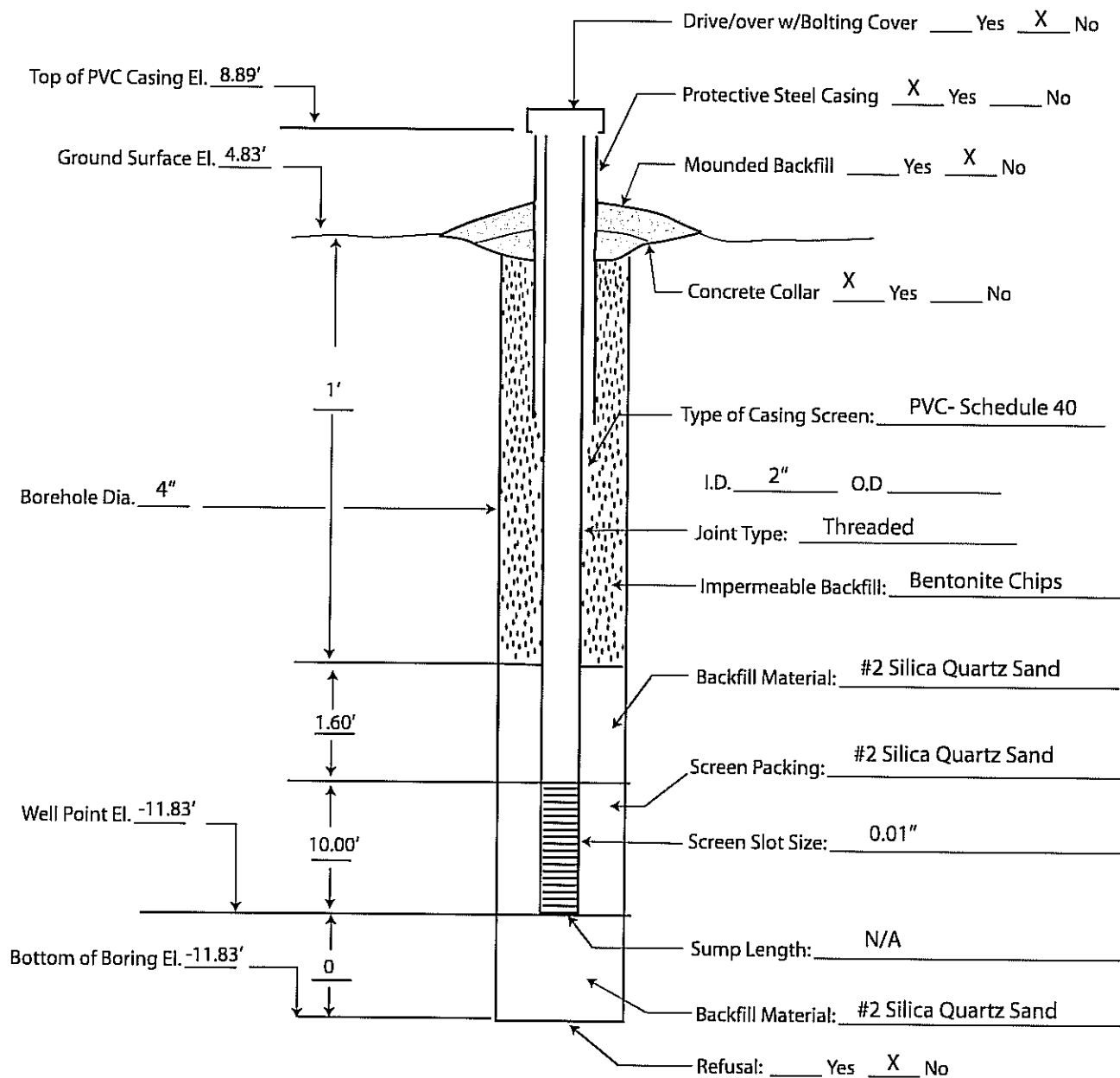
ESI File: SG96152.51

April 2007

Not to scale

Appendix D





## Materials Used:

Screen (PVC)	Bentonite Chips
Riser (PVC)	Concrete Mix
Plug (PVC)	Locking Exp. Plug
Silica Sand	Lock
	S/U

**Monitor Well MW-10 Installation Detail**

Long Dock Beacon Site  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

ESI File: SG96152.51

April 2007

Not to scale

Appendix D

Project \_\_\_\_\_ Site \_\_\_\_\_ Well No. MW-1 Date 8/28/06  
Well Depth 14.95 Screen Length \_\_\_\_\_ Well Diameter \_\_\_\_\_ Casing Type \_\_\_\_\_  
Sampling Device \_\_\_\_\_ Tubing type \_\_\_\_\_ Water Level \_\_\_\_\_  
Measuring Point \_\_\_\_\_ Other Infor \_\_\_\_\_  
\_\_\_\_\_  
Sampling Personnel \_\_\_\_\_

[illegible]

**Information:** 2 in = 617 ml/ft, 4 in = 2470 ml/ft:  $\text{Vol}_{\text{cyl}} = \pi r^2 h$ ,  $\text{Vol}_{\text{sphere}} = 4/3 \pi r^3$

Project \_\_\_\_\_ Site \_\_\_\_\_ Well No. MW-2 Date 8/28/06  
Well Depth 15.14 Screen Length \_\_\_\_\_ Well Diameter \_\_\_\_\_ Casing Type \_\_\_\_\_  
Sampling Device \_\_\_\_\_ Tubing type \_\_\_\_\_ Water Level \_\_\_\_\_  
Measuring Point \_\_\_\_\_ Other Infor \_\_\_\_\_  
\_\_\_\_\_  
Sampling Personnel \_\_\_\_\_

[illegible]

Information: 2 in = 617 ml/ft, 4 in = 2470 ml/ft;  $\text{Vol}_{\text{cyl}} = \pi r^2 h$ ,  $\text{Vol}_{\text{sphere}} = 4/3 \pi r^3$

Project \_\_\_\_\_ Site \_\_\_\_\_ Well No. NW-3 Date 8/25/06  
Well Depth 15.15 Screen Length \_\_\_\_\_ Well Diameter \_\_\_\_\_ Casing Type \_\_\_\_\_  
Sampling Device \_\_\_\_\_ Tubing type \_\_\_\_\_ Water Level \_\_\_\_\_  
Measuring Point \_\_\_\_\_ Other Infor \_\_\_\_\_  
\_\_\_\_\_  
Sampling Personnel \_\_\_\_\_

[illegible]

**Information:** 2 in = 617 ml/ft, 4 in = 2470 ml/ft:  $\text{Vol}_{\text{cyl}} = \pi r^2 h$ ,  $\text{Vol}_{\text{sphere}} = 4/3 \pi r^3$

Project \_\_\_\_\_ Site \_\_\_\_\_ Well No. MW-4 Date 8/28/06  
Well Depth 14.99 Screen Length \_\_\_\_\_ Well Diameter \_\_\_\_\_ Casing Type \_\_\_\_\_  
Sampling Device \_\_\_\_\_ Tubing type \_\_\_\_\_ Water Level \_\_\_\_\_  
Measuring Point \_\_\_\_\_ Other Infor \_\_\_\_\_  
\_\_\_\_\_  
Sampling Personnel \_\_\_\_\_

[illegible]

**Information:** 2 in = 617 ml/ft, 4 in = 2470 ml/ft:  $\text{Vol}_{\text{cyl}} = \pi r^2 h$ ,  $\text{Vol}_{\text{sphere}} = 4/3\pi r^3$

Figure 2. Ground Water Sampling Log

Project \_\_\_\_\_ Site \_\_\_\_\_ Well No. MW-5 Date 8/28/06  
 Well Depth 15.12 Screen Length \_\_\_\_\_ Well Diameter \_\_\_\_\_ Casing Type \_\_\_\_\_  
 Sampling Device \_\_\_\_\_ Tubing type \_\_\_\_\_ Water Level \_\_\_\_\_  
 Measuring Point \_\_\_\_\_ Other Infor \_\_\_\_\_  
 Sampling Personnel \_\_\_\_\_

Time	pH	Temp	Cond.	Dis.O <sub>2</sub>	Turb.	[ ]Conc			Notes
3:45	6.78	16.48	.98	.63	282				
3:55	6.82	16.45	1.04	.34	15.8				
4:05	6.85	16.43	1.05	.26	9.8				

Type of Samples Collected \_\_\_\_\_

Information: 2 in = 617 ml/ft, 4 in = 2470 ml/ft:  $Vol_{cyl} = \pi r^2 h$ ,  $Vol_{sphere} = 4/3 \pi r^3$

Project \_\_\_\_\_ Site \_\_\_\_\_ Well No. MW-6 Date 8/26/06  
Well Depth 14.90 Screen Length \_\_\_\_\_ Well Diameter \_\_\_\_\_ Casing Type \_\_\_\_\_  
Sampling Device \_\_\_\_\_ Tubing type \_\_\_\_\_ Water Level \_\_\_\_\_  
Measuring Point \_\_\_\_\_ Other Infor \_\_\_\_\_  
\_\_\_\_\_  
Sampling Personnel \_\_\_\_\_

[illegible]

**Information:** 2 in = 617 ml/ft, 4 in = 2470 ml/ft:  $\text{Vol}_{\text{cyl}} = \pi r^2 h$ ,  $\text{Vol}_{\text{sphere}} = 4/3\pi r^3$



Figure 2. Ground Water Sampling Log

Project \_\_\_\_\_ Site \_\_\_\_\_ Well No. 1W-7 Date 8/28/06  
 Well Depth 14.04 Screen Length \_\_\_\_\_ Well Diameter \_\_\_\_\_ Casing Type \_\_\_\_\_  
 Sampling Device \_\_\_\_\_ Tubing type \_\_\_\_\_ Water Level \_\_\_\_\_  
 Measuring Point \_\_\_\_\_ Other Infor \_\_\_\_\_  
 Sampling Personnel \_\_\_\_\_

Time	pH	Temp	Cond.	Dis.O <sub>2</sub>	Turb.	[ ]Conc			Notes
4:20	6.84	18.54	853	0.0	0.12				
4:30	6.76	18.61	832	0.0	29.9				
4:40	6.90	18.63	820	0.0	11.1				

Type of Samples Collected \_\_\_\_\_

Information: 2 in = 617 ml/ft, 4 in = 2470 ml/ft; Vol<sub>cy</sub> =  $\pi r^2 h$ , Vol<sub>sphere</sub> =  $4/3 \pi r^3$

Figure 2: Ground Water Sampling Log

Project \_\_\_\_\_ Site \_\_\_\_\_ Well No. MW-8 Date 8/28/06  
Well Depth 15.05 Screen Length \_\_\_\_\_ Well Diameter \_\_\_\_\_ Casing Type \_\_\_\_\_  
Sampling Device \_\_\_\_\_ Tubing type \_\_\_\_\_ Water Level \_\_\_\_\_  
Measuring Point \_\_\_\_\_ Other Infor \_\_\_\_\_  
\_\_\_\_\_  
Sampling Personnel \_\_\_\_\_

[illegible]

**Information:** 2 in = 617 ml/ft, 4 in = 2470 ml/ft:  $Vol_{cyl} = \pi r^2 h$ ,  $Vol_{sphere} = 4/3 \pi r^3$

Figure 2. Ground Water Sampling Log

Project \_\_\_\_\_ Site Long Dock Well No. MW-9 Date Feb. 27, 2007  
 Well Depth 14.62' Screen Length 10' Well Diameter 2" Casing Type Stick up  
 Sampling Device Horiba 1122 Tubing type \_\_\_\_\_ Water Level GW @ 4.69'  
 Measuring Point \_\_\_\_\_ Other Infor PID 0.7 ppm  
Depth to PVC = 14.62' A concrete + Top PVC x 270'  
 Sampling Personnel R. Andujar, J. Petronella

Time	pH	Temp	Cond.	Dis.O <sub>2</sub>	Turb.	[ ] Conc			Notes
10:05	6.44	7.57	1.15	0.99	268.0				reading #19
10:06	6.47	7.76	1.21	0.00	336.0				
10:07	6.46	7.90	1.39	2.74	-5.0				
10:08	6.46	7.85	0.999	2.69	-5.0				
10:09	6.49	8.37	1.12	0.33	669				
10:10	6.41	9.62	1.5	0.19	-5.0				
10:11	6.35	10.28	2.72	0.0	-5.0				
10:12	6.43	7.96	1.45	0.39	386				#26
10:13	6.48	9.20	1.49	0.80	714				
10:14	6.42	10.31	1.80	0.98	-5.0				
10:15	6.46	9.07	1.29	2.61	-5.0				
10:16	6.49	8.61	1.40	3.31	-5.0				
10:17	6.50	8.42	1.40	3.73	79				
10:18	6.50	8.32	1.36	3.90	170				#32
10:19	5.80	8.31	0.00	5.88	110.0				

Type of Samples Collected

Information: 2 in = 617 ml/ft, 4 in = 2470 ml/ft: Vol<sub>cyl</sub> =  $\pi r^2 h$ , Vol<sub>sphere</sub> =  $4/3 \pi r^3$

Figure 2. Ground Water Sampling Log

Project \_\_\_\_\_ Site Long Dock Well No. MW-9 Date Feb 27, 2007  
 Well Depth 14.62' Screen Length 10' Well Diameter 2" Casing Type stick up  
 Sampling Device Horiba 122 Tubing type \_\_\_\_\_ Water Level GLW @ 4.69'  
 Measuring Point \_\_\_\_\_ Other Infor PID 0.7 ppm  
Depth to PVC 14.62' Δ correct and top PVC x 240'  
 Sampling Personnel R. Andujar, J. Petrone

Time	pH	Temp	Cond.	Dis.O <sub>2</sub>	Turb.	[ ] Conc			Notes
10:22	6.43	7.58	1.30	1.45	108				Previous to this
10:26	6.49	7.78	1.41	<del>0.80</del>	90.5				reading we had
10:27	6.50	7.89	1.22	2.37	74.5				been pumping
10:30	6.80	8.24	1.07	4.16	77.5				for 15 minutes
10:33	6.31	7.79	1.45	5.5	33.3				
10:34	6.57	8.18	1.45	3.76	31.1				
									≈ 60 gallons
									pumped
									≈ 25 minutes
									Oxygen was
									getting into
									Horiba destabilizing
									DO & turbidity

Type of Samples Collected

Information: 2 in = 617 ml/ft, 4 in = 2470 ml/ft:  $Vol_{cyl} = \pi r^2 h$ ,  $Vol_{sphere} = 4/3 \pi r^3$

Figure 2. Ground Water Sampling Log

Project \_\_\_\_\_ Site Long Doc K Well No. MW-10 Date Feb 27, 2007  
 Well Depth 16.66' Screen Length 10' Well Diameter 2" Casing Type stick up  
 Sampling Device Horiba U22 Tubing type \_\_\_\_\_ Water Level GW @ 6.7'  
 Measuring Point \_\_\_\_\_ Other Infor Depth of PVC = 16.66 PID = 0.0 ppm  
A concrete d top PVC 53.75'  
 Sampling Personnel R. Andujar J. Petronella

minutes →

Time	pH	Temp	Cond.	Dis.O <sub>2</sub>	Turb.	[ ] Conc			Notes
1:00	4.82	13.89	0.00	11.1	221				Approx. 45 gallons pumped
2:00	5.34	13.89	0.00	11.10	0.0				
3:00	8.75	20.78	99.9	0.0	0.0				
4:00	6.88	7.46	2.66	2.22	622				
5:00	6.83	7.55	2.75	0.32	238				
6:00	6.76	7.80	2.63	0.64	204				
7:00	6.74	7.57	2.66	0.14	428				
8:00	6.73	7.57	2.63	0.87	303				
9:00	6.72	7.50	2.67	1.08	82.1				
10:00	6.70	7.26	2.26	0.91	5.0				
11:00	6.72	7.41	2.46	0.00	272.0				
12:00	6.74	7.47	2.49	0.0	119.0				
13:00	6.74	7.47	2.80	0.0	77.8				
14:00	6.75	7.80	2.80	0.0	52.9				
15:00	6.76	7.49	2.49	0.00	42.8				
16:00	6.77	7.5°C	2.48	<del>32.00</del> 0.0	32.00				
17:00	6.77	7.5°C	2.47	<del>0.0</del> 0.0	28.3				
18:00	6.78	7.5°C	2.45	<del>0.0</del> 0.0	24.3				

Type of Samples Collected \_\_\_\_\_

Information: 2 in = 617 ml/ft, 4 in = 2470 ml/ft:  $Vol_{cyl} = \pi r^2 h$ ,  $Vol_{sphere} = 4/3 \pi r^3$

## Groundwater Elevations

Well	Water Level - Round 1	Time	Date	Top of casing	Groundwater Elevation
MW-1	4.21	9:05	9/5/2006	8.29	4.08
MW-2	5.25	9:16	9/5/2006	8.24	2.99
MW-3	4.56	9:21	9/5/2006	7.23	2.67
MW-4	4.86	9:25	9/5/2006	7.82	2.96
MW-5	8.42	9:33	9/5/2006	11.65	3.23
MW-6	3.00	9:39	9/5/2006	6.07	3.07
MW-7	6.21	9:18	9/5/2006	9.21	3.00
MW-8	3.54	9:43	9/5/2006	6.39	2.85

Well	Water Level - Round 2	Time	Date	Top of casing	Groundwater Elevation
MW-1	4.45	13:39	9/6/2006	8.29	3.84
MW-2	5.10	13:42	9/6/2006	8.24	3.14
MW-3	4.39	13:45	9/6/2006	7.23	2.84
MW-4	5.16	13:47	9/6/2006	7.82	2.66
MW-5	8.45	13:53	9/6/2006	11.65	3.20
MW-6	3.03	13:57	9/6/2006	6.07	3.04
MW-7	6.31	13:49	9/6/2006	9.21	2.90
MW-8	3.57	13:55	9/6/2006	6.39	2.82

Well	Water Level - Round 3	Time	Date	Top of casing	Groundwater Elevation
MW-1	6.52	13:45	2/27/2007	8.29	1.77
MW-2	5.82	12:15	2/27/2007	8.24	2.42
MW-3	4.18	11:17	2/27/2007	7.23	3.05
MW-4	7.01	14:50	2/27/2007	7.82	0.81
MW-5*	NA	13:50	3/6/2007	11.65	NA
MW-6	3.86	10:08	3/6/2007	6.07	2.21
MW-7	9.00	9:08	3/6/2007	9.21	0.21
MW-8	4.97	14:17	3/6/2007	6.39	1.42
MW-9	4.98	12:02	3/6/2007	6.76	1.78
MW-10	6.22	11:13	3/6/2007	8.89	2.67

### Notes:

All depths above measured from top of PVC.

Round 2 water levels were used to construct groundwater flow map.

\* Water level could not be measured at the time as well was dry.

EXAMPLE (Minimum Requirements)  
Well PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Location (Site/Facility Name) \_\_\_\_\_  
 Well Number MW-1 Date 9/5/04 Depth to \_\_\_\_\_ of screen \_\_\_\_\_  
 Field Personnel \_\_\_\_\_ Pump Intake at (ft. below MP) 9.95  
 Sampling Organization \_\_\_\_\_ Purging Device; (pump type) \_\_\_\_\_  
 Identify MP \_\_\_\_\_

Clock Time MIN 24-HR	Water Depth below MP ft	Pump Dial <sup>1</sup>	Purge Rate ml/min	Cum. Volume Purged liters	Temp. °C	Spec. Cond. <sup>2</sup> µS/cm	pH	ORP/ Eh <sup>3</sup> mv	DO mg/L	Turbidity NTU	Comments
1:18		256		100	17.56	.93	6.16	-80	.68	0.0	
2:34				200	17.58	0.92	6.16	-82	.33	0.0	
4:42	4.35			400	17.68	.90	6.16	-84	0.0	0.0	
6:31	4.36			600	17.81	.977	6.21	-86	0.0	0.0	
8:35				800	17.86	.974	6.22	-87	0.0	0.0	
10:12	4.37			1000	17.93	.954	6.24	-87	0.0	0.0	
12:04				1200	18.04	.911	6.24	-87	0.0	0.0	
13:52				1400	18.09	.871	6.23	-86	0.0	0.0	
15:41	4.37			1600	18.15	.823	6.22	-81	0.0	0.0	
17:23				1800	18.20	.779	6.21	-75	0.0	0.0	
19:07				2000	18.26	.734	6.20	-70	0.0	0.0	
20:51				2200	18.33	.710	6.20	-68	0.0	0.0	
22:30				2400	18.45	.664	6.21	-66	0.0	0.0	
				2600							
43:39	4.37			2800							

1. Pump dial setting (for example: hertz, cycles/min, etc).  
 2. µSiemens per cm (same as µmhos/cm) at 25 °C.  
 3. Oxidation reduction potential (stand in for Eh).



EXAMPLE (Minimum Requirements)  
Well PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Page 2 of 8

Location (Site/Facility Name) \_\_\_\_\_ Depth to \_\_\_\_\_ of screen  
 Well Number AU-2 Date 9/5/06 \_\_\_\_\_  
 Field Personnel \_\_\_\_\_ Pump Intake at (ft. below MP) 10.2  
 Sampling Organization \_\_\_\_\_ Purging Device; (pump type) \_\_\_\_\_  
 Identify MP \_\_\_\_\_

Clock Time	Water Depth below MP	Pump Dial <sup>1</sup>	Purge Rate	Cum. Volume Purged	Temp.	Spec. Cond. <sup>2</sup>	pH	ORP/Eh <sup>3</sup>	DO	Turbidity	Comments
24 HR	ft		ml/min	liters	°C	µS/cm		mV	mg/L	NTU	
1:45		25%		200	21.70	425	6.45	-30	0.0	0.0	
3:29				400	21.72	423	6.42	-30	0.0	0.0	
5:14	5.15			600	21.76	421	6.41	-31	0.0	0.0	
6:56				800	21.75	421	6.42	-31	0.0	0.0	
8:36				1000	21.73	420	6.43	-32	0.0	0.0	
10:15				1200	21.72	421	6.46	-33	0.0	0.0	
11:54	5.17			1400	21.72	420	6.49	-34	0.0	0.0	
13:26				1600	21.76	420	6.50	-34	0.0	0.0	
15:03				1800	21.69	420	6.52	-35	0.0	0.0	
16:35	5.19			2000	21.64	420	6.54	-35	0.0	0.0	
				2200							
				2400							
				2600							
				2800							
	5.25	✓		3000							

1. Pump dial setting (for example: hertz, cycles/min, etc).
2. µSiemens per cm (same as µmhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

EXAMPLE (Minimum Requirements)  
Well PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Location (Site/Facility Name) \_\_\_\_\_  
 Well Number W-3 Date 9/5/06 Depth to \_\_\_\_\_ of screen  
 Field Personnel \_\_\_\_\_ Pump intake at (ft. below MP) 10.2  
 Sampling Organization \_\_\_\_\_ Purging Device; (pump type) \_\_\_\_\_  
 Identify MP \_\_\_\_\_

Clock Time	Water Depth below MP	Pump Dial <sup>1</sup>	Purge Rate	Cum. Volume Purged	Temp.	Spec. Cond. <sup>2</sup>	pH	ORP/Eh <sup>3</sup>	DO	Turbidity	Comments
24 HR	ft		mL/min	liters	°C	µS/cm		mv	mg/L	NTU	
1:25	5.20			200	19.29	503	6.60	-93	0.0	0.0	
2:50				400	19.18	503	6.58	-93	0.0	0.0	
4:11				600	19.06	502	6.57	-94	0.0	0.0	
5:32	5.25			800	18.93	503	6.58	-98	0.0	0.0	
6:51				1000	18.89	503	6.58	-98	0.0	0.0	
8:10				1200	18.77	505	6.59	-100	0.0	0.0	
9:29				1400	18.72	506	6.62	-101	0.0	6.0	
10:50	5.30			1600	18.67	506	6.65	-102	0.0	0.0	
12:12				1800	18.64	507	6.66	-102	0.0	0.0	
13:26				2000	18.61	506	6.68	-102	0.0	2.1	
14:42				2200	18.59	506	6.68	-102	0.0	1.9	
16:01	5.32			2400	18.56	506	6.68	-102	0.0	2.4	
17:22				2600	18.54	506	6.69	-101	0.0	1.6	
18:35				2800	18.51	506	6.69	-101	0.0	2.0	
				3000							

1. Pump dial setting (for example: hertz, cycles/min, etc).
2. µSiemens per cm (same as µmhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

EXAMPLE (Minimum Requirements)  
Well PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Location (Site/Facility Name) \_\_\_\_\_  
 Well Number MW-5 Date 9/5/06 Depth to \_\_\_\_\_ of screen  
 Field Personnel \_\_\_\_\_ Pump Intake at (ft. below MP) 11.8'  
 Sampling Organization \_\_\_\_\_ Purging Device; (pump type) \_\_\_\_\_  
 Identify MP \_\_\_\_\_

Clock Time MW 24-HR	Water Depth below MP ft	Pump Dial <sup>1</sup>	Purge Rate ml/min	Cum. Volume Purged liters	Temp. °C	Spec. Cond. <sup>2</sup> µS/cm	pH	ORP/ Eh <sup>3</sup> mv	DO mg/L	Turbidity NTU	Comments
1:30		25%		200	17.06	136	6.57	75	0.88	0.0	
2:57				400	17.06	136	6.57	75	0.00	0.0	
4:40	8.45		<del>88</del>	600	17.08	137	6.57	75	0.0	0.0	
5:54				800	17.18	137	6.59	74	0.0	0.0	
7:26				1000	17.20	138	6.60	74	0.0	0.0	
8:54				1200	17.26	138	6.61	74	0.0	0.0	
10:20	8.45			1400	17.29	138	6.62	74	0.0	0.0	
11:46				1600	17.33	138	6.63	74	0.0	0.0	
13:15				1800	17.06	138	6.64	76	0.0	0.0	
14:37				2000	17.20	138	6.62	77	0.0	0.0	
16:02	8.45			2200	17.29	138	6.65	76	0.0	0.0	
				2400							
				2600							
				2800							
				3000							

1. Pump dial setting (for example: hertz, cycles/min, etc).
2. µSiemens per cm (same as µmhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

EXAMPLE (Minimum Requirements)

Well PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Location (Site/Facility Name) \_\_\_\_\_ Depth to \_\_\_\_\_ of screen  
 Well Number W-4 Date 9/5/86 \_\_\_\_\_  
 Field Personnel \_\_\_\_\_ Pump Intake at (ft. below MP) 10.8  
 Sampling Organization \_\_\_\_\_ Purging Device; (pump type) \_\_\_\_\_  
 Identify MP \_\_\_\_\_

Clock Time	24 HR	Water Depth below MP	Pump Dial <sup>1</sup>	Purge Rate	Cum. Volume Purged	Temp.	Spec. Cond. <sup>2</sup>	pH	ORP/Eh <sup>3</sup>	DO	Turbidity	Comments
		ft		ml/min	liters	°C	µS/cm		mv	mg/L	NTU	
1:37		6.61	25%		200	21.83	.620	6.92	-8	1.68	0.0	
3:26		6.65			400	21.84	.622	6.87	-11	1.00	0.0	
5:11					600	21.80	.619	6.85	7	.99	0.0	
7:00		6.65			800	21.78	.620	6.83	17	.94	0.0	
8:39					1000	21.75	.622	6.81	25	.89	0.0	
10:20					1200	21.70	.624	6.80	30	.84	0.0	
12:06		6.68			1400	21.69	.625	6.79	33	.80	0.0	
13:58					1600	21.64	.628	6.79	35	.75	0.0	
15:52					1800	21.63	.630	6.79	29	.68	0.0	
17:51					2000	21.64	.631	6.79	28	.67	0.0	
19:47		6.71			2200	21.68	.630	6.78	31	.68	0.0	
21:42					2400	21.66	.631	6.77	35	.67	0.0	
					2600							
					2800							
					3000							

1. Pump dial setting (for example: hertz, cycles/min, etc).  
 2. µSiemens per cm (same as µmhos/cm) at 25 °C.  
 3. Oxidation reduction potential (stand in for Eh).

EXAMPLE (Minimum Requirements)  
WELL PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Page 6 of 8

Location (Site/Facility Name) \_\_\_\_\_  
 Well Number MW-7 Date 9/5/06 Depth to \_\_\_\_\_ of screen  
 Field Personnel \_\_\_\_\_ Pump Intake at (ft. below MP) 10.9  
 Sampling Organization \_\_\_\_\_ Purging Device; (pump type) \_\_\_\_\_  
 Identify MP \_\_\_\_\_

Clock Time	Water Depth below MP	Pump Dial <sup>1</sup>	Purge Rate	Cum. Volume Purged	Temp.	Spec. Cond. <sup>2</sup>	pH	ORP/Eh <sup>3</sup>	DO	Turbidity	Comments
24 HR	ft		ml/min	liters	°C	µS/cm		mv	mg/L	NTU	
1:52		259		200	19.68	1.02	6.80	102	3.41	43.3	
3:45				400	19.62	1.02	6.81	101	3.10	61.5	
5:34	7.89			600	19.55	1.02	6.83	100	2.90	52.9	
7:03				800	19.44	1.03	6.84	100	2.83	38.9	
9:03				1000	19.43	1.02	6.86	99	2.74	60.3	
10:54	7.90			1200	19.48	1.02	6.87	99	2.74	63.6	
12:56				1400	19.47	1.02	6.87	99	2.80	60.2	
14:52				1600	19.41	1.02	6.89	98	2.71	47.8	
16:44	7.89			1800	19.39	1.02	6.90	98	2.65	45.2	
18:41				2000	19.37	1.02	6.90	98	2.69	33.5	
20:35				2200	19.30	1.02	6.91	98	2.64	21.6	
22:20	7.90			2400	19.26	1.02	6.91	99	2.56	16.6	
24:22				2600	19.20	1.02	6.92	99	2.49	3.5	
26:12				2800	19.14	1.02	6.92	99	2.43	0.2	
28:04	7.91			3000	19.10	1.02	6.93	100	2.33	0.0	

1. Pump dial setting (for example: hertz, cycles/min, etc).  
 2. µSiemens per cm (same as µmhos/cm) at 25 °C.  
 3. Oxidation reduction potential (stand in for Eh).

29:59

31:52

Location (Site/Facility Name) \_\_\_\_\_ Depth to (below MP) \_\_\_\_\_ of screen 070 3.71'  
Well Number MW-8 Date 9/6/06 top \_\_\_\_\_ bottom \_\_\_\_\_  
Field Personnel \_\_\_\_\_ Pump Intake at (ft. below MP) 102 5.71  
Sampling Organization \_\_\_\_\_ Purging Device; (pump type) \_\_\_\_\_  
Identify MP \_\_\_\_\_

Clock Time	Water Depth below MP	Pump Dial	Purge Rate	Cum. Volume Purged	Temp.	Spec. Cond.	pH	ORP/Eh	DO	Turbidity	Comments
24 HR	ft		ml/min	liters	°C	µS/cm		mv	mg/L	NTU	
1:56	3.71	256		200	17.64	.932	6.47	-89	0.65	0.0	
3:42				400	17.81	.928	6.94	-96	0.29	0.0	
5:32				600	17.79	.925	6.99	-101	0.0	0.0	
7:08	3.69			800	17.60	.923	6.62	-105	0.0	0.0	
8:53				1000	17.80	.921	6.65	-108	0.0	0.0	
10:31				1200	17.80	.919	6.66	-110	0.0	0.0	
12:15	3.69			1400	17.82	.919	6.68	-112	0.0	0.0	
13:48				1600	17.82	.917	6.69	-113	0.0	0.0	
15:32				1800	17.81	.916	6.71	-114	0.0	0.0	
17:01				2000	17.81	.915	6.71	-116	0.0	0.0	
18:43				2200	17.81	.914	6.73	-117	0.0	0.0	
20:17	3.66			2400	17.81	.914	6.73	-118	0.0	0.0	
				2600							
				2800							
				3000							

1. Pump dial setting (for example: hertz, cycles/min, etc).
2. µSiemens per cm (same as µmhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

EXAMPLE (Minimum Requirements)  
Well PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Location (Site/Facility Name) \_\_\_\_\_ Date 9/6/06 Depth to \_\_\_\_\_ of screen 14714.072  
 Well Number MP-6 \_\_\_\_\_  
 Field Personnel \_\_\_\_\_  
 Sampling Organization \_\_\_\_\_  
 Identify MP \_\_\_\_\_  
 Pump Intake at (ft. below MP) 10.2'  
 Purging Device; (pump type) \_\_\_\_\_

Clock Time min	Water Depth below MP ft	Pump Dial <sup>1</sup>	Purge Rate ml/min	Cum. Volume Purged liters	Temp. °C	Spec. Cond. <sup>2</sup> µS/cm	pH	ORP/ Eh mv	DO mg/L	Turbidity NTU	Comments
1:43		256		200	17.97	90	6.70	-135	0.0	0.0	
3:20				400	17.92	999	6.74	-138	0.0	0.0	
5:00				600	17.91	999	6.72	-140	0.0	0.0	
6:31	3.03			800	17.88	999	6.72	-143	0.0	0.0	
8:10				1000	17.86	999	6.72	-145	0.0	0.0	
9:39				1200	17.85	999	6.73	-149	0.0	0.0	
11:24	3.02			1400	17.85	999	6.72	-150	0.0	0.0	
12:47				1600	17.83	999	6.73	-152	0.0	0.0	
14:24				1800	17.83	997	6.72	-154	0.0	0.0	
15:50	3.03			2000	17.84	996	6.73	-157	0.0	0.0	
				2200							
				2400							
				2600							
				2800							
				3000							

1. Pump dial setting (for example: hertz, cycles/min, etc).  
 2. µSiemens per cm (same as µmhos/cm) at 25 °C.  
 3. Oxidation reduction potential (stand in for Eh).



DATA #6

Location (Site/Facility Name) Long back Beach  
Well Number HW#1 Date 02/27/07  
Field Personnel R. Anderson / J. Petrucci  
Sampling Organization ES1  
Identify MP

Depth to (below MP) 10' of screen  
Pump Intake at (ft. below MP)  
Purging Device; (pump type) Horiba WZL

Clock Time	Water Depth below MP ft	Pump Dial <sup>1</sup>	Purge Rate mL/min	Cum. Volume Purged mL <sup>2</sup> liters	Temp. °C	Spec. Cond. <sup>2</sup> µS/cm	pH	ORP/Eh mv	DO mg/L	Turbidity NTU	Comments
24 HR											
13:45	6.52'	80% 80 rpm	200	200	9.53	2.96	6.18	-91	2.28	53.2	#79 reading
13:46				400	9.81	2.89	6.19	-96	6.41	34.2	
13:47				600	9.39	2.81	6.21	-101	0.0	54.7	
13:48				800	9.30	2.73	6.22	-105	0.0	56.3	
13:49				1,000	9.19	2.61	6.25	-107	0.0	38.3	
13:50				1,200	9.04	2.50	6.26	-108	0.0	36.3	
13:51				1,400	8.92	2.37	6.29	-110	0.0	41.6	#85
13:52				1,600	8.82	2.25	6.30	-110	0.0	37.3	
13:53				1,800	8.75	2.11	6.32	-111	0.0	38.0	
13:54				2,000	8.69	1.98	6.32	-112	0.0	35.9	
13:55				2,200	8.65	1.85	6.35	-112	0.0	34.9	
13:56	6.56'			2,400	8.60	1.79	6.36	-112	0.0	56.0	
13:57				2,600	8.56	1.88	6.37	-111	0.0	43.3	#91
13:58				2,800	8.80	1.41	6.38	-109	0.0	41.2	
13:59			↓	3,000	8.48	1.29	6.39	-107	0.0	48.3	

1. Pump dial setting (for example: hertz, cycles/min, etc).

2. µSiemens per cm (same as µmhos/cm) at 25 °C.

3. Oxidation reduction potential (stand in for Eh).

EXAMPLE (Minimum Requirements)  
Well PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Page 1 of 2

Location (Site/Facility Name) Long Deck Becam

Well Number NW #2 Date 02/27/07 Depth to 10' of screen (below MP) bottom

Field Personnel K. Andriker / J. Brownlee

Sampling Organization ESL Pump Intake at (ft. below MP) Horizon 222

Clock Time	Water Depth below MP	Pump Dial	Purge Rate	Cum. Volume Purged	Temp.	Spec. Cond.	pH	ORP/Eh	DO	Turbidity	Comments
24 HR	ft		ml/min	liters	°C	µS/cm		mV	mg/L	NTU	
12:15	5.82'	600	200	200	7.13	0.728	6.91	-23	3.55	8.4	#49 reading
12:16				400	7.06	0.736	6.84	-13	3.14	7.8	
12:17				600	7.02	0.731	6.88	-5	2.63	8.5	
12:18				800	6.98	0.732	6.87	1	2.36	9.6	
12:19				1,000	6.95	0.733	6.86	9	2.16	16.1	
12:20				1,200	6.85	0.733	6.85	15	2.24	19.9	#54
12:21				1,400	6.93	0.734	6.84	20	2.16	24.3	
12:22				1,600	6.93	0.733	6.82	26	2.05	49.1	
12:23				1,800	6.91	0.734	6.84	32	2.00	49.0	
12:24				2,000	6.88	0.734	6.80	36	1.9	65.4	
12:25	6.01			2,200	6.86	0.734	6.80	40	1.88	51.0	#54
12:26				2,400	6.86	0.733	6.80	43	1.90	72.5	
12:27				2,600	6.84	0.732	6.78	46	1.81	82.8	
12:28				2,800	6.84	0.732	6.78	49	1.86	82.0	#62
12:29			↓	3,000	6.81	0.732	6.77	52	1.82	83.5	

1. Pump dial setting (for example: hertz, cycles/min, etc).
2. µSiemens per cm (same as µmhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Location (Site/Facility Name) Long Dock Bayou Depth to 10' of screen  
 Well Number MW#2 Date 02/27/04 top bottom  
 Field Personnel R. Anderson / J. Petrellika Pump Intake at (ft. below MP)  
 Sampling Organization ESR Purging Device; (pump type) Horizon R22L  
 Identify MP

Clock Time	Water Depth below MP	Pump Dial <sup>1</sup>	Purge Rate ml/min	Cum. Volume Purged milliliters	Temp. °C	Spec. Cond. <sup>2</sup> µS/cm	pH	ORP/Eh <sup>3</sup> mv	DO mg/L	Turbidity NTU	Comments
24 HR	ft				°C	µS/cm		mv	mg/L	NTU	
12:41		50%	800	5,200	6.75	6.710	6.74	66	8.96	32.7	#64 reading
12:42				5,400	6.78	6.723	6.74	66	3.37	11.5	
12:43				5,600	6.88	6.722	6.74	67	2.77	11.4	
12:44				5,800	6.85	6.723	6.74	67	2.28	11.5	
12:45				6,000	6.88	6.726	6.74	66	1.92	11.2	
12:46				6,200	6.87	6.727	6.74	66	1.80	10.9	
12:47				6,400	6.86	6.729	6.74	67	1.80	11.3	
12:48				6,600	6.88	6.725	6.74	67	1.82	10.8	#71. Started collecting samples at this point
12:49					6.91	6.721	6.74	68	1.62	10.8	
12:50					6.93	6.711	6.73	69	6.12	10.7	
12:51					6.98	6.700	6.73	70	9.65	10.7	
12:52					6.97	6.673	6.74	70	10.44	10.4	
12:53					6.97	6.714	6.71	70	10.74	11.0	#76
12:54					6.99	6.988	6.74	71	10.91	11.0	
12:55			↓		6.97	6.905	6.80	78	10.96	10.7	

1. Pump dial setting (for example: hertz, cycles/min, etc).

2. µSiemens per cm (same as µmhos/cm) at 25 °C.

3. Oxidation reduction potential (stand in for Eh).

DATA #3,

EXAMPLE (Minimum Requirements)  
Well PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Location (Site/Facility Name) Long Jack Bericap Depth to 10' of screen  
 Well Number W-#3 Date 02/27/01 (below MP)  
 Field Personnel R. Andujar, J. Pettibone Pump Intake at (ft. below MP)  
 Sampling Organization ESI Purging Device; (pump type) Horiba U22  
 Identify MP

Clock Time	Water Depth below MP	Pump Dial <sup>1</sup>	Purge Rate	Cum. Volume Purged	Temp.	Spec. Cond. <sup>2</sup>	pH	ORP/Eh <sup>3</sup>	DO	Turbidity	Comments
24 HR	ft		ml/min	m <sup>3</sup> /l	liters	°C	µS/cm	mv	mg/L	NTU	
11:16	4.18	50%	200	400	6.65	0.663	6.55	-49	2.23	25.4	#34 reading
11:17				600	6.49	0.655	6.55	-51	1.38	17.0	
11:18				800	6.30	0.652	6.55	-52	0.47	14.0	
11:19				1000	6.16	0.651	6.54	-53	0.04	11.4	
11:20				1200	6.08	0.649	6.55	-54	0.0	12.6	
11:21				1400	6.01	0.648	6.56	-57	0.0	3.1	
11:22				1600	5.99	0.647	6.57	-58	0.0	2.6	
11:23				1800	5.97	0.645	6.57	-59	0.0	1.4	#41 reading
11:24				2,000	5.97	0.644	6.58	-60	0.0	3.1	
11:25				2,200	6.0	0.642	6.58	-61	0.0	2.6	
11:26	4.45			2,400	6.03	0.642	6.58	-63	0.0	2.6	
11:27				2,600	6.07	0.640	6.58	-63	0.0	2.9	
11:28				2,800	6.09	0.640	6.58	-65	0.0	1.6	
11:29				3,000	6.14	0.640	6.58	-65	0.0	2.0	#47 reading
11:30			↓	3,200	6.16	0.638	6.59	-66	0.0	2.3	

1. Pump dial setting (for example: hertz, cycles/min, etc).  
 2. µSiemens per cm (same as µmhos/cm) at 25°C.  
 3. Oxidation reduction potential (stand in for Eh).

DATA # 5

EXAMPLE (Minimum Requirements)  
Well PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Location (Site/Facility Name) Long Back Bay Depth to 10' of screen  
 Well Number HW#4 Date 09/27/07  
 Field Personnel R. Anderson / J. Retnawala  
 Sampling Organization ESI  
 Identify MP

Clock Time	Water Depth below MP	Pump Dial <sup>1</sup>	Purge Rate	Cum. Volume Purged	Temp.	Spec. Cond. <sup>2</sup>	pH	ORP/Eh <sup>3</sup>	DO	Turbidity	Comments
24 HR	ft		ml/min	liters	°C	µS/cm		mv	mg/L	NTU	
14:50	7.01'	600	200	200	5.30	0.999	6.74	-90	9.75	172.0	#94 reading
14:51				400	4.97	6.90	6.84	-88	8.87	124.0	
14:52				600	4.87	0.999	6.88	-88	0.91	134.0	
14:53				800	4.68	6.90	6.94	-80	0.24	132.0	
14:54				1,000	4.80	0.999	6.95	-78	0.0	158.0	
14:55				1,200	4.34	0.90	7.0	-73	0.0	149.0	
14:56				1,400	4.20	0.00	6.40	-31	6.35	193.0	#100
14:57				1,600	3.94	0.999	7.14	-50	9.46	151.0	
14:58				1,800	3.73	0.90	7.05	-45	5.55	118.0	
14:59				2,000	3.67	6.999	7.13	-34	4.50	76.5	
15:00				2,200	3.57	0.970	7.09	-28	5.11	69.2	#104
15:01	7.12'			2,400	3.60	0.953	7.11	-20	6.11	52.4	
15:02				2,600	3.49	0.943	7.11	-16	6.42	51.0	#106
15:03				2,800	3.51	0.935	7.12	-11	7.07	59.3	
15:04			✓	3,000	3.48	0.934	7.10	-6	7.28	56.1	

1. Pump dial setting (for example: hertz; cycles/min, etc).  
 2. µSiemens per cm (same as µmhos/cm) at 25 °C.  
 3. Oxidation reduction potential (stand in for Eh).

Location (Site/Facility Name) Long Oak Bog  
Well Number WU #4 Date 02/27/07  
Field Personnel R. Anderson / J. Roberts  
Sampling Organization ESI  
Identify MP \_\_\_\_\_

Depth to            / 10' of screen  
(below MP) top bottom  
Pump Intake at (ft. below MP)  
Purging Device; (pump type) Honba 4422

[illegible]

1. Pump dial setting (for example: hertz, cycles/min, etc).
2.  $\mu$ Siemens per cm (same as  $\mu$ mhos/cm) at 25°C.
3. Oxidation reduction potential (stand in for Eh).

EXAMPLE (Minimum Requirements)  
WELL PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Page      of     

Location (Site/Facility Name) Long Dock Brown Depth to      top      of screen  
Well Number MW-6 Date 03/08/07  
Field Personnel R. Hooper / R. Andoyer Pump Intake at (ft. below MP)       
Sampling Organization ESI Purging Device; (pump type)       
Identify MP     

Clock Time	Water Depth below MP	Pump Dial <sup>1</sup>	Purge Rate	Cum. Volume Purged	Temp.	Spec. Cond. <sup>2</sup>	pH	ORP/Eh <sup>3</sup>	DO	Turbidity	Comments
24 HR	ft		ml/min	liters	°C	µS/cm		mv	mg/L	NTU	
10:08	3.86'	55%	500		3.80	0.980	6.92	-78	0.33	23.8	
10:09			400		3.62	0.987	6.90	-80	0.32	23.2	
10:10			600		4.06	0.981	6.88	-80	0.00	26.8	
10:11			800		3.84	0.993	6.86	-81	0.00	14.4	
10:12			1,000		3.91	0.992	6.83	-82	0.00	18.9	
10:13			1,200								Horiba didn't record
10:14			1,400								last 10-minutes
10:15			1,600								
10:16			1,800								
10:17	3.79'		2,000								
10:18			2,200								
10:19			2,400								
10:20			2,600								
10:21			3,000								
10:22	3.79'		3,200								

1. Pump dial setting (for example: hertz, cycles/min, etc).

2. µSiemens per cm (same as µmhos/cm) at 25 °C.

3. Oxidation reduction potential (stand in for Eh).

3.79' - 10:17 pm  
3.79' - 10:22 pm

PID = 0.0 ppm

Machined  
du du du  
rec'd 10-min.



Location (Site/Facility Name) Long Dock Beam  
Well Number AW-1 Date 03/06/01  
Field Personnel R. Hoeller  
Sampling Organization ESI  
Identify MP \_\_\_\_\_  
Depth to \_\_\_\_\_ of screen  
(below MP) top / bottom  
Pump Intake at (ft. below MP) \_\_\_\_\_  
Purging Device; (pump type) \_\_\_\_\_

[illegible]

1. Pump dial setting (for example: hertz, cycles/min, etc).
2.  $\mu$ Siemens per cm (same as  $\mu$ mhos/cm) at 25 °C.
3. Oxidation reduction potential (stand in for Eh).



Location (Site/Facility Name) Long Dock Basin Depth to (below MP) top / bottom of screen  
 Well Number MW-8 Date 02/06/04  
 Field Personnel R. Hooper P. Anderson  
 Sampling Organization ESI  
 Identify MP \_\_\_\_\_  
 Purging Device; (pump type) \_\_\_\_\_

Clock Time	Water Depth below MP	Pump Dial <sup>1</sup>	Purge Rate	Cum. Volume Purged	Temp. °C	Spec. Cond. <sup>2</sup> µS/cm	pH	ORP/Eh <sup>3</sup> mv	DO mg/L	Turbidity NTU	Comments
24 HR	ft		ml/min	liters	°C	µS/cm		mv	mg/L	NTU	
14:05	<del>3.4</del>	<del>80%</del> 80%	200	400	4.39	0.993	6.64	-45	1.52	39.5	Reading # 144
14:06				600	3.79	0.999	6.67	-46	0.00	29.5	
14:07				800	3.42	0.990	6.59	-50	0.00	26.6	
14:08				1,000	3.09	0.999	6.56	-47	0.00	24.2	
14:09				1,200	2.98	0.990	6.43	-48	0.00	22.8	
14:10				1,400	2.87	0.996	6.49	-47	0.00	23.8	# 154
14:11				1,600	2.69	0.996	6.41	-46	0.00	30.7	
14:12				1,800	2.68	0.991	6.39	-46	0.00	18.8	
14:13				2,000	2.62	0.984	6.37	-47	0.00	27.9	
14:14				2,200	2.64	0.972	6.37	-48	0.00	19.8	
14:15				2,400	2.73	0.963	6.37	-49	0.00	20.9	
14:16				2,600	2.97	0.955	6.37	-80	0.00	18.8	
14:17	4.97'			2,800	3.08	0.960	6.39	-52	0.00	20.7	
14:18				3,000	3.29	0.963	6.41	-53	0.00	21.8	
14:19				3,200	3.15	0.969	6.43	-54	0.00	20.3	reading # 163

1. Pump dial setting (for example: hertz; cycles/min, etc).

2. µSiemens per cm (same as µmhos/cm) at 25 °C.

3. Oxidation reduction potential (stand in for Eh).

Reading

PID 21.5 ppm

EXAMPLE (Minimum Requirements)  
Well PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Page 1 of 2

Location (Site/Facility Name)	<u>Long Doe K. Broom</u>		
Well Number	<u>NW-9</u>	Depth to (below MP)	<u>top</u> / <u>bottom</u>
Field Personnel	<u>R. Harker, R. Anderson</u>	Pump Intake at (ft. below MP)	<u>                    </u>
Sampling Organization	<u>BSI</u>	Purging Device; (pump type)	<u>                    </u>
Identify MP	<u>                    </u>		

Clock Time	Water Depth below MP	Pump Dial <sup>1</sup>	Purge Rate	Cum. Volume Purged	Temp. °C	Spec. Cond. <sup>2</sup> µS/cm	pH	ORP/Eh <sup>3</sup> mv	DO mg/L	Turbidity NTU	Comments
24 HR	ft		ml/min	liters	°C	µS/cm		mv	mg/L	NTU	
13:00	4.98	55%	200	400	6.60	2.22	6.46	-51	0.08	82.5	
12:00				800	6.68	2.17	6.45	-50	0.00	89.9	
1				1,000	6.44	2.09	6.40	-48	0.00	75.9	
2				1,200	6.49	2.02	6.45	-46	0.00	83.7	
3				1,400	6.30	1.88	6.48	-44	0.00	73.1	
4				1,600	6.17	1.64	6.55	-40	0.62	75.0	
5				1,800	5.97	1.29	6.60	-35	1.30	90.7	
6				2,000	5.58	0.95	6.68	-29	2.03	87.0	
7				2,200	5.22	0.99	6.72	-20	2.46	86.7	
8				2,400	4.83	0.90	6.62	-15	2.75	79.4	
9				2,600	4.62	0.90	6.68	-6	2.92	65.7	
10				2,800	4.44	0.88	6.44	1	2.95	41.1	
11				3,000	4.31	0.77	6.62	7	3.05	62.2	
12		✓		3,200	4.30	0.71	6.60	13	2.88	62.1	
13					4.20	0.65	6.58	17	2.81	53.7	

- Pump dial setting (for example: hertz, cycles/min, etc).
- µSiemens per cm (same as µmhos/cm) at 25 °C.
- Oxidation reduction potential (stand in for Eh).

First 15 min.  
time interval.

P/D = 1.7

Reading 1.48

12:00 - 5:00

12:00 - 5:00

[illegible]

1. Pump dial setting (for example: hertz, cycles/min, etc).
2.  $\mu$ Siemens per cm (same as  $\mu$ mhos/cm) at 25°C.
3. Oxidation reduction potential (stand in for Eh).

Location (Site/Facility Name) Long Bell Beam  
 Well Number W12-10 Date 03/06/07  
 Field Personnel R. Appleker, R. Andujar  
 Sampling Organization ESI  
 Identify MP

Depth to \_\_\_\_\_ of screen  
 (below MP) \_\_\_\_\_  
 top \_\_\_\_\_  
 Pump Intake at (ft. below MP) \_\_\_\_\_  
 Purging Device; (pump type) \_\_\_\_\_

Clock Time	Water Depth below MP	Pump Dial <sup>1</sup>	Purge Rate	Cum. Volume Purged	Temp. °C	Spec. Cond. <sup>2</sup> µS/cm	pH	ORP/Eh <sup>3</sup> mv	DO mg/L	Turbidity NTU	Comments
24 HR	ft		ml/min	liters	°C	µS/cm		mv	mg/L	NTU	
11:27		50% 4" rpm	200	3,200	5.62	0.90	6.5	-93	0	8.5	
11:28				3,400	5.57	0.99	6.51	-92	0	17.5	
11:29				3,600	5.55	0.999	6.49	-93	0	12.22	
11:30				3,800	5.47	0.999	6.50	-93	0	14.6	
11:31	6.26			4,000	5.49	0.999	6.57	-95	0	15	
11:13	6.22			200	6.34	0.90	6.76	-95	0.69	70.9	
11:14				400	6.20	0.999	6.78	-95	0.0	96.5	
11:15				600	6.11	0.90	6.62	-94	0.0	26.4	
11:16				800	5.94	0.999	6.64	-90	0.0	21.6	
11:17				1,000	5.89	0.90	6.47	-90	0.0	19.8	

1. Pump dial setting (for example: hertz, cycles/min, etc).

2. µSiemens per cm (same as µmhos/cm) at 25 °C.

3. Oxidation reduction potential (stand in for Eh).

SI  
 reading  
 03/06/07

**Ecosystems Strategies, Inc.**

24 Davis Avenue, Poughkeepsie, New York 12603-2332

Environmental Services and Solutions

TEL: 845-452-1658 • FAX: 845-485-7083

[mail@ecosystemsstrategies.com](mailto:mail@ecosystemsstrategies.com)**Water Sample Log**

Site: Long Dock Beacon

9/5/2006

Job Number: SG96152.51

Sample Location: \_\_\_\_ MW-1

Sample ID: \_\_\_\_\_

Type of sample: Surface/Groundwater/OtherGrab/Composite

Volume Collected:	Analysis	Preservative
(2) 40ml vials	VOCs(8260)	HCl
(2) 1L amber	SVOCs (8270), PCBs(8082)	N/A
(1) 500ml Plastic	TAL Metals (6010 and 7471)	HNO <sub>3</sub>

Comments: \_\_\_\_\_

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Environmental Services and Solutions

TEL: 845-452-1658 • FAX: 845-485-7083

[mail@ecosystemsstrategies.com](mailto:mail@ecosystemsstrategies.com)**Water Sample Log**Site: Long Dock Beacon  
Job Number: SG96152.51

9/5/2006

Sample Location: \_\_\_\_ MW-2

Sample ID: \_\_\_\_\_

Type of sample: Surface/Groundwater/OtherGrab/Composite

Volume Collected:	Analysis	Preservative
(2) 40ml vials	VOCs(8260)	HCl
(3) 1L amber	SVOCs (8270), PCBs(8082), pesticides (8081)	N/A
(1) 500ml Plastic	TAL Metals (6010 and 7471)	HNO <sub>3</sub>

Comments: \_\_\_\_\_

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24 Davis Avenue, Poughkeepsie, New York 12603-2332

Environmental Services and Solutions

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[mail@ecosystemsstrategies.com](mailto:mail@ecosystemsstrategies.com)**Water Sample Log**

Site: Long Dock Beacon

9/5/2006

Job Number: SG96152.51

Sample Location: \_\_\_\_ MW-3

Sample ID: \_\_\_\_\_

Type of sample: Surface Groundwater OtherGrab/Composite

Volume Collected:	Analysis	Preservative
(2) 40ml vials	VOCs(8260)	HCl
(2) 1L amber	SVOCs (8270), PCBs(8082)	N/A
(1) 500ml Plastic	TAL Metals (6010 and 7471)	HNO <sub>3</sub>

Comments: \_\_\_\_\_

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24 Davis Avenue, Poughkeepsie, New York 12603-2332

Environmental Services and Solutions

TEL: 845-452-1658 • FAX: 845-485-7083

[mail@ecosystemsstrategies.com](mailto:mail@ecosystemsstrategies.com)**Water Sample Log**

Site: Long Dock Beacon

9/5/2006

Job Number: SG96152.51

Sample Location: \_\_\_\_ MW-4

Sample ID: \_\_\_\_\_

Type of sample: Surface/Groundwater/OtherGrab/Composite

Volume Collected:	Analysis	Preservative
(2) 40ml vials	VOCs(8260)	HCl
(2) 1L amber	SVOCs (8270), PCBs(8082)	N/A
(1) 500ml Plastic	TAL Metals (6010 and 7471)	HNO <sub>3</sub>

Comments: \_\_\_\_\_

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24 Davis Avenue, Poughkeepsie, New York 12603-2332

Environmental Services and Solutions

TEL: 845-452-1658 • FAX: 845-485-7083

[mail@ecosystemsstrategies.com](mailto:mail@ecosystemsstrategies.com)**Water Sample Log**

Site: Long Dock Beacon

9/5/2006

Job Number: SG96152.51

Sample Location: \_\_\_\_ MW-5

Sample ID: \_\_\_\_\_

Type of sample: Surface/Groundwater/OtherGrab/Composite

Volume Collected:	Analysis	Preservative
(2) 40ml vials	VOCs(8260)	HCl
(2) 1L amber	SVOCs (8270), PCBs(8082)	N/A
(1) 500ml Plastic	TAL Metals (6010 and 7471)	HNO <sub>3</sub>

Comments: \_\_\_\_\_

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24 Davis Avenue, Poughkeepsie, New York 12603-2332

Environmental Services and Solutions

TEL: 845-452-1658 • FAX: 845-485-7083

[mail@ecosystemsstrategies.com](mailto:mail@ecosystemsstrategies.com)**Water Sample Log**

Site: Long Dock Beacon

9/6/2006

Job Number: SG96152.51

Sample Location: \_\_\_ MW-6, MW-Dup, MW-MS, MW-MSD

Sample ID: \_\_\_\_\_

Type of sample: Surface Groundwater/OtherGrab/Composite

Volume Collected:	Analysis	Preservative
(8) 40ml vials	VOCs(8260)	HCl
(12) 1L amber	SVOCs (8270), PCBs(8082), pesticides (8081)	N/A
(4) 500ml Plastic	TAL Metals (6010 and 7471)	HNO <sub>3</sub>

Comments: PET ODOR, CONTAMINATED

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24 Davis Avenue, Poughkeepsie, New York 12603-2332

Environmental Services and Solutions

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[mail@ecosystemsstrategies.com](mailto:mail@ecosystemsstrategies.com)**Water Sample Log**

Site: Long Dock Beacon

9/5/2006

Job Number: SG96152.51

Sample Location: \_\_\_\_ MW-7

Sample ID: \_\_\_\_\_

Type of sample: Surface/Groundwater/OtherGrab/Composite

Volume Collected:	Analysis	Preservative
(2) 40ml vials	VOCs(8260)	HCl
(2) 1L amber	SVOCs (8270), PCBs(8082)	N/A
(1) 500ml Plastic	TAL Metals (6010 and 7471)	HNO <sub>3</sub>

Comments: \_\_\_\_\_

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Environmental Services and Solutions

TEL: 845-452-1658 • FAX: 845-485-7083

[mail@ecosystemsstrategies.com](mailto:mail@ecosystemsstrategies.com)**Water Sample Log**

Site: Long Dock Beacon

9/6/2006

Job Number: SG96152.51

Sample Location: \_\_\_\_ MW-8

Sample ID: \_\_\_\_\_

Type of sample: Surface/Groundwater/OtherGrab/Composite

Volume Collected:	Analysis	Preservative
(2) 40ml vials	VOCs(8260)	HCl
(2) 1L amber	SVOCs (8270), PCBs(8082), pesticides (8081)	N/A
(1) 500ml Plastic	TAL Metals (6010 and 7471)	HNO <sub>3</sub>

Comments: PET ODOR, CONTAINERIZED

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# **Ecosystems Strategies, Inc.**

24 Davis Avenue, Poughkeepsie, New York 12603-2332

Environmental Services and Solutions

TEL: 845-452-1658 • FAX: 845-485-7083

[mail@ecosystemsstrategies.com](mailto:mail@ecosystemsstrategies.com)

## **Water Sample Log**

Site: Long Dock Beacon 2/27/2007

Job Number: SG96152.51

Sample Location: \_\_\_ MW-1

Sample ID: \_\_\_\_\_

Type of sample: Surface/Groundwater/Other

Grab/Composite

Volume Collected:	Analysis	Preservative
(2) 1 L amber	SVOCs (8270), PCBs (8082)	N/A
(1) 500 mL plastic	TAL metals (6010 and 7471)	HNO <sub>3</sub>
(2) 40 mL vials	VOCs (8260)	HCl

Comments: \_\_\_\_\_

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# Ecosystems Strategies, Inc.

24 Davis Avenue, Poughkeepsie, New York 12603-2332

Environmental Services and Solutions

TEL: 845-452-1658 • FAX: 845-485-7083

[mail@ecosystemsstrategies.com](mailto:mail@ecosystemsstrategies.com)

## Water Sample Log

Site: Long Dock Beacon 2/27/2007

Job Number: SG96152.51

Sample Location: \_\_\_ MW-4, MW-DUP, MW-MS, W-MSD

Sample ID: \_\_\_\_\_

Type of sample: Surface Groundwater Other

Grab/Composite

Volume Collected:	Analysis	Preservative
(8) 1 L amber	SVOCs (8270), PCBs (8082)	N/A
(4) 500 mL plastic	TAL metals (6010 and 7471)	HNO <sub>3</sub>
(8) 40 mL vials	VOCs (8260)	HCl

Comments: \_\_\_\_\_

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Environmental Services and Solutions

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[mail@ecosystemsstrategies.com](mailto:mail@ecosystemsstrategies.com)**Water Sample Log**

Site: Long Dock Beacon

3/6/2007

Job Number: SG96152.51

Sample Location: \_\_\_ MW-6

Sample ID: \_\_\_\_\_

Type of sample: Surface Groundwater OtherGrab Composite

Volume Collected:	Analysis	Preservative
(2) 1 L amber	SVOCs (8270), PCBs (8082)	N/A
(1) 500 mL plastic	TAL metals (6010 and 7471)	HNO <sub>3</sub>
(2) 40 mL vials	VOCs (8260)	HCl

Comments: \_\_\_\_\_

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24 Davis Avenue, Poughkeepsie, New York 12603-2332

Environmental Services and Solutions

TEL: 845-452-1658 • FAX: 845-485-7083

[mail@ecosystemsstrategies.com](mailto:mail@ecosystemsstrategies.com)

## Water Sample Log

Site: Long Dock Beacon

3/6/2007

Job Number: SG96152.51

Sample Location: \_\_\_\_ MW-7

Sample ID: \_\_\_\_\_

Type of sample: Surface Groundwater Other

Grab Composite

Volume Collected:	Analysis	Preservative
(2) 1 L amber	SVOCs (8270), PCBs (8082)	N/A
(1) 500 mL plastic	TAL metals (6010 and 7471)	HNO <sub>3</sub>
(2) 40 mL vials	VOCs (8260)	HCl

Comments: \_\_\_\_\_

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24 Davis Avenue, Poughkeepsie, New York 12603-2332

Environmental Services and Solutions

TEL: 845-452-1658 • FAX: 845-485-7083

[mail@ecosystemsstrategies.com](mailto:mail@ecosystemsstrategies.com)**Water Sample Log**

Site: Long Dock Beacon

3/6/2007

Job Number: SG96152.51

Sample Location: \_\_\_ MW-8

Sample ID: \_\_\_\_\_

Type of sample: Surface Groundwater OtherGrab Composite

Volume Collected:	Analysis	Preservative
(2) 1 L amber	SVOCs (8270), PCBs (8082)	N/A
(1) 500 mL plastic	TAL metals (6010 and 7471)	HNO <sub>3</sub>
(2) 40 mL vials	VOCs (8260)	HCl

Comments: \_\_\_\_\_

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24 Davis Avenue, Poughkeepsie, New York 12603-2332

Environmental Services and Solutions

TEL: 845-452-1658 • FAX: 845-485-7083

[mail@ecosystemsstrategies.com](mailto:mail@ecosystemsstrategies.com)

## **Water Sample Log**

Site: Long Dock Beacon

3/6/2007

Job Number: SG96152.51

Sample Location: \_\_\_\_ MW-9, MW-DUP, MW-MS, MW-MSD

Sample ID: \_\_\_\_\_

Type of sample: Surface Groundwater Other

Grab Composite

Volume Collected:	Analysis	Preservative
(8) 1 L amber	SVOCs (8270), PCBs (8082)	N/A
(4) 500 mL plastic	TAL metals (6010 and 7471)	HNO <sub>3</sub>
(8) 40 mL vials	VOCs (8260)	HCl

Comments: \_\_\_\_\_

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# **Ecosystems Strategies, Inc.**

24 Davis Avenue, Poughkeepsie, New York 12603-2332

Environmental Services and Solutions

TEL: 845-452-1658 • FAX: 845-485-7083

[mail@ecosystemsstrategies.com](mailto:mail@ecosystemsstrategies.com)

## **Water Sample Log**

Site: Long Dock Beacon

3/6/2007

Job Number: SG96152.51

Sample Location: \_\_\_ MW-10

Sample ID: \_\_\_\_\_

Type of sample: Surface Groundwater Other

Grab Composite

Volume Collected:	Analysis	Preservative
(2) 1 L amber	SVOCs (8270), PCBs (8082)	N/A
(1) 500 mL plastic	TAL metals (6010 and 7471)	HNO <sub>3</sub>
(2) 40 mL vials	VOCs (8260)	HCl

Comments: \_\_\_\_\_

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**Ecosystems Strategies, Inc.**

24 Davis Avenue, Poughkeepsie, New York 12603-2332

Environmental Services and Solutions

TEL: 845-452-1658 • FAX: 845-485-7083

[mail@ecosystemsstrategies.com](mailto:mail@ecosystemsstrategies.com)**Water Sample Log**

Site: Long Dock Beacon

Job Number: SG96152.51

Sample Location: \_\_\_\_ SW-1

Sample ID: \_\_\_\_\_

Type of sample: Surface/Groundwater/OtherGrab/Composite

8/10/06

Volume Collected:	Analysis	Preservative
(2) 40ml vials	VOCs(8260)	HEI
(2) 1L amber	SVOCs (8270), PCBs(8082)	N/A
(1) 500ml Plastic	TAL Metals (6010 and 7471)	HNO <sub>3</sub>

Comments: \_\_\_\_\_

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**Ecosystems Strategies, Inc.**

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Environmental Services and Solutions

TEL: 845-452-1658 • FAX: 845-485-7083

[mail@ecosystemsstrategies.com](mailto:mail@ecosystemsstrategies.com)**Water Sample Log**

Site: Long Dock Beacon

Job Number: SG96152.51

Sample Location: \_\_\_ SW-2

Sample ID: \_\_\_\_\_

Type of sample: Surface/Groundwater/OtherGrab/Composite

8/10/06

Volume Collected:	Analysis	Preservative
(2) 40ml vials	VOCs(8260)	HCl
(2) 1L amber	SVOCs (8270), PCBs(8082)	N/A
(1) 500ml Plastic	TAL Metals (6010 and 7471)	HNO <sub>3</sub>

Comments: \_\_\_\_\_

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**Ecosystems Strategies, Inc.**

24 Davis Avenue, Poughkeepsie, New York 12603-2332

Environmental Services and Solutions

TEL: 845-452-1658 • FAX: 845-485-7083

[mail@ecosystemsstrategies.com](mailto:mail@ecosystemsstrategies.com)**Water Sample Log**

Site: Long Dock Beacon

Job Number: SG96152.51

Sample Location: \_\_, SW-3, SW-DUP, SW-MS, SW-MSD

Sample ID: \_\_\_\_\_

Type of sample: Surface/Groundwater/OtherGrab/Composite

8/10/06

Volume Collected:	Analysis	Preservative
(8) 40ml vials	VOCs(8260)	HCl
(8) 1L amber	SVOCs (8270), PCBs(8082), Pesticides(8081)	N/A
(4) 500ml Plastic	TAL Metals (6010 and 7471)	HNO <sub>3</sub>

Comments: \_\_\_\_\_

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Environmental Services and Solutions

TEL: 845-452-1658 • FAX: 845-485-7083

[mail@ecosystemsstrategies.com](mailto:mail@ecosystemsstrategies.com)**Water Sample Log**

Site: Long Dock Beacon

Job Number: SG96152.51

Sample Location: \_\_\_\_ SW-4

Sample ID: \_\_\_\_\_

Type of sample: Surface/Groundwater/OtherGrab/Composite

8/10/06

Volume Collected:	Analysis	Preservative
(2) 40ml vials	VOCs(8260)	HCl
(2) 1L amber	SVOCs (8270), PCBs(8082), Pesticides(8081)	N/A
(1) 500ml Plastic	TAL Metals (6010 and 7471)	HNO <sub>3</sub>

Comments: \_\_\_\_\_

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# AQUA SURVEY, INC. SEDIMENT CORE LOG

Client : Ecosystems Strategies		Project : Beacon, NY		Logger: M. Padover	
Job#: 26261		Date: 10-Aug-06		Time : 09:35	
Sample Coordinates: 584,458.20		4,595,203.14		UTM Zone 18 Meters	
Core # Core-01		DTW(ft)	HDOP=		
Project Depth (inc. ft. overdredge) [PD]: 6.0		Core Penetration Length: 8.5			
Measured Water Depth [MWD]:		Recovered Core Length: 6.7			
Tide Adjust [TA] (+/- ft. from MLW):		Sample Length Retained :			
Corrected Depth @ MLW:		Core Volume Retained:			
Required Sample Core Length [SCL] : 6.0		Collected to Project Depth: Y / N			
All Length Measurements are in Decimal Feet					
Sample Interval (ft.)		Sample Id #		Description	
Top				Sample turned over to client in liner	
Bottom					
# of containers:				Core Volumes	
type of container:		bucket	hardliner	cup	other
Water and surface conditions:				Nominal core-barrel diameter	EST. Volume
				3.0"	.25 gal/ft
				3.5"	.33gal/ft
Comments:				4.0"	.50gal/ft
				Liner Type: Soft Hard	
				Vibra Corer: P3 P4 VT6 Other	
Live Organisms present		Y	N		
Oil Present		Y	N		
Odor Present		Y	N		
Debris Present		Y	N		
Within 10% of Req'd Core Length		Y	N		
Photo		Y	N		



# AQUA SURVEY, INC. SEDIMENT CORE LOG

Client : Ecosystems Strategies		Project : Beacon, NY		Logger: M. Padover									
Job#: 26261		Date: 10-Aug-06		Time : 14:00									
Sample Coordinates: 584,418.14		4,595,229.21		UTM Zone 18 Meters									
Core # Core-02		DTW(ft)	HDOP=										
Project Depth (inc_ ft. overdredge) [PD]: 6.0		Core Penetration Length: 8.5											
Measured Water Depth [MWD]:		Recovered Core Length: 8.0											
Tide Adjust [TA] (+/- ft. from MLW):		Sample Length Retained :											
Corrected Depth @ MLW:		Core Volume Retained:											
Required Sample Core Length [SCL] : 6.0		Collected to Project Depth: Y / N											
All Length Measurements are in Decimal Feet													
Sample Interval (ft.)		Sample Id #		Description									
Top				Sample turned over to client in liner									
Bottom													
# of containers: <table border="1"><tr><td> </td><td> </td><td> </td><td> </td></tr></table> type of container: <table border="1"><tr><td>bucket</td><td>hardliner</td><td>cup</td><td>other</td></tr></table>								bucket	hardliner	cup	other	Core Volumes Nominal core-barrel diameter      EST. Volume	
bucket	hardliner	cup	other										
Water and surface conditions:				3.0"      .25 gal/ft									
Comments:				3.5"      .33gal/ft									
				4.0"      .50gal/ft									
				Liner Type: Soft Hard									
				Vibra Corer: P3 P4 VT6 Other									
Live Organisms present		Y	N										
Oil Present		Y	N										
Odor Present		Y	N										
Debris Present		Y	N										
Within 10% of Req'd Core Length		Y	N										
Photo		Y	N										



Client : Ecosystems Strategies				Project : Beacon, NY				Logger: M. Padover								
Job#: 26261				Date: 10-Aug-06				Time : 14:30								
Sample Coordinates: 584,391.15				4,595,285.24				UTM Zone 18 Meters								
Core # Core-03				DTW(ft)		HDOP=										
Project Depth (inc_ ft. overdredge) [PD]: 6.0				Core Penetration Length: 8.5												
Measured Water Depth [MWD]:				Recovered Core Length: 7.8												
Tide Adjust [TA] (+/- ft. from MLW):				Sample Length Retained :												
Corrected Depth @ MLW:				Core Volume Retained:												
Required Sample Core Length [SCL] : 6.0				Collected to Project Depth: Y / N												
All Length Measurements are in Decimal Feet																
Sample Interval (ft.)			Sample Id #			Description										
Top						Sample turned over to client in liner										
Bottom																
# of containers:					Core Volumes											
type of container:					bucket		hardliner		cup		other		Nominal core-barrel diameter		EST. Volume	
Water and surface conditions:													3.0"		.25 gal/ft	
													3.5"		.33gal/ft	
Comments:													4.0"		.50gal/ft	
													Liner Type: Soft		Hard	
													Vibra Corer: P3		P4 VT6 Other	
Live Organisms present					Y		N									
Oil Present					Y		N									
Odor Present					Y		N									
Debris Present					Y		N									
Within 10% of Req'd Core Length					Y		N									
Photo					Y		N									
ver 010503																




# AQUA SURVEY, INC. SEDIMENT CORE LOG

Client : Ecosystems Strategies		Project : Beacon, NY		Logger: M. Padover	
Job#: 26261		Date: 10-Aug-06		Time : 14:45	
Sample Coordinates: 584,515.50		4,595,312.49		UTM Zone 18 Meters	
Core # Core-04		DTW(ft)	HDOP=		
Project Depth (inc. ft. overdredge) [PD]: 6.0		Core Penetration Length: 8.5			
Measured Water Depth [MWD]:		Recovered Core Length: 7.8			
Tide Adjust [TA] (+/- ft. from MLW):		Sample Length Retained :			
Corrected Depth @ MLW:		Core Volume Retained:			
Required Sample Core Length [SCL] : 6.0		Collected to Project Depth: Y / N			
<b>All Length Measurements are in Decimal Feet</b>					
Sample Interval (ft.)		Sample Id #		Description	
Top				Sample turned over to client in liner	
Bottom					
# of containers:				Core Volumes	
type of container:		bucket	hardliner	cup	other
Water and surface conditions:		Nominal core-barrel diameter		EST. Volume	
		3.0"		.25 gal/ft	
		3.5"		.33gal/ft	
Comments:		4.0"		.50gal/ft	
		Liner Type: Soft Hard			
		Vibra Corer: P3 P4 VT6 Other			
Live Organisms present		Y	N		
Oil Present		Y	N		
Odor Present		Y	N		
Debris Present		Y	N		
Within 10% of Req'd Core Length		Y	N		
Photo		Y	N		



# AQUA SURVEY, INC. SEDIMENT CORE LOG

Client : Ecosystems Strategies		Project : Beacon, NY		Logger: M. Padover	
Job#: 26261		Date: 10-Aug-06		Time : 10:20	
Sample Coordinates: 584,418.01		4,595,191.62		UTM Zone 18 Meters	
Core # Core-05		DTW(ft)	HDOP=		
Project Depth (inc. ft. overdredge) [PD]: 6.0		Core Penetration Length: 8.5			
Measured Water Depth [MWD]:		Recovered Core Length: 6.4			
Tide Adjust [TA] (+/- ft. from MLW):		Sample Length Retained :			
Corrected Depth @ MLW:		Core Volume Retained:			
Required Sample Core Length [SCL] : 6.0		Collected to Project Depth: Y / N			
All Length Measurements are in Decimal Feet					
Sample Interval (ft.)		Sample Id #		Description	
Top				Sample turned over to client in liner	
					
		Bottom			
# of containers:				Core Volumes	
type of container: bucket hardliner cup other				Nominal core-barrel diameter EST. Volume	
Water and surface conditions:				3.0" .25 gal/ft	
				3.5" .33gal/ft	
Comments:				4.0" .50gal/ft	
				Liner Type: Soft Hard	
				Vibra Corer: P3 P4 VT6 Other	
Live Organisms present Y N					
Oil Present Y N					
Odor Present Y N					
Debris Present Y N					
Within 10% of Req'd Core Length Y N					
Photo Y N					



# AQUA SURVEY, INC. SEDIMENT CORE LOG

Client : Ecosystems Strategies		Project : Beacon, NY		Logger: M. Padover	
Job#: 26261		Date: 10-Aug-06		Time : 10:40	
Sample Coordinates: 584,364.68		4,595,202.30		UTM Zone 18 Meters	
Core # Core-06		DTW(ft)	HDOP=		
Project Depth (inc. ft. overdredge) [PD]: 6.0		Core Penetration Length: 8.5			
Measured Water Depth [MWD]:		Recovered Core Length: 7.8			
Tide Adjust [TA] (+/- ft. from MLW):		Sample Length Retained :			
Corrected Depth @ MLW:		Core Volume Retained:			
Required Sample Core Length [SCL]: 6.0		Collected to Project Depth: Y / N			
All Length Measurements are in Decimal Feet					
Sample Interval (ft.)		Sample Id #		Description	
Top				Sample turned over to client in liner	
		Bottom			
# of containers:				Core Volumes	
type of container:		bucket	hardliner	cup	other
Water and surface conditions:				Nominal core-barrel diameter	EST. Volume
Comments:				3.0"	.25 gal/ft
				3.5"	.33gal/ft
				4.0"	.50gal/ft
				Liner Type: Soft Hard	
				Vibra Corer: P3 P4 VT6 Other	
Live Organisms present		Y	N		
Oil Present		Y	N		
Odor Present		Y	N		
Debris Present		Y	N		
Within 10% of Req'd Core Length		Y	N		
Photo		Y	N		



ver 010503





# AQUA SURVEY, INC. SEDIMENT CORE LOG

Client : Ecosystems Strategies		Project : Beacon, NY		Logger: M. Padover	
Job#: 26261		Date: 10-Aug-06		Time : 11:30	
Sample Coordinates: 584,398.40		4,595,252.18		UTM Zone 18 Meters	
Core # Core-08		DTW(ft)	HDOP=		
Project Depth (inc. ft. overdredge) [PD]: 6.0		Core Penetration Length: 3.4			
Measured Water Depth [MWD]:		Recovered Core Length: 2.5			
Tide Adjust [TA] (+/- ft. from MLW):		Sample Length Retained :			
Corrected Depth @ MLW:		Core Volume Retained:			
Required Sample Core Length [SCL] : 6.0		Collected to Project Depth: Y / N			
All Length Measurements are in Decimal Feet					
Sample Interval (ft.)		Sample Id #		Description	
Top				Sample turned over to client in liner	
				First Attempt, refusal at 3.5 feet. Moved location to:	
				584388.31 E, 4595251.10 N.	
				2nd Deployment 8.0 penetration, 5.5 recovery	
Bottom					
# of containers:				Core Volumes	
type of container:		bucket	hardliner	cup	other
Water and surface conditions:		Nominal core-barrel diameter		EST. Volume	
		3.0"		.25 gal/ft	
		3.5"		.33gal/ft	
		4.0"		.50gal/ft	
Comments:		Liner Type: Soft Hard			
		Vibra Corer: P3 P4 VT6 Other			
Live Organisms present		Y	N		
Oil Present		Y	N		
Odor Present		Y	N		
Debris Present		Y	N		
Within 10% of Req'd Core Length		Y	N		
Photo		Y	N		



**AQUA SURVEY, INC.**  
**SEDIMENT CORE LOG**

[illegible]



# AQUA SURVEY, INC. SEDIMENT CORE LOG

Client : Ecosystems Strategies		Project : Beacon, NY		Logger: M. Padover	
Job#: 26261		Date: 10-Aug-06		Time : 12:40	
Sample Coordinates: 584,367.37		4,595,311.03		UTM Zone 18 Meters	
Core # Core-10		DTW(ft)	HDOP=		
Project Depth (inc. ft. overdredge) [PD]: 6.0		Core Penetration Length: 8.5			
Measured Water Depth [MWD]:		Recovered Core Length: 7.8			
Tide Adjust [TA] (+/- ft. from MLW):		Sample Length Retained :			
Corrected Depth @ MLW:		Core Volume Retained:			
Required Sample Core Length [SCL]: 6.0		Collected to Project Depth: Y / N			
<b>All Length Measurements are in Decimal Feet</b>					
Sample Interval (ft.)		Sample Id #		Description	
Top				Sample turned over to client in liner	
Bottom					
# of containers:				Core Volumes	
type of container:		bucket	hardliner	cup	other
Water and surface conditions:		Nominal core-barrel diameter		EST. Volume	
		3.0"		.25 gal/ft	
		3.5"		.33gal/ft	
Comments:		4.0"		.50gal/ft	
		Liner Type: Soft Hard			
		Vibra Corer: P3 P4 VT6 Other			
Live Organisms present		Y	N		
Oil Present		Y	N		
Odor Present		Y	N		
Debris Present		Y	N		
Within 10% of Req'd Core Length		Y	N		
Photo		Y	N		



# AQUA SURVEY, INC. SEDIMENT CORE LOG

Client : Ecosystems Strategies		Project : Beacon, NY		Logger: M. Padover	
Job#: 26261		Date: 10-Aug-06		Time : 12:50	
Sample Coordinates: 584,428.83		4,595,329.03		UTM Zone 18 Meters	
Core # Core-11		DTW(ft)	HDOP=		
Project Depth (inc. ft. overdredge) [PD]: 6.0		Core Penetration Length: 8.5			
Measured Water Depth [MWD]:		Recovered Core Length: 7.8			
Tide Adjust [TA] (+/- ft. from MLW):		Sample Length Retained :			
Corrected Depth @ MLW:		Core Volume Retained:			
Required Sample Core Length [SCL] : 6.0		Collected to Project Depth: Y / N			
All Length Measurements are in Decimal Feet					
Sample Interval (ft.)		Sample Id #		Description	
Top				Sample turned over to client in liner	
Bottom					
# of containers:				Core Volumes	
type of container:		bucket	hardliner	cup	other
Water and surface conditions:		Nominal core-barrel diameter		EST. Volume	
		3.0"		.25 gal/ft	
		3.5"		.33gal/ft	
Comments:		4.0"		.50gal/ft	
		Liner Type: Soft Hard			
		Vibra Corer: P3 P4 VT6 Other			
Live Organisms present		Y	N		
Oil Present		Y	N		
Odor Present		Y	N		
Debris Present		Y	N		
Within 10% of Req'd Core Length		Y	N		
Photo		Y	N		
ver 010503					



# AQUA SURVEY, INC. SEDIMENT CORE LOG

Client : Ecosystems Strategies		Project : Beacon, NY		Logger: M. Padover	
Job#: 26261		Date: 10-Aug-06		Time : 13:10	
Sample Coordinates: 584,498.08		4,595,311.71		UTM Zone 18 Meters	
Core # Core-12		DTW(ft)	HDOP=		
Project Depth (inc. ft. overdredge) [PD]: 6.0		Core Penetration Length: 8.5			
Measured Water Depth [MWD]:		Recovered Core Length: 7.8			
Tide Adjust [TA] (+/- ft. from MLW):		Sample Length Retained :			
Corrected Depth @ MLW:		Core Volume Retained:			
Required Sample Core Length [SCL] : 6.0		Collected to Project Depth: Y / N			
All Length Measurements are in Decimal Feet					
Sample Interval (ft.)		Sample Id #		Description	
Top				Sample turned over to client in liner	
Bottom					
# of containers:				Core Volumes	
type of container:		bucket	hardliner	cup	other
Water and surface conditions:				Nominal core-barrel diameter	EST. Volume
				3.0"	.25 gal/ft
				3.5"	.33gal/ft
Comments:				4.0"	.50gal/ft
				Liner Type: Soft Hard	
				Vibra Corer: P3 P4 VT6 Other	
Live Organisms present		Y	N		
Oil Present		Y	N		
Odor Present		Y	N		
Debris Present		Y	N		
Within 10% of Req'd Core Length		Y	N		
Photo		Y	N		

## **APPENDIX E**

### **Documentation of Regional Background Metal Concentrations**

New York State Department of Environmental Conservation  
Region 3 Office/Solid Waste Program

**Background Levels of Heavy Metals in Soils of the Lower Hudson Valley**

Summary of Results

July 1, 2003 (Revised 7/06)

In March of 2003, a study was carried out by Solid Waste Program staff in the Region 3 Office of the New York State Department of Environmental Conservation (DEC) to characterize background concentrations of heavy metals in soils of the lower Hudson Valley. This preliminary report provides a summary of the methods and results. A full report is in preparation and will be issued after evaluation of the data has been completed.

This study area is the lower Hudson Valley region of southeastern New York State, an area of 4,552 square miles which includes the counties of Westchester, Rockland, Putnam, Orange, Sullivan, Dutchess and Ulster. Twenty sites were selected for collection of soil samples and three replicate samples were collected at each sampling location to provide a total of sixty samples. The locations selected for sampling were undeveloped sites exhibiting mature natural vegetation with no apparent signs of fill placement, waste disposal or other types of recent anthropogenic disturbance. Care was taken to select sites where the only likely source of anthropogenic contamination would be atmospheric deposition. The sites selected were on publically owned properties managed by the DEC, the State Department of Parks or the Westchester County Department of Parks. The geographic coordinates of each sampling location were determined in the field using a global positioning satellite (GPS) receiver and these data were imported into a geographic information system (GIS) file which was used to create a map of the sampling locations (Figure 1). Names and geographic coordinates of each sampling location are provided in Table 1.

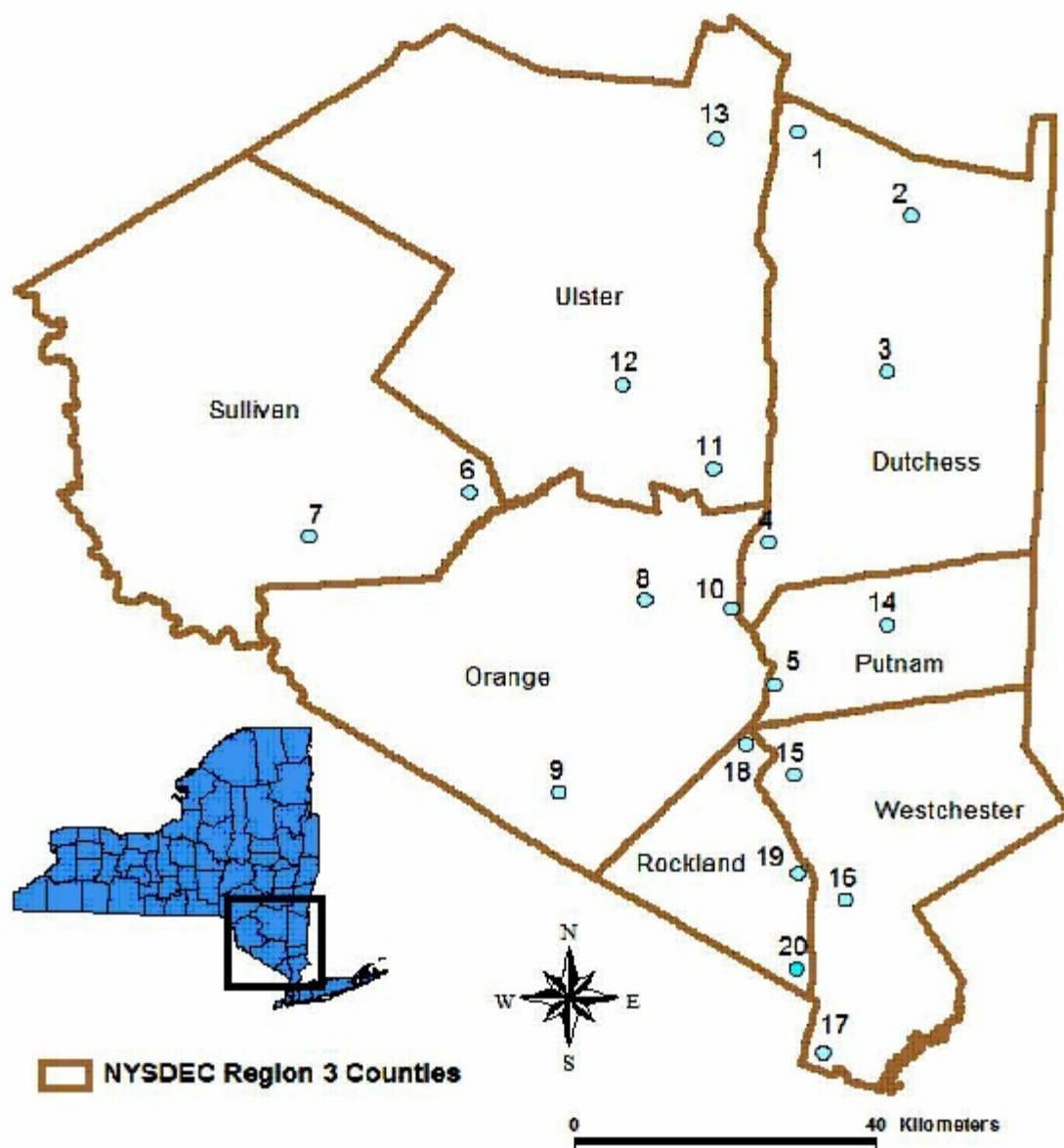
At each sampling location, the three replicate samples were collected within a 10-foot radius. The samples were collected from the upper six inches of the mineral soil (excluding the O horizon, where present) using a core sampler incorporating a 2-inch diameter stainless steel core barrel, a removable stainless steel cutting head, a 2-inch diameter removable butyrate plastic liner and a sliding-weight drive hammer. A new liner was used for each sample and sealed with plastic end-caps to serve as a sample container for shipment of the sample to the laboratory. Based on the design of the sampler, samples come in contact with the inside surface of the cutting head and the inside surface of the core liner only. To prevent cross-contamination, the cutting head was removed and cleaned with de-ionized water after collection of each sample.

Samples were stored at less than 4 degrees centigrade prior to and during shipment to the contract laboratory for analysis. All samples arrived at the laboratory within acceptable holding times, properly preserved and with appropriate chain of custody seals and documentation.

At the contract laboratory, all samples were analyzed for eleven heavy metals using methods consistent with EPA's SW-846 protocols and the DEC Analytical Services Protocol (ASP). The metals analyzed included arsenic, barium, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium and zinc. In accordance with SW-846 protocols, prior to analysis for all metals, one gram of sample was digested using nitric acid, hydrogen peroxide and hydrochloric acid. All metals determinations, with the exception of mercury, were carried out using inductively coupled plasma atomic emission spectrometry (ICP-AES). Mercury was determined using the cold vapor atomic absorption method.

Table 2 provides summary statistics for each of the metals analyzed along with comparisons of the results to DEC guidance values and results from other studies. The full data set is provided in Table 3. It is anticipated that the results of this study will be useful to DEC/Region 3 staff in evaluating environmental impacts at sites which are filled using imported soils or soil-like wastes.

Questions regarding this report should be directed to Steven Parisio at 845-256-3126.



NYSDEC collected the samples in March 2003

By: Amanda Davis / Steven Parisio, NYSDEC  
and Mauricio Roma, NYSDOT, January 2004

**FIGURE 1. Sampling Locations for Background Soil Metals Concentrations, New York**

Refer to Table 1 for names of sampling locations



Table 1. Soil Sampling Locations

Site No.	County	Park/Property Name	Managed By	Date Sampled	Geographic Coordinates
1	Dutchess	Tivoli Bay	DEC	3/10/03	N:42.03632, W:73.89645
2	Dutchess	Stissing Mtn	DEC	3/10/03	N:41.93383, W:73.7179
3	Dutchess	Taconic/Hereford	DEC	3/10/03	N:41.74659, W:73.76030
4	Dutchess	Stony Kill Farm	DEC	3/10/03	N:41.54293, W:73.95121
5	Putnam	Castle Rock	DEC	3/10/03	N:41.37013, W:73.94498
6	Sullivan	Wurtsboro Ridge	DEC	3/11/03	N:41.60621, W:74.42667
7	Sullivan	Neversink River	DEC	3/11/03	N:41.55457, W:74.68181
8	Orange	Stewart State Forest	DEC	3/11/03	N:41.47451, W:74.14892
9	Orange	Mt. Peter Hawk Watch Trailway	DEC	3/11/03	N:41.24484, W:74.28831
10	Orange	Kowawese	DEC	3/11/03	N:41.46286, W:74.01263
11	Ulster	Hemlock Ridge	DEC	3/12/03	N:41.63142, W:74.03738
12	Ulster	Shawangunk	DEC	3/12/03	N:41.73427, W:74.18067
13	Ulster	Highwoods	DEC	3/12/03	N:42.02909, W:74.02744
14	Putnam	California Hill	DEC	3/24/03	N:41.44169, W:73.76609
15	Westchester	Blue Mountain Reservation	Westchester Co. Parks	3/24/03	N:41.26223, W:73.91644
16	Westchester	Rockefeller Preserve	State Parks	3/24/03	N:41.11065, W:73.83748
17	Westchester	Tibbetts Brook Park	Westchester Co. Parks	3/24/03	N:40.92714, W:73.87445
18	Rockland	Bear Mountain	State Parks	3/35/03	N:41.30057, W:73.99174
19	Rockland	Hook Mountain	State Parks	3/35/03	N:41.14383, W:73.91217
20	Rockland	Tallman Mountain	State Parks	3/25/03	N:41.02887, W:73.91627

Table 2. Region 3 Background Soils Heavy Metals Concentrations - Summary Statistics and Comparisons

	As	Ba	Be	Cd	Cr	Cu	Pb	Hg	Ni	Se	Zn
Minimum	2.2	38.5	0.24	0.04U	11.2	5.8	6.9	0.04	8.7	0.20	35.7
Maximum	23.1	187	2.2	1.2	51.2	64.8	303	0.92	54.5	2.9	225
Median	5.5	61.9	0.58	0.12	17.9	17.6	33.1	0.13	16.7	0.73	75.4
Mean	6.6	74.2	0.67	0.18	19.4	20.9	57.8	0.20	19.2	0.88	80.2
Standard Deviation	3.8	31.8	0.34	0.20	7.1	11.4	67.5	0.18	8.1	0.60	31.7
Coefficient of Variation	0.58	0.43	0.51	1.1	0.37	0.55	1.2	0.9	0.42	0.68	0.40
90 % UCL	7.4	81.1	0.75	0.22	20.9	23.4	72.5	0.24	21.0	1.0	87.1
TAGM 4046	7.5	300	0.16	1	10	25	-	0.1	13	2	20
% Values Exceeding TAGM 4046	24	0	100	2	100	22	-	66	80	5	100
Mean for NJ Soils	4.46	-	0.93	0.37	12.3	17.2	58.4	0.46	10.3	0.07	73.4
Mean for Eastern US Soils (USGS)	7.4	-	0.85	-	22	22	17	0.12	18	0.45	50

**NOTES:**

1. All concentrations are given in mg/kg.
2. In order to perform statistical calculations, non-detect values were assigned a value of one half of the detection limit.
3. "TAGM 4046" refers to DEC's Technical & Administrative Guidance Memorandum (TAGM) #4046, entitled "Determination of soil cleanup objectives and cleanup levels".
4. Mean metals concentrations for NJ soils were taken from the 1993 study by the New Jersey Department of Environmental Protection.
5. Mean metals concentrations for Eastern US soils were taken from Shacklette and Boerngen (1984) Element concentrations in soils and other surficial materials of the coterminous United States. USGS Professional Paper 1270.

Table 3. Background Heavy Metals Concentrations in Undisturbed Natural Soils of the Lower Hudson Valley (Page 1 of 3)

Site No./County/Name	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Zinc
01/Dutchess/Tivoli Bay	5.8	74.7	0.58	0.11	14.4	16.1	26.4	0.06	16.4	0.81	57.9
	4.7	58.7	0.47	0.06	11.8	12.6	22.2	0.04	13.3	0.48	45.2
	5.2	59.2	0.49	0.06U	12.8	13.1	19.9	0.05	14.3	0.54	48.2
02/Dutchess/Stissing Mountain	4.4	47.7	0.57	0.11	24.5	17.6	23.8	0.07	29.4	0.48	91.6
	5.1	46.1	0.59	0.06	25	17.9	43.2	0.06	30.4	1.2	96.9
	4.8	46.6	0.62	0.05U	22.3	16.5	17.4	0.06	28.5	0.73	89.6
03/Dutchess/Taconic-Hereford	7.0	55.6	0.78	0.04U	17.3	17.6	16.6	0.05	22.7	0.71	79.3
	8.5	55.7	0.79	0.06	17.9	18.6	43	0.12	26.6	0.73	91.9
	7.5	48.8	0.70	0.10	15.5	16.6	19.3	0.09	22.4	0.62	78.6
04/Dutchess/Stony Kill Farm	6.9	53.7	0.57	0.09	12.6	13.5	74.7	0.18	15.8	1.1	68.1
	7.6	53.0	0.56	0.11	14.4	15.2	42.2	0.14	16.6	1.4	72.7
	6.5	56.0	0.53	0.07	13.6	14.4	33.1	0.14	16.7	0.82	70.3
05/Putnam/Castle Rock	14.3	99.7	1.4	0.19	29.4	32.4	59.1	0.34	31.0	0.83U	135
	23.1	187	2.2	0.42	51.2	64.8	82.6	0.36	54.5	2.9	225
	11.2	82.6	1.2	0.21	24.3	30.0	49.6	0.29	26.3	1.2	124
06/Sullivan/Wurtsboro Ridge	8.8	99.9	1.0	0.18	26.8	29	33.8	0.10	26.6	1.3	99.4
	15.5	136	1.6	0.12	39.1	44.2	24.9	0.06	41.5	0.96	132
	8.9	96.6	0.91	0.31	21.5	25.6	102	0.14	23.7	1.4	89.9
07/Sullivan/Neversink River	6.6	66.2	0.29	0.17	13.8	25.5	215	0.24	8.7	1.1	97.8
	5.5	42.0	0.24	0.06	11.3	49.4	59.9	0.23	9.3	0.49	52.8
	7.3	50.7	0.32	0.11	13.2	12.1	50.5	0.15	10.8	0.84	59.2

Notes:

1. All concentrations are given in mg/kg.
2. Concentrations below the method detection limit (MDL) are designated by the MDL followed by the "U" data qualifier.

Table 3. Background Heavy Metals Concentrations in Undisturbed Natural Soils of the Lower Hudson Valley (Page 2 of 3)

Site No./County/Name	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Zinc
08/Orange/Stewart State Forest	17.7	90.9	0.34	0.42	11.2	16.6	95.1	0.10	14.9	0.62	88.1
	4.7	92.2	0.57	0.17	13.5	18.1	209	0.69	15.8	0.60	91.5
	5.4	141	0.63	0.30	14.9	19.5	303	0.92	18	0.69	125
09/Orange/Mt Peter Hawk Watch Trailway	6.0	61.9	0.98	0.25	15.4	14.3	51.3	0.18	16.0	0.51	84.2
	3.8	61.1	1.4	0.19	15.7	11.1	20	0.1	17.4	0.38	80.8
	6.5	60.9	1.4	0.18	18.7	18.1	36.1	0.11	20.5	0.45U	91.4
10/Orange/Kowawese	4.7	38.5	0.45	0.11	14.1	20.4	12.7	0.08	22.4	0.37U	59.7
	5.3	48	0.58	0.14	19.3	24.9	17.1	0.05	28	0.49U	76.6
	4.4	42.4	0.54	0.17	14.6	20	13.1	0.09	24.1	0.37U	57.4
11/Ulster/Hemlock Ridge	6.4	77.8	0.40	0.27	13.5	11	89.9	0.14	13	1.3	74
	2.2	72.8	0.56	0.05U	17.4	5.8	6.9	0.12	12.8	0.48U	67.2
	4.1	56.5	0.62	0.04U	22.6	14.8	12.6	0.09	22	0.04U	72
12/Ulster/Shawangunk	5.2	83.2	0.83	0.11	17.3	10.8	15.9	0.10	19.5	0.47U	71.9
	5.6	82.4	0.64	0.20	13.9	14	53.8	0.11	15.6	0.53	75.1
	5.7	92.1	0.72	0.27	14.7	11.5	43.3	0.11	16.6	0.55	84.9
13/Ulster/Highwoods	6.0	85.3	0.52	0.32	16.8	12.2	29.6	0.12	14.2	0.76	72.3
	4.8	58.8	0.49	0.10	16.3	11.7	19.3	0.09	15.2	0.61	54.9
	7.6	67.4	0.59	0.08	20.3	12.7	26.8	0.13	17.9	0.57U	60.4
14/Putnam/California Hill	2.9	141	0.38	0.41	14.8	23.2	60.4	0.15	10.5	1.9	93.8
	2.9	107	0.67	0.19	22	33	24.8	0.13	10.9	0.63	77
	2.2	90.7	0.65	0.11	22.2	24.5	13.9	0.15	11.6	0.53	66.4

## Notes:

1. All concentrations are given in mg/kg.
2. Concentrations below the method detection limit (MDL) are designated by the MDL followed by the "U" data qualifier.

Table 3. Background Heavy Metals Concentrations in Undisturbed Natural Soils of the Lower Hudson Valley (Page 3 of 3)

Site No./County/Name	Arsenic	Barium	Beryllium	Cadmium	Chromium	Copper	Lead	Mercury	Nickel	Selenium	Zinc
15/Westchester/Blue Mountain Reservation	5.5	68.7	0.57	0.19	21.5	15.9	26.5	0.38	18.2	0.83	67.1
	4.5	94.5	0.69	0.15	31.3	20.3	13.2	0.48	27.5	1.1	75.4
	3.3	80	0.54	0.06	21.9	15.1	7.4	0.42	18.3	0.66	53.8
16/Westchester/Rockefeller Preserve	3.5	50	0.60	0.06	18.5	8.5	10.5	0.05	11.3	0.39U	35.7
	3.3	58.6	0.66	0.08	19.7	9.6	15.2	0.20	12.7	0.45U	41
	4.9	49.4	0.61	0.11	18.7	10.9	24.3	0.26	12.5	0.78	41.7
17/Westchester/Tibbetts Brook Park	7.8	126	0.51	0.94	23.8	31.3	208	0.41	20.8	1.5	126
	15.0	57.1	0.43	0.28	29.7	48.6	190	0.52	18.9	2.6	89.9
	9.6	165	0.45	1.2	30.9	42.8	301	0.65	28.3	2.5	161
18/Rockland/Bear Mountain State Park	4.6	39.9	0.72	0.05	13.7	14.5	15.5	0.05	13.5	0.88	42.5
	3.1	57.7	0.44	0.15	17.9	13.9	33.0	0.22	14.0	1.8	51.6
	3.9	44.6	0.80	0.05U	14.7	17.1	9.5	0.36	14.0	0.89	43.3
19/Rockland/Hook Mountain State Park	4.0	89.8	0.53	0.20	18.5	23.2	47.7	0.30	20.4	1.4	76.4
	5.3	64.2	0.52	0.12	17.8	27.7	113	0.29	19.5	0.92	79.3
	9.6*	1060*	0.40*	9.2*	15.9*	29.2*	1380*	0.20*	17.6*	1.5*	1750*
20/Rockland/Tallman Mountain State Park	6.4	46.5	0.31	0.06U	22.9	19.4	48.2	0.11	12.5	1.6	68.2
	6.8	79.0	0.55	0.36	22.0	21.9	69.7	0.17	14.0	1.3	89.2
	7.6	39.5	0.46	0.09	20.7	20.6	64.6	0.13	12.0	1.1	59.1

## Notes:

1. All concentrations are given in mg/kg.
2. Concentrations below the method detection limit (MDL) are designated by the MDL followed by the "U" data qualifier.
3. Values marked with an asterisk are considered to be outlier values or are values associated with a sample which is being omitted from statistical calculations because it exhibits values for one or more metals which are considered to be outlier values.

**APPENDIX F**  
**Data Summary Tables**

**Table 8: PCBs in Surface Soil Samples (SS-1 through SS-12)**

Results provided in mg/kg (parts per million). Results shown in **bold** exceed guidance levels.

PCB Compound (USEPA Method 8082)	Sample Identification											
	SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10**	SS-11	SS-12
PCB 1016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1221	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1232	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1242	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1248	ND	ND	0.330	ND	ND	0.140	0.095	0.028	0.013	0.019	0.570	<b>16.000</b>
PCB 1254	ND	ND	<b>1.400</b>	ND	0.065	0.260	0.130	0.019	ND	0.024	<b>2.800</b>	<b>51.000</b>
PCB 1260	0.0059	ND	0.740	0.034	0.040	ND	0.089	0.018	ND	ND	ND	ND
PCB 1268	ND	ND	0.160	ND	ND	0.068	ND	ND	ND	0.010	ND	ND
PCB, Total	0.0059	ND	<b>2.630</b>	0.034	0.105	0.468	0.314	0.065	0.013	0.053	<b>3.370</b>	<b>67.000</b>

Notes:

Guidance level = 1.0 ppm, based on BCP Track "2" Commercial Restricted Use SCOs, 6 NYCRR Part 375, Table 375-6.8(b).

\*\* = Sample with duplicate analysis

ND = Not Detected

**Table 9: PCBs in Soil Boring Samples (SB-1 through SB-11)**Results provided in mg/kg (parts per million). Results shown in **bold** exceed guidance levels.

PCB Compound (USEPA Method 8082)	Sample Identification									
	SB-1 (4.2-5')	SB-1 (7.8-8.2')	SB-2 (9-10')	SB-3 (3-4.5')	SB-4 (2.4-3.2')	SB-4 (3.2-4.0')	SB-5 (3.2-3.8')	SB-5 (8.4-10')	SB-6 (5-10')	SB-6 (15-20')**
PCB 1016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1221	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1232	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1242	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1248	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1254	ND	ND	ND	ND	0.069	0.062	ND	ND	ND	ND
PCB 1260	ND	ND	ND	0.0079	ND	ND	ND	ND	ND	ND
PCB 1268	ND	ND	ND	ND	0.01	0.0056	ND	ND	ND	ND
PCB, Total	ND	ND	ND	0.0079	0.079	0.0676	ND	ND	ND	ND
PCB Compound (USEPA Method 8082)	Sample Identification									
	SB-7 (3-4.5')	SB-7 (8.6-10')	SB-8 (2.9-3.6')	SB-8 (10-15')	SB-9 (4.4-5')	SB-9 (18.9-19.5')	SB-10 (3.4-4.5')	SB-10 (5-10')	SB-11 (3.3-4')	SB-11 (14-15')
PCB 1016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1221	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1232	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1242	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1248	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1254	ND	ND	ND	ND	ND	ND	ND	ND	0.036	ND
PCB 1260	ND	ND	ND	ND	ND	ND	ND	ND	0.013	ND
PCB 1268	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB, Total	ND	ND	ND	ND	ND	ND	ND	ND	0.049	ND

Notes:

Guidance level = 1.0 ppm, based on BCP Track "2" Commercial Restricted Use SCOs, 6 NYCRR Part 375, Table 375-6.8(b).

\*\* = Sample with duplicate analysis

ND = Not Detected



**Table 10: PCBs in Soil Boring Samples (2SB-19 through 2SB-24)**Results provided in mg/kg (parts per million). Results shown in **bold** exceed guidance levels.

PCB Compound (USEPA Method 8082)	Sample Identification								
	2SB-19 (0-4")	2SB-19 (20-24")	2SB-19 (36-40")	2SB-20 (0-4")	2SB-20 (20-24")	2SB-20 (36-40")	2SB-21 (0-4")	2SB-21 (10-14")	2SB-21 (20-24")
PCB 1016	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1221	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1232	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1242	0.033	0.012	0.012	0.110	ND	ND	0.230	0.460	0.010
PCB 1248	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1254	0.075	0.017	0.017	0.630	ND	ND	<b>1.600</b>	<b>3.700</b>	0.018
PCB 1260	0.027	ND	ND	0.480	ND	ND	0.950	<b>1.700</b>	0.019
PCB 1268	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB, Total	0.135	0.029	0.029	<b>1.220</b>	ND	ND	<b>2.780</b>	<b>5.860</b>	0.047
PCB Compound (USEPA Method 8082)	Sample Identification								
	2SB-22 (0-4")	2SB-22 (20-24")	2SB-22 (36-40")	2SB-23 (0-4")	2SB-23 (20-24")	2SB-23 (36-40")	2SB-24 (0-4")	2SB-24 (20-24")	2SB-24 (36-40")
PCB 1016	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1221	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1232	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1242	0.041	ND	ND	0.670	ND	ND	0.430	ND	ND
PCB 1248	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1254	0.120	ND	ND	1.000	ND	ND	<b>1.500</b>	ND	ND
PCB 1260	0.063	ND	0.012	0.650	ND	ND	0.610	ND	ND
PCB 1268	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB, Total	0.224	ND	0.012	<b>2.320</b>	ND	ND	<b>2.540</b>	ND	ND

Notes:

Guidance level = 1.0 ppm, based on BCP Track "2" Commercial Restricted Use SCOs, 6 NYCRR Part 375, Table 375-6.8(b).

ND = Not Detected    NA = Not Analyzed

**Table 11: PCBs in Soil Boring Samples (2SB-25 through 2SB-34)**Results provided in mg/kg (parts per million). Results shown in **bold** exceed guidance levels.

PCB Compound (USEPA Method 8082)	Sample Identification									
	2SB-25 (0-4")	2SB-25 (20-24")	2SB-25 (36-40")	2SB-26 (0-4")	2SB-26 (20-24")	2SB-26 (36-40")	2SB-27 (0-4")	2SB-27 (20-24")	2SB-27 (36-40")	2 SB-28(0-4")
PCB 1016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1221	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1232	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1242	0.340	0.540	ND	ND	ND	0.028	0.810	ND	ND	0.005
PCB 1248	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1254	0.850	0.440	ND	ND	ND	0.024	<b>1.100</b>	ND	ND	0.017
PCB 1260	ND	0.490	ND	ND	ND	0.015	0.400	ND	ND	0.010
PCB 1268	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB, Total	<b>1.190</b>	<b>1.470</b>	ND	ND	ND	0.067	<b>2.310</b>	ND	ND	0.032
PCB Compound (USEPA Method 8082)	Sample Identification									
	2 SB-28(20-24")	2 SB-28(36-40")	2 SB-29(0-4")	2 SB-29(20-24")	2 SB-29(36-40")	2 SB-30(0-4")	2 SB-30(20-24")	2 SB-30(36-40")	2 SB-34(0-2')**	2 SB-34(3-5')
PCB 1016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1221	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1232	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1242	0.007	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1248	ND	ND	ND	ND	ND	<b>2.400</b>	ND	ND	0.290	ND
PCB 1254	0.046	ND	0.010	0.009	ND	<b>3.400</b>	0.005	ND	0.695	ND
PCB 1260	0.018	ND	0.007	ND	ND	<b>1.200</b>	ND	ND	0.210	ND
PCB 1268	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PCB, Total	0.071	ND	0.017	0.009	ND	<b>7.000</b>	0.005	ND	<b>1.195</b>	ND

Notes:

Guidance level = 1.0 ppm, based on BCP Track "2" Commercial Restricted Use SCOs, 6 NYCRR Part 375, Table 375-6.8(b).

\*\* = Sample with duplicate analysis

ND = Not Detected    NA = Not Analyzed

**Table 12: PCBs in Test Pit Soil Samples (TP-1 through TP-9)**

Results provided in mg/kg (parts per million). Results shown in **bold** exceed guidance levels.

PCB Compound (USEPA Method 8082)	Sample Identification										
	TP-1 (1.3')	TP-2 (2.5')	TP-3 (1')	TP-4 (1')	TP-5 (2')	TP-6 (4')**	TP-6 (8.5')	TP-7 (5.9')	TP-8 (3')	TP-9 (1.5')	TP-9 (4.7')
PCB 1016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1221	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1232	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1242	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1248	ND	ND	ND	0.032	0.016	ND	ND	ND	ND	0.026	ND
PCB 1254	ND	ND	ND	0.084	0.017	ND	ND	ND	ND	0.032	ND
PCB 1260	ND	0.049	ND	0.035	0.013	ND	ND	ND	ND	0.019	ND
PCB 1268	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB, Total	ND	0.049	ND	0.151	0.046	ND	ND	ND	ND	0.077	ND

Notes:

Guidance level = 1.0 ppm, based on BCP Track "2" Commercial Restricted Use SCOs, 6 NYCRR Part 375, Table 375-6.8(b).

\*\* = Sample with duplicate analysis

ND = Not Detected

**Table 13: SVOCs in Surface Soil Samples (SS-1 through SS-12)**Results provided in mg/kg (parts per million). Results shown in **bold** exceed guidance levels.

Compound (USEPA Method 8270C)	Guidance Level	Sample Identification											
		SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10**	SS-11	SS-12
1,2,4-Trichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.17
2,2'-oxybis[1-chloropropane]	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	0.4*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	0.2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	1*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	0.8*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	36.4*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	0.430*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	0.3*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	0.500*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	0.24*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	0.220*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	0.1*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	500	ND	ND	1.110	ND	ND	0.210	0.180	0.083	0.120	ND	ND	0.390
Acenaphthylene	500	0.069	ND	0.290	0.110	0.180	0.220	0.120	0.300	1.200	0.345	0.074	0.830
Anthracene	500	0.099	ND	2.400	0.130	0.210	0.470	0.380	0.410	1.200	0.270	0.120	1.700
Benidine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	5.6	0.360	ND	5.200	0.350	0.590	1.400	0.870	1.100	1.700	0.660	0.380	4.200
Benzo[a]pyrene	1	0.380	ND	4.100	0.230	0.540	1.300	0.780	1.110	2.700	0.530	0.250	3.300
Benzo[b]fluoranthene	5.6	0.350	ND	3.800	0.530	0.500	1.400	0.730	0.960	2.000	0.945	0.440	3.900
Benzo[g,h,i]perylene	500	0.410	0.082	3.400	0.290	0.510	1.200	0.620	0.870	1.600	0.355	0.200	1.900
Benzo[k]fluoranthene	56	0.310	ND	3.700	0.270	0.430	1.000	0.580	0.810	1.600	0.860	0.240	3.100
Benzyl alcohol	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	50*	0.150	0.150	1.500	0.170	0.240	0.870	0.300	0.190	0.088	0.160	0.560	7.900
Butyl benzyl phthalate	50*	ND	ND	ND	ND	0.230	0.220	0.290	ND	ND	ND	0.061	2.600
Carbazole	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	56	0.400	ND	5.400	1.000	0.680	1.900	0.980	1.200	1.900	1.190	0.870	6.300
Dibenz(a,h)anthracene	0.56	0.095	ND	1.100	0.130	0.130	0.370	0.190	0.250	0.400	0.135	0.091	0.650
Dibenzofuran	6.2*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	7.1*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	2*	ND	ND	ND	ND	ND	ND	ND	0.350	ND	ND	ND	ND
Di-n-butyl phthalate	8.1*	ND	ND	ND	0.110	ND	0.190	ND	ND	ND	ND	ND	1.500
Di-n-octyl phthalate	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	500	0.650	0.120	9.800	0.660	1.300	2.900	1.800	2.100	2.600	1.075	0.580	7.300
Fluorene	500	ND	ND	1.100	ND	ND	0.250	0.160	0.098	0.210	0.077	0.085	0.940
Hexachlorobenzene	0.41*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	5.6	0.390	ND	4.300	0.300	0.550	1.400	0.730	1.000	2.000	0.455	0.200	2.400
Isophorone	4.4*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	500	ND	ND	0.970	0.310	ND	6.700	0.180	0.100	0.270	0.655	0.330	3.700
Nitrobenzene	0.2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	6.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	500	0.300	ND	9.100	1.400	0.850	2.600	1.700	1.300	1.400	1.140	0.970	8.000
Phenol	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	500	0.600	0.110	8.100	0.550	1.100	2.400	1.500	1.800	2.500	0.890	0.460	6.000
Total TICs	NE	24.300	67.000	30.530	21.530	41.160	48.450	34.060	35.900	41.780	21.935	44.120	111.900
Total Unknown Compounds	NE	2.920	0.840	12.930	15.260	19.800	37.800	14.280	10.700	5.750	13.740	4.050	75.400
Total SVOCs	500*	31.783	68.302	108.830	43.330	69.000	107.220	60.430	60.631	71.018	45.417	54.081	254.080
Total PAHs	TBD	4.413	0.312	63.870	6.260	7.570	19.690	11.500	13.491	23.400	8.922	5.290	54.610
Total Carcinogenic PAHs	TBD	2.285	ND	27.600	2.810	3.420	8.770	4.860	6.430	12.300	4.775	2.471	23.850

Notes:

Guidance levels based on BCP Track "2" Commercial Restricted Use SCOs, 6 NYCRR Part 375, Table 375-6.8(b), except as noted.

\* = Guidance level based on NYSDEC TAGM 4046.

\*\* = Sample with duplicate analysis

ND = Not Detected, NE = Not Established, TBD = To Be Determined, TICs = Tentatively Identified Compounds, NA = Not Analyzed

Table 14: SVOCs in Soil Boring Samples (SB-1 through SB-11)

Results provided in mg/kg (parts per million). Results shown in **bold** exceed guidance levels.

Compound (USEPA Method 8270C)	Guidance Level	Sample Identification																				
		SB-1 (4.2-5')	SB-1 (7.8-8.2')	SB-2 (9-10')	SB-3 (3-4.5')	SB-4 (2.4-3.2')	SB-4 (3.2-4')	SB-5 (3.2-3.8')	SB-5 (8.4-10')	SB-6 (5-10')	SB-6 (15-20')**	SB-7 (3-4.5')	SB-7 (8.6-10')	SB-8 (2.9-3.6')	SB-8 (10-15')	SB-9 (4.4-5')	SB-9 (18.9-19.5')	SB-10 (3.4-4.5')	SB-10 (5-10')	SB-11 (3.3-4')	SB-11 (14-15')	
1,2,4-Trichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,2-Diphenylhydrazine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,3-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
1,4-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2,2'-oxybis[1-chloropropane]	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2,4,6-Trichlorophenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2,4-Dichlorophenol	0.4*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2,4-Dimethylphenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2,4-Dinitrophenol	0.2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2,4-Dinitrotoluene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2,6-Dinitrotoluene	1*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-Chloronaphthalene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-Chlorophenol	0.8*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
2-Methylnaphthalene	36.4*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Nitroaniline	0.430*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
2-Nitrophenol	0.3*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
3,3'-Dichlorobenzidine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
3-Nitroaniline	0.500*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
4,6-Dinitro-2-methylphenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-Bromophenyl phenyl ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-Chloro-3-methylphenol	0.24*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-Chloroaniline	0.220*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
4-Chlorophenyl phenyl ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-Nitroaniline	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4-Nitrophenol	0.1*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Acenaphthene	500	0.550	180.000	ND	0.089	ND	ND	0.110	ND	0.230	ND	ND	ND	0.410	0.580	ND	ND	ND	ND	0.140	ND	
Acenaphthylene	500	0.450	79.000	0.057	0.076	0.070	ND	0.054	ND	0.094	ND	0.560	ND	1.700	0.720	ND	ND	ND	0.080	0.140	ND	
Anthracene	500	1.600	350.000	ND	0.240	0.110	ND	0.290	ND	0.610	ND	0.560	ND	2.400	1.700	1.900	ND	ND	0.220	0.310	ND	
Benzidine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Benzo[a]anthracene	5.6	4.100	420.000	0.222	0.550	0.470	0.230	0.700	ND	0.960	ND	1.200	ND	2.700	2.000	1.400	ND	0.082	0.770	0.490	ND	
Benzo[a]pyrene	1	3.200	360.000	0.190	0.410	0.470	0.210	0.590	ND	0.770	ND	1.600	ND	3.400	1.700	1.300	ND	0.077	0.690	0.420	ND	
Benzo[b]fluoranthene	5.6	2.700	280.000	0.230	0.520	0.660	0.300	0.630	ND	0.600	ND	1.100	ND	2.300	1.200	0.890	ND	ND	0.810	0.460	ND	
Benzo[g,h,i]perylene	500	3.100	300.000	0.130	0.580	0.560	ND	0.390	ND	0.660	ND	1.900	ND	2.900	1.100	0.790	ND	0.052	0.580	0.300	ND	
Benzo[k]fluoranthene	56	2.600	250.000	0.180	0.370	0.430	0.200	0.590	ND	0.640	ND	1.100	ND	2.100	1.100	0.920	ND	0.052	0.580	0.350	ND	
Benzyl alcohol	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Bis(2-chloroethoxy)methane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Bis(2-chloroethyl)ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Bis(2-ethylhexyl) phthalate	50*	1.000	ND	ND	0.480	1.600	1.800	0.170	0.100	0.180	ND	0.150	0.200	0.150	0.250	ND	0.220	0.054	0.210	0.850	0.460	
Butyl benzyl phthalate	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Carbazole	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Chrysene	56	4.300	390.000	0.310	0.860	0.860	0.430	0.800	ND	0.980	ND	1.200	ND	2.900	2.100	1.600	ND	0.094	1.200	0.750	ND	
Dibenz(a,h)anthracene	0.56	0.870	60.000	ND	0.170	0.160	0.050	0.084	ND	ND	ND	0.440	ND	0.950	0.370	ND	ND	ND	0.160	0.098	ND	
Dibenzofuran	6.2*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Diethyl phthalate	7.1*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Dimethyl phthalate	2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Di-n-butyl phthalate	8.1*	ND	ND	ND	ND	ND	ND	ND	ND	0.086	ND	ND	0.083	0.099	0.130	ND	ND	ND	ND	ND	ND	
Di-n-octyl phthalate	50*	ND	ND	ND	ND	1.200	1.100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Fluoranthene	500	7.600	1,100.000	0.520	1.000	0.880	0.410	1.600	0.100	1.900	ND	1.600	ND	4.500	3.600	3.000	ND	0.140	2.100	0.970	0.110	
Fluorene	500	0.450	200.000	ND	0.170	ND	ND	0.073	ND	0.270	ND	0.056	ND	0.800	1.200	ND	ND	ND	0.100	0.410	ND	
Hexachlorobenzene	0.41*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Hexachlorobutadiene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Hexachlorocyclopentadiene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Hexachloroethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Indeno[1,2,3-cd]pyrene	5.6	3.400	300.000	0.150	0.540	0.530	0.230	0.390	ND	0.660	ND	2.										

Notes:

Guidance levels based on BCP Track "2" Commercial Restricted Use SCOs, 6 NYCRR Part 375, Table 375-6.8(b), except as noted.

\* = Guidance level based on NYSDEC TAGM 4046.

Table 15: SVOCs in Soil Boring Samples (2SB-1 through 2SB-7)

Results provided in mg/kg (parts per million). Results shown in **bold** exceed guidance levels.

Compound (USEPA Method 8270C)	Guidance Level	Sample Identification																			
		2 SB-1(0-4")	2 SB-1(20-24")	2 SB-1(36-40")	2 SB-2(0-4")	2 SB-2(20-24")	2 SB-2(36-40")	2 SB-3(0-4")	2 SB-3(20-24")	2 SB-3(36-40")	2 SB-4(0-4")	2 SB-4(20-24")	2 SB-4(36-40")	2 SB-5(0-4")	2 SB-5(20-24")	2 SB-5(36-40")	2 SB-6(0-4")	2 SB-6(20-24")	2 SB-6(36-40")	2 SB-7(0-4")	2 SB-7(20-24")
1,2,4-Trichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2'-oxybis[1-chloropropane]	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	0.4*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	0.2*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	1*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	0.8*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	36.4*	0.570	ND	ND	1.100	0.280	0.630	ND	0.340	ND	2.100	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitroaniline	0.430*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	0.3*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	NE	ND	ND	ND	1.500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	0.500*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	0.24*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	0.220*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	0.1*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	500	ND	ND	ND	ND	0.100	2.000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.310	ND	ND
Acenaphthylene	500	0.069	ND	ND	0.120	0.120	1.300	ND	ND	0.150	ND	ND	ND	ND	ND	ND	ND	ND	0.440	ND	ND
Anthracene	500	0.100	ND	ND	0.140	0.350	2.600	ND	ND	0.220	ND	ND	ND	ND	ND	0.093	ND	ND	0.930	ND	ND
Benzdine	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	5.6	0.330	0.260	0.130	0.540	0.910	11.000	0.280	0.280	0.140	0.170	ND	ND	0.100	0.067	0.460	ND	ND	4.000	ND	ND
Benzo[a]pyrene	1	0.260	0.240	0.110	0.490	0.650	12.000	0.230	0.130	ND	0.130	ND	ND	0.100	ND	0.410	ND	ND	3.700	ND	ND
Benzo[b]fluoranthene	5.6	0.420	0.280	0.120	0.900	0.940	13.000	0.310	0.540	0.130	0.440	ND	ND	0.160	0.087	0.670	ND	ND	4.700	0.091	ND
Benzo[g,h,i]perylene	500	0.350	0.160	ND	0.760	0.640	8.800	0.230	0.270	0.580	0.300	ND	ND	0.100	ND	0.350	ND	ND	2.300	ND	ND
Benzo[k]fluoranthene	56	0.250	0.200	ND	0.490	0.610	5.100	ND	ND	ND	ND	ND	ND	ND	ND	0.260	ND	ND	1.800	ND	ND
Benzyl alcohol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	50*	0.160	ND	ND	0.830	ND	ND	0.300	ND	ND	0.500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.690	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	NE	ND	ND	ND	ND	0.130	0.870	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.810	ND	ND
Chrysene	56	0.790	0.320	0.130	0.970	1.400	13.000	0.470	1.300	ND	0.450	ND	ND	0.120	0.090	0.620	ND	ND	4.700	ND	ND
Dibenz(a,h)anthracene	0.56	0.140	ND	ND	0.230	0.210	2.300	ND	0.190	ND	0.084	ND	ND	ND	ND	0.083	ND	ND	0.570	ND	ND
Dibenzofuran	6.2*	0.140	ND	ND	0.190	0.230	1.400	ND	ND	ND	0.077	ND	ND	ND	ND	ND	ND	ND	0.310	ND	ND
Diethyl phthalate	7.1*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	8.1*	ND	ND	ND	ND	ND	ND	0.420	ND	ND	0.140	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	500	0.560	0.600	0.200	0.970	2.100	21.000	0.540	0.250	0.110	0.270	ND	ND	0.210	0.120	1.000	ND	ND	9.900	0.150	ND
Fluorene	500	0.086	ND	ND	0.078	0.120	1.300	ND	0.100	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.350	ND	ND
Hexachlorobenzene	0.41*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	5.6	0.320	0.170	0.085	0.750	0.580	9.500	ND	0.120	0.530	0.290	ND	ND	0.093	ND	0.350	ND	ND	2.700	ND	ND
Isophorone	4.4*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	500	0.270	ND	ND	0.550	0.260	1.400	ND	0.390	ND	1.200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	0.2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	500	1.300	0.410	0.083	1.200	2.400	13.000	0.540	1.600	ND	0.570	ND	ND	0.110	0.081	0.690	ND	ND	6.700	0.130	ND
Phenol	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	500	0.490	0.490	0.160	0.800	1.700	19.000	0.450	0.210	ND	0.250	ND	ND	0.200	0.150	1.200	ND	ND	7.700	0.120	ND
Total TICs	NE	64.530	47.560	68.770	66.800	57.160	305.810	151.740	67.460	2.770	47.820	64.700	48.400	1.740	ND	1.400	7.350	ND	9.910	3.410	0.310
Total Unknown Compounds	NE	16.830	6.630	6.720	18.890	11.320	24.260	32.460	7.180	55.980	28.870	2.310	2.090	20.360	11.570	10.940	17.830	18.000	17.300	17.510	20.180
Total SVOCs	500*	87.965	57.320	76.508	98.298	82.210	469.270	187.970	80.360	60.610	84.351	67.010	50.490	23.293	12.165	18.526	25.180	18.000	79.130	21.411	57.320
Total PAHs	TBD	6.305	3.130	1.018	10.088	13.370	136.930	3.050	5.720	1.860	6.254	ND	ND	1.193	0.595	6.186	ND	ND	50.800	0.491	ND
Total Carcinogenic PAHs	TBD	2.510	1.470	0.575	4.370	5.300	65.900	1.290	2.560	0.800	1.564	ND	ND	0.573	0.244	2.853	ND	ND	22.170	0.091	ND

Notes:

Guidance levels based on BCP Track "2" Commercial Restricted Use SCOs, 6 NYCRR Part 375, Table 375-6.8(b), except as noted.

\* = Guidance level based on NYSEDEC TAGM 4046.

ND = Not Detected NE = Not Established TBD = To Be Determined TICs = Tentatively Identified Compounds NA = Not Analyzed

Table 16: SVOCs in Soil Boring Samples (2SB-7 through 2SB-19)

Results provided in mg/kg (parts per million). Results shown in**bold** exceed guidance levels.

Compound (USEPA Method 8270C)	Guidance Level	2 SB-7(36-40")	2 SB-8(0-4")	2 SB-8(20-24")	2 SB-8(36-40")	2 SB-10(5-6")	2 SB-10(12-13")	2 SB-11A(6-7")	2 SB-11A(9-10")**	2 SB-12(6-7")	2 SB-13(6-7")	2 SB-13(17-19")	2 SB-14(9")**	2 SB-15(36-40")	2 SB-15(18")	2 SB-16(9-15")**	2 SB-17(36-40")	2 SB-17(5-10")	2 SB-18(9-10")	2 SB-19(0-4")	2 SB-19(20-24")	2 SB-19(36-40")
1,2,4-Trichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
1,3-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2'-oxybis[1-chloropropane]	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
2,4-Dichlorophenol	0.4*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
2,4-Dimethylphenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
2,4-Dinitrophenol	0.2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
2,4-Dinitrotoluene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	1*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	0.8*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
2-Methylnaphthalene	36.4*	0.079	0.590	0.110	ND	64.000	1.600	23.000	ND	1.400	1.800	ND	2.700	73.000	0.170	2.700	2.500	0.820	0.270	ND	ND	ND
2-Nitroaniline	0.430*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	0.3*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
3,3'-Dichlorobenzidine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	0.500*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4-Bromophenyl phenyl ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	0.24*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
4-Chloroaniline	0.220*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	0.1*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
Acenaphthene	500	0.086	ND	ND	ND	9.800	0.260	5.700	ND	0.510	4.500	ND	0.460	12.000	ND	1.145	0.120	1.400	0.790	ND	ND	ND
Acenaphthylene	500	0.210	ND	ND	ND	3.900	ND	ND	ND	0.480	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	500	0.260	ND	ND	ND	7.900	0.290	3.900	ND	1.600	2.300	ND	0.098	5.000	0.280	1.575	1.400	2.900	3.800	ND	ND	ND
Benzdine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
Benzo[a]anthracene	5.6	1.200	0.370	0.270	0.220	5.100	ND	0.350	ND	2.100	0.340	ND	ND	ND	0.740	1.099	0.480	4.700	8.100	0.085	ND	ND
Benzo[a]pyrene	1	1.100	0.300	0.240	0.270	3.800	ND	ND	ND	1.800	ND	ND	ND	ND	0.580	1.200	0.360	4.400	6.200	ND	ND	ND
Benzo[b]fluoranthene	5.6	1.600	0.830	0.440	0.390	4.400	0.082	0.340	ND	1.800	0.300	ND	ND	ND	0.780	0.874	0.470	5.500	7.300	0.092	ND	ND
Benzo[g,h,i]perylene	500	1.200	0.510	0.200	0.240	2.200	ND	ND	ND	1.100	ND	ND	ND	ND	0.640	0.895	0.330	2.000	6.200	ND	ND	ND
Benzo[k]fluoranthene	56	0.590	0.190	0.140	0.140	1.400	ND	ND	ND	0.760	ND	ND	ND	ND	0.250	0.470	0.160	1.900	2.900	ND	ND	ND
Benzyl alcohol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	50*	ND	ND	ND	ND	ND	ND	ND	ND	0.160	ND	ND	ND	ND	ND	ND	0.110	ND	ND	0.170	2.000	2.300
Butyl benzyl phthalate	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	NE	0.250	ND	ND	ND	1.200	ND	ND	ND	0.560	ND	ND	ND	ND	0.360	ND	ND	1.000	0.560	ND	ND	ND
Chrysene	56	1.500	1.500	0.380	0.310	5.000	ND	0.930	ND	2.100	0.440	ND	ND	ND	0.740	1.160	0.580	4.700	7.800	0.110	ND	ND
Dibenz[a,h]anthracene	0.56	0.250	0.280	0.053	ND	ND	ND	ND	ND	0.360	ND	ND	ND	ND	0.140	0.260	0.074	0.520	1.600	ND	ND	ND
Dibenzofuran	6.2*	0.097	0.140	ND	ND	9.100	0.240	ND	ND	0.490	6.700	ND	0.470	12.000	ND	0.750	ND	0.830	0.380	ND	ND	ND
Diethyl phthalate	7.1*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	8.1*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	500	2.900	0.410	0.480	0.440	11.000	0.130	1.200	ND	4.000	1.100	ND	ND	ND	1.200	2.425	0.260	11.000	13.000	0.160	0.092	ND
Fluorene	500	0.110	ND	ND	ND	19.000	0.540	10.000	ND	1.100	13.000	ND	ND	20.000	0.130	2.350	ND	1.700	1.100	ND	ND	ND
Hexachlorobenzene	0.41*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	5.6	1.100	0.420	0.220	0.230	2.400	ND	ND	ND	1.300	ND	ND	ND	ND	0.550	0.945	0.310	2.300	6.100	0.075	ND	ND
Isophorone	4.4*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	500	0.110	0.310	0.077	ND	16.000	0.470	8.400	ND	0.930	ND	ND	1.700	17.000	0.250	1.200	ND	0.820	0.160	ND	ND	ND
Nitrobenzene	0.2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
N-Nitrosodi-n-propylamine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.310	ND	ND	ND
Pentachlorophenol	6.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
Phenanthrene	500	2.100	1.400	0.300	0.200	41.000	0.490	21.000	0.088	5.200	20.000	ND	0.160	40.000	1.100	3.175	2.500	10.000	12.000	0.120	0.070	ND
Phenol	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	NA
Pyrene	500	2.700	0.450	0.430	0.430	11.000	0.270	3.000	ND	3.700	1.500	ND	0.081	2.400	1.500	2.903	1.700	7.200	15.000	0.130	0.078	ND
Total TICs	NE	5.430	9.960	1.060	0.320	516.000	6.800	122.500	20.910	10.290	213.000	9.910	18.800	1.575.000	14.330	32.250	7.100	10.900	38.530	61.660	41.000	61.200
Total Unknown Compounds	NE	13.110	22.650	22.280	51.560	450.000	52.200	44.950	38.865	30.670	136.000	5.770	72.015	977.000	14.170	51.060	47.600	44.500	11.320	9.910	1.490	3.360
Total SVOCs	500*	35.982	40.310	26.680	54.750	1184.200	63.372	245.270	59.863	72.410	400.980	15.680	96.484	2733.400	37.550	108.796	66.054	119.090	143.420	72.512	44.730	66.860
Total PAHs	TBD	17.095	7.560	3.340	2.870	207.900	4.132	77.820	0.088	30.240	45.280	ND	5.201	169.400	9.050	25.570	11.244	61.860	92.320	0.772	0.240	ND
Total Carcinogenic PAHs	TBD	7.340	3.890	1.743	1.560	22.100	0.082	1.620	ND	10.220	1.080	ND	ND	ND	3.78							



Table 17: SVOCs in Soil Boring Samples (2SB-20 through 2SB-25)

Results provided in mg/kg (parts per million). Results shown in**bold** exceed guidance levels.

Compound	Guidance																				
(USEPA Method 8270C)	Level	2 SB-20(0-4")	2 SB-20(20-24")	2 SB-20(36-40")	2 SB-21(0-4")	2 SB-21(10-14")	2 SB-21(20-24")	2 SB-22(0-4")	2 SB-22(20-24")	2 SB-22(36-40")	2 SB-23(0-4")	2 SB-23(20-24")	2 SB-23(36-40")	2 SB-23(7-7.3")	2 SB-24(0-4")	2 SB-24(20-24")	2 SB-24(36-40")	2 SB-24(7-7.4")	2 SB-25(0-4")	2 SB-25(20-24")	2 SB-25(36-40")
1,2,4-Trichlorobenzene	NE	ND	ND	ND	ND	ND	0.050	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.120	ND
2,2'-oxybis[1-chloropropane]	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	0.4*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dimethylphenol	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrophenol	0.2*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dinitrotoluene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	1*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	0.8*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	36.4*	0.540	0.720	0.960	0.610	1.400	0.320	0.400	0.082	ND	1.200	ND	ND	0.130	1.800	ND	ND	ND	0.560	3.300	ND
2-Nitroaniline	0.430*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	0.3*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
3,3'-Dichlorobenzidine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	0.500*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	0.24*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	0.220*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	0.1*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	500	0.170	1.500	1.300	ND	0.170	0.140	ND	ND	ND	ND	ND	ND	0.150	ND	ND	0.074	ND	ND	ND	ND
Acenaphthylene	500	0.190	ND	0.300	0.200	0.120	0.082	ND	ND	ND	ND	ND	ND	ND	0.180	ND	ND	ND	0.430	ND	ND
Anthracene	500	0.540	2.600	1.800	0.470	0.530	0.430	0.065	ND	ND	0.130	ND	ND	0.190	0.280	ND	0.220	ND	0.770	0.140	ND
Benzidine	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzo[a]anthracene	5.6	1.300	5.300	4.700	1.700	1.700	1.500	0.230	ND	0.087	0.390	0.078	ND	0.510	0.960	ND	0.720	0.130	1.800	0.300	ND
Benzo[a]pyrene	1	1.200	4.100	4.100	1.400	1.400	1.300	0.150	ND	0.081	0.330	ND	ND	0.450	0.740	ND	0.630	0.099	2.000	0.150	ND
Benzo[b]fluoranthene	5.6	1.400	5.500	5.300	2.400	2.500	1.700	0.340	0.140	0.170	0.600	0.130	ND	0.650	1.200	0.052	0.900	0.160	2.600	0.440	ND
Benzo[g,h,i]perylene	500	1.300	3.400	4.000	0.710	0.740	1.700	0.240	ND	ND	0.210	ND	ND	0.310	0.590	ND	0.630	ND	1.300	0.150	ND
Benzo[k]fluoranthene	56	0.780	2.000	2.100	0.880	0.930	0.640	0.099	ND	ND	0.180	ND	ND	0.260	0.410	ND	0.310	ND	0.900	ND	ND
Benzyl alcohol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	50*	0.730	ND	ND	0.770	1.500	0.270	0.410	0.240	0.340	2.300	0.320	0.110	0.170	1.700	ND	0.160	1.100	0.540	2.000	0.180
Butyl benzyl phthalate	50*	0.140	ND	ND	0.180	0.420	ND	0.068	ND	ND	0.590	ND	ND	ND	1.200	ND	ND	ND	0.340	0.850	ND
Carbazole	NE	0.290	1.700	2.300	0.230	0.290	0.220	ND	ND	ND	ND	ND	ND	0.130	ND	ND	ND	ND	0.180	ND	ND
Chrysene	56	1.700	5.800	5.900	2.200	2.300	1.600	0.590	0.240	0.140	0.730	0.210	ND	0.610	1.300	ND	0.820	0.170	2.200	0.950	ND
Dibenz[a,h]anthracene	0.56	0.430	0.870	0.980	0.260	0.230	0.410	0.091	ND	ND	0.074	ND	ND	ND	0.230	ND	0.120	ND	0.380	0.073	ND
Dibenzofuran	6.2*	0.190	1.300	1.800	0.140	0.270	0.160	0.081	ND	ND	ND	ND	ND	0.210	0.130	ND	0.066	ND	0.110	ND	ND
Diethyl phthalate	7.1*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.160	ND	ND	ND	0.160	ND	ND	ND
Dimethyl phthalate	2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	8.1*	0.120	ND	ND	0.130	0.200	0.087	0.094	0.086	ND	0.250	0.230	ND	ND	0.190	ND	ND	0.200	0.094	0.180	ND
Di-n-octyl phthalate	50*	ND	ND	ND	ND	1.600	ND	ND	ND	ND	0.200	ND	ND	ND	ND	ND	ND	ND	ND	0.190	ND
Fluoranthene	500	2.900	13.000	14.000	2.600	3.400	2.100	0.330	ND	0.170	0.630	0.120	ND	1.200	1.200	0.100	1.500	0.330	2.600	0.380	ND
Fluorene	500	0.180	1.500	1.400	ND	ND	0.160	ND	ND	ND	ND	ND	ND	0.150	ND	ND	0.063	ND	0.150	ND	ND
Hexachlorobenzene	0.41*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND				



Table 18: SVOCs in Soil Boring Samples (2SB-25 through 2SB-35)

Results provided in mg/kg (parts per million). R

Compound (USEPA Method 8270C)	Guidance Level	Sample Identification																		
		2 SB-25(6-7")	2 SB-26(0-4")	2 SB-26(20-24")	2 SB-26(36-40")	2 SB-26(8.2-8.6')	2 SB-27(0-4")	2 SB-27(20-24")	2 SB-27(36-40")	2 SB-28(0-4")	2 SB-28(20-24")	2 SB-28(36-40")	2 SB-29(0-4")	2 SB-29(20-24")	2 SB-29(36-40")	2 SB-30(0-4")	2 SB-30(20-24")	2 SB-30(36-40")	2SB-35(5-10')	2SB-35(20')
1,2,4-Trichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
1,3-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2'-oxybis[1-chloropropane]	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
2,4-Dichlorophenol	0.4*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
2,4-Dimethylphenol	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
2,4-Dinitrophenol	0.2*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
2,4-Dinitrotoluene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	1*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	0.8*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
2-Methylnaphthalene	36.4*	ND	0.140	ND	0.970	ND	1.000	0.230	ND	ND	0.240	ND	ND	ND	ND	1.200	ND	ND	0.690	ND
2-Nitroaniline	0.430*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	0.3*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
3,3'-Dichlorobenzidine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	0.500*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
4-Bromophenyl phenyl ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	0.24*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
4-Chloroaniline	0.220*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	0.1*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Acenaphthene	500	ND	0.480	ND	0.660	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.100	ND	ND	ND	ND
Acenaphthylene	500	ND	0.069	ND	0.830	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.250	ND	ND	ND	ND
Anthracene	500	ND	0.700	ND	2.100	ND	0.100	0.065	ND	ND	ND	ND	0.190	ND	ND	0.490	ND	ND	0.190	ND
Benzdine	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Benzo[a]anthracene	5.6	ND	1.700	0.170	6.100	ND	0.360	0.230	ND	0.210	0.093	ND	0.490	ND	0.180	1.400	0.081	ND	ND	0.150
Benzo[a]pyrene	1	ND	1.400	0.170	4.700	ND	0.360	0.150	ND	0.210	ND	ND	0.440	ND	0.160	1.300	ND	ND	ND	0.120
Benzo[b]fluoranthene	5.6	ND	1.600	0.210	5.800	ND	0.610	0.380	ND	0.280	0.190	ND	0.550	0.065	0.320	1.600	0.130	ND	0.081	0.150
Benzo[g,h,i]perylene	500	ND	1.500	0.220	4.900	ND	0.450	0.170	ND	0.240	0.098	ND	0.450	ND	0.190	0.870	ND	ND	ND	ND
Benzo[k]fluoranthene	56	ND	0.590	ND	2.200	ND	0.190	0.110	ND	0.120	ND	ND	0.190	ND	ND	0.600	ND	ND	ND	ND
Benzyl alcohol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	50*	0.500	0.310	0.170	ND	0.470	0.940	0.430	0.350	0.250	0.170	0.150	0.330	0.210	0.270	1.200	0.100	ND	ND	ND
Butyl benzyl phthalate	50*	ND	ND	ND	ND	ND	0.300	ND	ND	ND	ND	ND	ND	ND	ND	1.500	ND	ND	ND	ND
Carbazole	NE	ND	0.310	ND	1.000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.180	ND	ND	ND	ND
Chrysene	56	ND	1.800	0.180	6.600	ND	0.610	0.630	ND	0.230	0.600	ND	0.490	ND	0.290	1.800	0.290	ND	0.110	0.150
Dibenz(a,h)anthracene	0.56	ND	0.310	0.056	1.400	ND	0.110	0.071	ND	ND	0.055	ND	0.098	ND	ND	0.270	ND	ND	ND	ND
Dibenzofuran	6.2*	ND	0.270	ND	0.760	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.160	ND	ND	ND	ND
Diethyl phthalate	7.1*	0.160	ND	ND	ND	0.140	0.150	0.120	0.100	0.120	0.110	0.098	0.088	0.092	0.089	ND	ND	ND	ND	ND
Dimethyl phthalate	2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	8.1*	0.200	0.230	0.084	ND	0.250	0.190	0.170	0.140	ND	ND	ND	0.170	0.088	0.072	0.110	ND	ND	ND	ND
Di-n-octyl phthalate	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	500	0.094	3.300	0.280	10.000	ND	0.500	0.340	ND	0.380	0.140	ND	0.930	0.078	0.390	2.200	0.099	ND	0.140	0.270
Fluorene	500	ND	0.370	ND	0.720	ND	0.062	0.071	ND	ND	0.160	ND	ND	ND	ND	0.210	ND	ND	0.200	ND
Hexachlorobenzene	0.41*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	5.6	ND	1.500	0.190	5.000	ND	0.420	0.150	ND	0.230	ND	ND	0.480	ND	0.210	0.960	ND	ND	ND	0.110
Isophorone	4.4*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	500	ND	0.270	ND	2.200	ND	0.520	0.140	ND	ND	ND	ND	ND	ND	ND	0.710	ND	ND	0.260	ND
Nitrobenzene	0.2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
N-Nitrosodi-n-propylamine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	6.7	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Phenanthrene	500	0.080	4.000	0.160	8.200	0.085	0.620	0.820	0.086	0.200	0.750	ND	0.600	ND	0.320	1.900	0.170	ND	0.190	0.200
Phenol	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND	ND
Pyrene	500	0.110	3.500	0.290	9.800	0.081	0.620	0.340	ND	0.390	0.170	ND	0.890	0.075	0.340	1.700	0.110	ND	0.250	0.220
Total TICs	NE	0.840	13.470	4.860	18.730	3.180	6.020	4.830	1.270	2.210	12.400	0.600	4.070	ND	0.510	19.830	2.690	0.250	7.100	7.190
Total Unknown Compounds	NE	135.200	21.360	22.640	22.110	116.760	147.790	103.720	100.630	97.480	94.620	101.050	129.040	121.460	152.540	249.740	183.340	211.190	42.600	7.740
Total SVOCs	500*	137.184	59.179	29.680	114.780	120.966	161.922	113.167	102.576	102.550	109.796	101.898	139.496	122.068	155.881	290.280	187.010	211.440	51.811	16.300
Total PAHs	TBD	0.284	23.229	1.926	72.180	0.166	6.532	3.897	0.086	2.490	2.496	ND	5.798	0.218	2.400	17.560	0.880	ND	1.370	2.111
Total Carcinogenic PAHs	TBD	ND	8.900	0.976	31.800	ND	2.660	1.721	ND	1.280	0.938	ND	2.738	0.065	1.160	7.930	0.501	ND	0.680	0.191

Notes:

Guidance levels based on BCP Track "2" Commercial Restricted Use SCOs, 6 NYCRR Part 375, Table 375-6.8(b), except as noted.

\* = Guidance level based on NYSDEC TAGM 4046.

ND = Not Detected NE = Not Established TBD = To Be Determined TICs = Tentatively Identified Compounds NA = Not Analyzed

Table 19: SVOCs in Test Pit Soil Samples (TP-1 through TP-9)

Results provided in mg/kg (parts per million). Results shown in **bold** exceed guidance levels.

Compound (USEPA Method 8270C)	Guidance Level	Sample Identification										
		TP-1 (1.3')	TP-2 (2.5')	TP-3 (1')	TP-4 (1')	TP-5 (2')	TP-6 (4')**	TP-6 (8.5')	TP-7 (5.9')	TP-8 (3')	TP-9 (1.5')	TP-9 (4.7')
1,2,4-Trichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2'-oxybis[1-chloropropane]	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	0.4*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	0.2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	1*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	0.8*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Methylnaphthalene	36.4*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	0.430*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	0.3*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	0.500*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	0.24*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloroaniline	0.220*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	0.1*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	500	ND	2.000	0.810	0.210	ND	1.094	ND	0.300	1.000	ND	5.600
Acenaphthylene	500	ND	2.900	0.770	0.290	ND	0.780	ND	2.200	5.100	ND	ND
Anthracene	500	ND	6.100	1.900	0.850	ND	0.650	0.460	3.100	7.200	0.370	1.600
Benzidine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo[a]anthracene	5.6	0.094	16.000	7.000	1.700	0.190	0.860	0.150	3.800	9.800	0.130	ND
Benzo[a]pyrene	1	0.059	15.000	6.300	1.500	0.150	1.200	0.150	4.700	10.000	0.088	ND
Benzo[b]fluoranthene	5.6	0.190	14.000	6.000	1.300	0.370	1.000	0.130	3.800	8.000	0.200	ND
Benzo[g,h,i]perylene	500	0.050	10.000	4.000	0.860	0.140	0.870	0.099	2.600	5.400	0.190	ND
Benzo[k]fluoranthene	56	ND	9.600	4.400	1.300	ND	0.500	0.070	2.600	5.600	0.075	ND
Benzyl alcohol	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	50*	0.550	ND	0.260	0.260	0.340	0.220	0.120	0.097	0.400	ND	ND
Butyl benzyl phthalate	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	56	0.250	17.000	9.000	1.800	0.400	0.523	0.180	4.300	10.000	0.450	ND
Dibenz[a,h]anthracene	0.56	ND	2.800	1.200	0.280	0.049	0.250	ND	0.950	1.500	0.071	ND
Dibenzofuran	6.2*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	7.1*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	8.1*	ND	ND	ND	ND	ND	ND	ND	0.058	ND	ND	ND
Di-n-octyl phthalate	50*	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.160	ND
Fluoranthene	500	0.130	39.000	17.000	3.300	0.260	1.350	0.370	5.800	17.000	0.250	ND
Fluorene	500	ND	2.000	0.640	0.220	ND	0.200	1.700	0.400	2.400	ND	9.100
Hexachlorobenzene	0.41*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	5.6	ND	12.000	5.000	1.200	0.140	1.000	0.110	3.300	6.700	0.160	ND
Isophorone	4.4*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	500	0.110	1.170	0.720	0.310	ND	0.190	ND	0.450	0.730	2.500	23.000
Nitrobenzene	0.2*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	6.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	500	0.260	30.000	12.000	2.900	0.430	2.500	2.800	2.600	7.700	1.300	19.000
Phenol	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	500	0.100	32.000	13.000	2.900	0.230	0.995	0.470	4.700	14.000	0.460	2.900
Total TICs	NE	10.090	25.100	11.480	7.620	4.450	7.920	38.400	20.300	29.000	54.400	1,199.000
Total Unknown Compounds	NE	0.550	25.500	9.990	2.520	0.880	2.970	55.900	13.700	29.100	48.500	1,397.000
Total SVOCs	500*	12.433	262.700	111.470	31.320	8.029	23.418	101.109	79.755	169.630	109.304	2,657.200
Total PAHs	TBD	1.243	212.100	89.740	20.920	2.359	12.198	6.689	45.600	111.130	6.244	61.200
Total Carcinogenic PAHs	TBD	0.593	86.400	38.900	9.080	1.299	5.800	0.790	23.450	51.600	1.174	ND

Notes:

Guidance levels based on BCP Track "2" Commercial Restricted Use SCOs, 6 NYCRR Part 375, Table 375-6.8(b), except as noted.

\* = Guidance level based on NYSDEC TAGM 4046.

\*\* = Sample with duplicate analysis

**Table 20: Target Analyte List (TAL) Metals in Surface Soil Samples (SS-1 through SS-12)**Results provided in mg/kg (parts per million). Results shown in **bold** exceed guidance levels.

Metal	Guidance Level	Background Concentration	Sample Identification											
			SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10***	SS-11	SS-12
Aluminum	SB*	33,000	14,700	3,610	10,400	8,540	13,400	3,930	13,500	2,600	11,300	6,490	6,660	5,730
Antimony	SB*	NP	ND	ND	6.9	ND	ND	ND	ND	ND	ND	2.3	ND	ND
Arsenic	16	7.4 (HV)	4.8	2.2	<b>22.3</b>	7.6	9.0	5.9	6.7	3.3	2.7	<b>62.7</b>	12.0	<b>18</b>
Barium	400	81.1 (HV)	80.8	11.1	218	252	103	166	167	27.6	50.4	203	232	214
Beryllium	590	0.75 (HV)	0.82	ND	0.61	0.83	ND	ND	0.71	ND	ND	ND	0.84	0.81
Cadmium	9.3	0.22 (HV)	2.1	ND	7.2	ND	3.2	5.4	4.2	ND	1.4	2.5	7.3	<b>11</b>
Calcium	SB*	130 - 35,000	4,490	<b>148,000</b>	8,730	7,910	7,430	6,220	4,390	54,300	18,400	5,810	6,460	3,890
Chromium	1,500	20.9 (HV)	18.3	3.2	23.4	6.2	19.6	13.7	19.9	5.2	12.1	9.3	17.6	33
Cobalt	30* or SB	2.5 - 60	19.4	2.5	10.1	6.8	13.0	6.1	12.6	2.4	7.1	6.6	9.2	8.4
Copper	270	23.4 (HV)	35	6.2	<b>5,640</b>	31.2	68.9	<b>390</b>	<b>326</b>	15.9	16.2	218.3	184	<b>1,100</b>
Iron	2,000* or SB	2,000 - 550,000	<b>27,900</b>	<b>4,660</b>	<b>31,900</b>	<b>5,190</b>	<b>27,300</b>	<b>13,900</b>	<b>28,900</b>	<b>6,420</b>	<b>19,700</b>	<b>17,800</b>	<b>28,700</b>	<b>46,900</b>
Lead	1,000	72.5** (HV)	73.1	3.6	<b>1,880</b>	179	172	400	478	113	36.6	204	490	867
Magnesium	SB*	100 - 5,000	<b>6,920</b>	<b>85,400</b>	3,220	448	<b>6,200</b>	2,480	<b>5,140</b>	<b>29,800</b>	<b>12,900</b>	708	1,100	1,820
Manganese	10,000	50 - 5,000	742	102	351	35.4	926	204	649	147	425	135	187	339
Mercury	2.8	0.24 (HV)	0.67	ND	0.28	0.044	0.16	0.49	0.28	0.14	0.037	0.119	0.11	0.38
Nickel	310	21.0 (HV)	27.7	5.2	31.4	11.3	33.1	25.7	37.7	7.1	16.2	13.6	29.0	45.5
Potassium	SB*	8,500 - 43,000	705	3,200	912	338	1,010	339	911	259	651	314	357	554
Selenium	1,500	1 (HV)	ND	ND	2.0	3.1	3.2	ND	ND	ND	ND	3.2	2.7	3.6
Silver	1,500	NP	ND	ND	0.49	1.3	ND	0.55	0.76	ND	ND	ND	ND	ND
Sodium	SB*	6,000 - 8,000	60.2	71.7	120	212	59.1	106	120	115	84.8	125	135	61.8
Thallium	SB*	NP	8.9	ND	8.8	ND	12.0	ND	9.2	ND	7.6	11.7	10.1	17.6
Vanadium	150* or SB	1 - 300	20	5.9	29.0	27.3	26.6	17.7	25.9	10.4	16.7	28.3	28.0	27.7
Zinc	10,000	87.1 (HV)	97.4	7.5	786	53	226	613	449	75.9	49.9	104	389	739

## Notes:

Guidance levels based on BCP Track "2" Commercial Restricted Use SCOs, 6 NYCRR Part 375, Table 375-6.8(b), except as noted.

HV = Background levels based on NYSDEC draft data for metals in Lower Hudson Valley soils (90% upper confidence limit).

\* = Guidance level based on NYSDEC TAGM 4046.

\*\* = Background lead concentrations in urban settings typically range from 200 to 500 ppm.

\*\*\* = Sample with duplicate analysis

ND = Not Detected    NP = Not Provided    SB = Site Background

**Table 21: Target Analyte List (TAL) Metals in Soil Boring Samples (SB-1 through SB-11)**Results provided in mg/kg (parts per million). Results shown in **bold** exceed guidance levels.

Metal	Guidance Level	Background Concentrations	Sample Identification									
			SB-1 (4.2-5')	SB-1 (7.8-8.2')	SB-2 (9-10')	SB-3 (3-4.5')	SB-4 (2.4-3.2')	SB-4 (3.2-4')	SB-5 (3.2-3.8')	SB-5 (8.4-10')	SB-6 (5-10')	SB-6 (15-20')***
Aluminum	SB*	33,000	4,270	1,730	15,900	8,840	3,700	6,140	10,300	17,700	14,300	13,250
Antimony	SB*	NP	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	16	7.4 (HV)	<b>84.8</b>	<b>162</b>	8.8	9.3	4.3	6.0	9.0	7.5	8.2	6
Barium	400	81.1 (HV)	<b>701</b>	148	74.3	152	157	122	84.5	106	72.9	44.4
Beryllium	590	0.75 (HV)	ND	ND	<b>0.90</b>	<b>0.73</b>	ND	<b>0.60</b>	ND	ND	0.78	ND
Cadmium	9.3	0.22 (HV)	1.6	ND	1.8	3.4	2.5	2.0	1.6	1.8	2.0	1.7
Calcium	SB*	130 - 35,000	<b>38,900</b>	2,530	2,330	4,720	3,260	2,940	7,870	7,670	7,600	2,785
Chromium	1,500	20.9 (HV)	14.1	8.3	24.3	28.5	9.9	12.4	14.4	23.2	24.9	22.1
Cobalt	30* or SB	2.5 - 60	5	2.1	13.7	14.7	6.1	6.9	9.7	14.4	13.5	13
Copper	270	23.4 (HV)	46.5	32.2	56.7	32.3	160	167	62.6	34.5	38.6	18.3
Iron	2,000* or SB	2,000 - 550,000	<b>10,100</b>	<b>7,080</b>	<b>35,800</b>	<b>15,100</b>	<b>8,400</b>	<b>13,600</b>	<b>22,400</b>	<b>29,400</b>	<b>29,500</b>	<b>28,400</b>
Lead	1,000	72.5** (HV)	<b>1,470</b>	614	110	260	155	160	391	104	59.8	12.7
Magnesium	SB*	100 - 5,000	1,400	937	<b>6,170</b>	2,650	1,040	2,250	<b>6,900</b>	<b>6,450</b>	<b>7,270</b>	<b>5,895</b>
Manganese	10,000	50 - 5,000	214	55.2	245	278	131	151	603	689	434	498
Mercury	2.8	0.24 (HV)	0.15	<b>14.8</b>	0.10	0.082	0.48	0.38	0.083	0.30	0.16	0.043
Nickel	310	21.0 (HV)	11	7.7	30.70	21.4	22.9	23.2	23.4	28.1	32.3	26.3
Potassium	SB*	8,500 - 43,000	502	233	1,120	478	282	386	833	2,350	889	1,185
Selenium	1,500	1 (HV)	ND	ND	3.3	ND	ND	ND	ND	ND	ND	ND
Silver	1,500	NP	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	SB*	6,000 - 8,000	97.3	32.5	78.1	238	117	173	115	630	136	527
Thallium	SB*	NP	ND	ND	ND	5.0	ND	ND	ND	9.5	ND	7.2
Vanadium	150* or SB	1 - 300	14.2	4.4	24.5	22.4	11.6	15.5	20.7	31.3	27.3	22.8
Zinc	10,000	87.1 (HV)	638	171	103	152	543	323	118	102	111	75.6

Metal	Guidance Level	Background Concentrations	Sample Identification									
			SB-7 (3-4.5')	SB-7 (8.6-10')	SB-8 (2.9-3.6')	SB-8 (10-15')	SB-9 (4.4-5')	SB-9 (18.9-19.5')	SB-10 (3.4-4.5')	SB-10 (5-10')	SB-11 (3.3-4')	SB-11 (14-15')
Aluminum	SB*	33,000	11,400	14,100	8,170	6,560	7,130	14,200	9,030	3,470	7,460	13,700
Antimony	SB*	NP	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	16	7.4 (HV)	5.0	6.9	6.5	11.0	6.3	8.0	3.5	<b>21.9</b>	<b>20.2</b>	6.7
Barium	400	81.1 (HV)	41.9	75.3	53.4	172	45.9	41.4	76.8	84.9	112	42.9
Beryllium	590	0.75 (HV)	0.52	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	9.3	0.22 (HV)	1.9	ND	1.4	ND	ND	1.8	1.1	ND	2.7	1.7
Calcium	SB*	130 - 35,000	<b>46,200</b>	9,830	<b>47,300</b>	10,400	1,800	2,800	4,300	3,770	<b>38,900</b>	2,370
Chromium	1,500	20.9 (HV)	13.6	9.7	10.3	6.4	5.2	24.2	19.9	8.6	22.7	22.9
Cobalt	30* or SB	2.5 - 60	8.8	3.8	6.4	4.5	3.9	13.5	8.5	6.5	9.3	12.7
Copper	270	23.4 (HV)	25.9	13	19.9	18.0	20.5	17.4	28.7	32.1	79.7	17.0
Iron	2,000* or SB	2,000 - 550,000	<b>24,000</b>	<b>8,990</b>	<b>17,900</b>	<b>12,500</b>	<b>8,210</b>	<b>31,400</b>	<b>17,900</b>	<b>12,200</b>	<b>31,800</b>	<b>29,200</b>
Lead	1,000	72.5** (HV)	59.7	14.6	59.6	44.2	89.7	12.8	51.3	43.4	142	12.1
Magnesium	SB*	100 - 5,000	<b>30,900</b>	2,170	<b>29,600</b>	3,390	893	<b>6,420</b>	4,180	949	<b>22,500</b>	<b>5,730</b>
Manganese	10,000	50 - 5,000	448	685	465	217	30.6	464	356	89.3	318	442
Mercury	2.8	0.24 (HV)	0.094	ND	0.13	ND	0.035	0.042	0.17	0.16	0.22	0.045
Nickel	310	21.0 (HV)	17.1	10	14.4	9.7	9.6	28.2	36.1	14.5	32.1	26.7
Potassium	SB*	8,500 - 43,000	983	966	799	400	721	1,860	1,690	330	1,070	1,530
Selenium	1,500	1 (HV)	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	1,500	NP	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	SB*	6,000 - 8,000	166	1,930	157	382	223	969	107	67.7	262	822
Thallium	SB*	NP	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	150* or SB	1 - 300	18.2	14.3	23.2	24.6	9.1	26.5	28.3	15.3	29.6	23.9
Zinc	10,000	87.1 (HV)	68.0	43.9	59.4	33.4	45.9	79.1	61.8	28.9	170	77.8

Notes:

Guidance levels based on BCP Track "2" Commercial Restricted Use SCOs, 6 NYCRR Part 375, Table 375-6.8(b), except as noted.

HV = Background levels based on NYSDEC draft data for metals in Lower Hudson Valley soils (90% upper confidence limit).

\* = Guidance level based on NYSDEC TAGM 4046.

\*\* = Background lead concentrations in urban settings typically range from 200 to 500 ppm.

\*\*\* = Sample with duplicate analysis

ND = Not Detected NP = Not Provided SB = Site Background

**Table 22: Arsenic, Lead, and Mercury in Soil Boring Samples (2SB-1 through 2SB-22)**Results provided in mg/kg (parts per million). Results shown in **bold** exceed guidance levels.

Metal	Guidance Level	Background Concentrations	Sample Identification											
			2SB-1 (0-4")	2SB-1 (20-24")	2SB-1 (36-40")	2SB-2 (0-4")	2SB-2 (20-24")	2SB-2 (36-40")	2SB-3 (0-4")	2SB-3 (20-24")	2SB-3 (36-40")	2SB-4 (0-4")	2SB-4 (20-24")	2SB-4 (36-40")
Arsenic	16	7.4 (HV)	8.3	7.3	10.4	13.9	9.5	14.6	8.9	14.8	<b>175</b>	7.9	2.5	11.6
Lead	1,000	72.5* (HV)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Mercury	2.8	0.24 (HV)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metal	Guidance Level	Background Concentrations	Sample Identification											
			2SB-5 (0-4")	2SB-5 (20-24")	2SB-5 (36-40")	2SB-6 (0-4")	2SB-6 (20-24")	2SB-6 (36-40")	2SB-7 (0-4")	2SB-7 (20-24")	2SB-7 (36-40")	2SB-8 (0-4")	2SB-8 (20-24")	2SB-8 (36-40")
Arsenic	16	7.4 (HV)	9.2	9.4	8.4	12.3	7.1	10.3	9.9	9	9.4	12.6	7.6	8.9
Lead	1,000	72.5* (HV)	5.8	5.9	5.2	7.7	4.4	6.4	6.2	5.6	5.9	7.9	4.8	5.6
Mercury	2.8	0.24 (HV)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metal	Guidance Level	Background Concentrations	Sample Identification											
			2SB-9 (0-4")	2SB-9 (20-24")	2SB-9 (36-40")	2SB-15 (0-4")	2SB-15 (20-24")	2SB-15 (36-40")	2SB-17 (0-4")	2SB-17 (20-24")	2SB-17 (36-40")	2SB-18 (0-4")**	2SB-18 (20-24")**	2SB-18 (36-40")**
Arsenic	16	7.4 (HV)	NA	NA	NA	8.4	5.6	9.4	6.6	6	10.3	5.3	ND	2
Lead	1,000	72.5* (HV)	7.8	5.2	5.1	5.3	174	9.2	145	116	240	185	3	ND
Mercury	2.8	0.24 (HV)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Metal	Guidance Level	Background Concentrations	Sample Identification											
			2SB-19 (0-4")	2SB-19 (20-24")	2SB-19 (36-40")	2SB-20 (0-4")	2SB-20 (20-24")	2SB-20 (36-40")	2SB-21 (0-4")	2SB-21 (10-14")	2SB-21 (20-24")	2SB-22 (0-4")	2SB-22 (20-24")	2SB-22 (36-40")
Arsenic	16	7.4 (HV)	6.4	ND	9.2	<b>113</b>	<b>23.8</b>	<b>19.6</b>	15.1	<b>16.8</b>	<b>20.1</b>	10.8	<b>23</b>	6.7
Lead	1,000	72.5* (HV)	93.8	79.4	354	<b>4,990</b>	109	226	<b>3,140</b>	<b>2,350</b>	264	700	27.1	159
Mercury	2.8	0.24 (HV)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

## Notes:

Guidance levels based on BCP Track "2" Commercial Restricted Use SCOs, 6 NYCRR Part 375, Table 375-6.8(b), except as noted.

HV = Background levels based on NYSDEC draft data for metals in Lower Hudson Valley soils (90% upper confidence limit).

\* Background lead concentrations in urban settings typically range from 200 to 500 ppm.

\*\* Sample with duplicate analysis

ND = Not Detected    NA = Not Analyzed

**Table 23: Arsenic, Lead, and Mercury in Soil Boring Samples (2SB-23 through 2SB-34)**Results provided in mg/kg (parts per million). Results shown in **bold** exceed guidance levels.

Metal	Guidance Level	Background Concentrations	Sample Identification						
			2SB-23 (0-4")	2SB-23 (20-24")	2SB-23 (36-40")	2SB-23 (7-7.3')	2SB-24 (0-4")	2SB-24 (20-24")	2SB-24 (36-40")
Arsenic	16	7.4 (HV)	18.2	21.8	ND	299	16.9	17.6	8.6
Lead	1,000	72.5* (HV)	764	38.7	5.2	92.0	1,180	30.5	140
Mercury	2.8	0.24 (HV)	0.190	0.150	0.034	0.460	0.380	0.039	1.200
Metal	Guidance Level	Background Concentrations	Sample Identification						
			2SB-24 (7-7.4')	2SB-25 (0-4")	2SB-25 (20-24")	2SB-25 (36-40")	2SB-25 (6-7')	2SB-26 (0-4")	2SB-26 (20-24")
Arsenic	16	7.4 (HV)	9.6	14.1	41.7	24.7	284	5.8	5.4
Lead	1,000	72.5* (HV)	175	881	109	105	19.4	55	72.2
Mercury	2.8	0.24 (HV)	0.082	0.180	0.150	0.016	0.021	0.130	0.085
Metal	Guidance Level	Background Concentrations	Sample Identification						
			2SB-26 (36-40")	2SB-26 (8.2-8.6')	2SB-27 (20-24")	2SB-27 (36-40")	2SB-28 (0-4")	2SB-28 (20-24")	2SB-28 (36-40")
Arsenic	16	7.4 (HV)	12.7	145.0	84.8	30	6.7	8.4	9.4
Lead	1,000	72.5* (HV)	166	20.4	86.7	118	75.8	48.3	4
Mercury	2.8	0.24 (HV)	0.930	0.052	0.065	0.043	0.100	0.100	0.016
Metal	Guidance Level	Background Concentrations	Sample Identification						
			2SB-29 (0-4")	2SB-29 (20-24")	2SB-29 (36-40")	2SB-30 (0-4")	2SB-30 (20-24")	2SB-30 (36-40")	2SB-34 (3-5')**
Arsenic	16	7.4 (HV)	2.8	9.0	79.4	16.9	30.3	37.1	NA
Lead	1,000	72.5* (HV)	58.4	29.2	76.0	436	11.3	9.7	NA
Mercury	2.8	0.24 (HV)	0.083	0.061	0.220	0.290	0.042	0.017	0.073

## Notes:

Guidance levels based on BCP Track "2" Commercial Restricted Use SCOs, 6 NYCRR Part 375, Table 375-6.8(b), except as noted.

HV = Background levels based on NYSDEC draft data for metals in Lower Hudson Valley soils (90% upper confidence limit).

\* Background lead concentrations in urban settings typically range from 200 to 500 ppm.

\*\* Sample with duplicate analysis

ND = Not Detected    NA = Not Analyzed

**Table 24: Target Analyte List (TAL) Metals in Test Pit Soil Samples (TP-1 through TP-9)**Results provided in mg/kg (parts per million). Results shown in **bold** exceed guidance levels.

Metal	Guidance Level	Background Concentrations	Sample Identification										
			TP-1 (1.3')	TP-2 (2.5')	TP-3 (1')	TP-4 (1')	TP-5 (2')	TP-6 (4')***	TP-6 (8.5')	TP-7 (5.9')	TP-8 (3')	TP-9 (1.5')	TP-9 (4.7')
Aluminum	SB*	33,000	3,120	6,000	6,860	8,150	14,900	11,150	9,230	10,700	11,900	5,410	630
Antimony	SB*	NP	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	16	7.4 (HV)	21.4	10.2	28.7	7.4	20.7	3	1.6	12.4	4.4	21.3	ND
Barium	400	81.1 (HV)	43.2	215	73.8	142	204	40.3	29.1	90.7	57.9	254	10.4
Beryllium	590	0.75 (HV)	ND	ND	ND	ND	1.2	0.48	ND	ND	ND	ND	ND
Cadmium	9.3	0.22 (HV)	ND	3.4	ND	2.1	1.6	1.4	1.3	1.7	1.4	ND	ND
Calcium	SB*	130 - 35,000	5,630	3,710	1,900	10,700	16,700	8,290	5,520	30,300	10,200	3,560	341
Chromium	1,500	20.9 (HV)	5.9	18.3	12.4	13.0	15.6	12.6	12.8	12.8	15.9	42.7	2.1
Cobalt	30* or SB	2.5 - 60	7.9	8.3	23.3	8.0	12.4	10.9	10.3	8.4	10.9	5.5	2.8
Copper	270	23.4 (HV)	28.3	89.5	73.8	67.2	56.8	36.1	28.5	45.6	30.3	51.2	12.5
Iron	2,000* or SB	2,000 - 550,000	12,100	24,700	17,900	14,200	14,500	21,600	19,600	20,900	21,000	13,000	2,280
Lead	1,000	72.5** (HV)	41.3	1,420	592	738	73.6	42.5	8.5	255	32.6	4,630	22.1
Magnesium	SB*	100 - 5,000	1,860	2,630	2,800	5,570	3,580	7,820	5,390	18,700	8,430	1,190	84.7
Manganese	10,000	50 - 5,000	114	462	473	299	418	880	473	522	418	145	8.4
Mercury	2.8	0.24 (HV)	0.22	0.31	0.98	0.60	0.03	0.079	ND	0.19	0.057	0.057	ND
Nickel	310	21.0 (HV)	15.1	19.2	17.0	18.2	23.2	17.3	17.6	18.2	20.1	14.1	7.7
Potassium	SB*	8,500 - 43,000	378	469	448	527	827	589	569	781	1,040	386	55.9
Selenium	1,500	1 (HV)	ND	ND	ND	ND	3.1	ND	ND	ND	ND	3.1	ND
Silver	1,500	NP	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	SB*	6,000 - 8,000	85.2	82.8	158	206	417	187	117	228	201	65.7	28.9
Thallium	SB*	NP	4.7	8	7.5	7.8	7.7	6.5	5.9	5.4	8.3	ND	ND
Vanadium	150* or SB	1 - 300	12.8	23.5	15.4	44.1	32.9	11.2	16.9	22.4	20.0	19.3	6.6
Zinc	10,000	87.1 (HV)	67.6	1,240	158	397	82.5	55.1	51.2	129	66.1	85.2	20.2

## Notes:

Guidance levels based on BCP Track "2" Commercial Restricted Use SCOs, 6 NYCRR Part 375, Table 375-6.8(b), except as noted.

HV = Background levels based on NYSDEC draft data for metals in Lower Hudson Valley soils (90% upper confidence limit).

\* = Guidance level based on NYSDEC TAGM 4046.

\*\* = Background lead concentrations in urban settings typically range from 200 to 500 ppm.

\*\*\* = Sample with duplicate analysis

ND = Not Detected NP = Not Provided SB = Site Background



**Table 25: VOCs in Surface Soil Samples (SS-1 through SS-12)**All results provided in mg/kg (parts per million). Results in **bold** exceed designated guidance levels.

Compound (USEPA Method 8260)	Guidance Level	Sample Identification											
		SS-1	SS-2	SS-3	SS-4	SS-5	SS-6	SS-7	SS-8	SS-9	SS-10*	SS-11	SS-12
1,1,1,2-Tetrachloroethane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.6*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	240	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	0.4*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	3.4*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	190	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-Chloropropane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene, Total	NE <sup>1</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	190	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichloropropane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-Chlorohexane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2-Dichloropropane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloroethylvinylether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorotoluene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Isopropyltoluene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acrolein	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	1.9*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	350	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	390	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m&p-Xylene	500 <sup>2</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl tert-butyl ether	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	500	0.014	0.016	0.0082	0.0083	0.022	0.0059	0.010	0.0069	0.0091	0.0043	0.0085	0.0057
Naphthalene	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Propylbenzene	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene	500 <sup>2</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	150	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, Total	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total TICs	NE	ND	ND	ND	ND	ND	0.021	0.013	ND	ND	ND	0.010	0.022
Total Unknown Compounds	NE	ND	0.005	0.006	0.012	ND	0.011	ND	ND	0.003	ND	0.019	ND
Total VOCs	10*	0.014	0.021	0.014	0.020	0.022	0.038	0.023	0.007	0.012	0.004	0.038	0.028

Notes:

Guidance levels based on BCP Track "2" Commercial Restricted Use SCOs, 6 NYCRR Part 375, Table 375-6.8(b), except as noted.

\* = Guidance level based on NYSDEC TAGM 4046.

\*\* = Sample with duplicate analysis

1 - Guidance level for cis-1,2-Dichloroethene and trans-1,2-Dichloroethene is 500 ppm.

2 - Guidance level for total xylenes is 500 ppm.

NE = Not Established ND = Not Detected TICs = Tentatively Identified Compounds NA = Not Analyzed



Table 26: VOCs in Soil Boring Samples (SB-1 through SB-11)  
All results provided in mg/kg (parts per million). Results in **bold** exceed designated guidance levels.

Compound (USEPA Method 8260)	Guidance Level	Sample Identification																			
		SB-1 (4.2-5')	SB-1 (7.8-8.2')	SB-2 (9-10')	SB-3 (3-4.5')	SB-4 (2.4-3.2')	SB-4 (3.2-4.0')	SB-5 (3.2-3.8')	SB-5 (8.4-10')	SB-6 (5-10')	SB-6 (15-20')**	SB-7 (3-4.5')	SB-7 (8.6-10')	SB-8 (2.9-3.6')	SB-8 (10-15')	SB-9 (4.4-5')	SB-9 (18.9-19.5')	SB-10 (3.4-4.5')	SB-10 (5-10')	SB-11 (3.3-4')	SB-11 (14-15')
1,1,1,2-Tetrachloroethane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.6*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	240	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	0.4*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	3.4*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	190	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-Chloropropane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	30	ND	ND	ND	0.018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene, Total	NE <sup>1</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	190	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichloropropane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-Chlorohexane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2-Dichloropropane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloroethylvinylether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorotoluene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Isopropyltoluene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acrolein	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	1.9*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	350	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	390	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m&p-Xylene	500 <sup>2</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl tert-butyl ether	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	500	0.012	0.010	0.010	0.0077	0.0084	0.0077	0.0075	0.0089	0.0091	0.010	0.007	0.011	0.0066	0.012	0.0089	0.009	0.0082	0.016	0.010	0.012
Napthalene	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Propylbenzene	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene	500 <sup>2</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	150	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0012	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, Total	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total TICs	NE	0.018	0.325	0.016	ND	0.014	0.010	ND	ND	ND	0.018	ND	0.596	0.005	0.285	0.306	0.175	0.044	ND	ND	0.016
Total Unknown Compounds	NE	ND	ND	ND	0.037	ND	ND	ND	ND	ND	ND	ND	0.514	0.348	0.992	0.923	0.406	0.009	0.012	ND	ND
Total VOCs	10*	0.030	0.335	0.026	0.063	0.022	0.018	0.008	0.009	0.009	0.028	0.007	1.121	0.360	1.289	1.2391	0.590	0.0612	0.028	0.010	0.028

Notes:

Guidance levels based on BCP Track "2" Commercial Restricted Use SCOs, 6 NYCRR Part 375, Table 375-6.8(b), except as noted.

\* = Guidance level based on NYSDEC TAGM 4046.

\*\* = Sample with duplicate analysis

1 - Guidance level for cis-1,2-Dichloroethene and trans-1,2-Dichloroethene is 500 ppm.

2 - Guidance level for total xylenes is 500 ppm.

Table 27: VOCs in Soil Boring Samples (2SB-1 through 2SB-35)

All results provided in mg/kg (parts per million). Results in **bold** exceed designated guidance levels.

Compound (USEPA Method 8260)	Guidance Level	Sample Identification																		
		2SB-10(5-6')	2SB-10(12-13')	2 SB-11A(6-7')	2 SB-11A(9-10')**	2 SB-12(6-7')	2SB-13(6-7')	2SB-13(17-19')	2 SB-14(9')	2SB-15(36-40")	2SB-15(18')	2 SB-16(9')	2SB-17(36-40")	2SB-17(5-10')	2 SB-18(9-10')	2 SB-31(8.5')	2SB-32 (9')	2 SB-33(7-8')	2SB-35(5-10')	2SB-35(20')
1,1,1,2-Tetrachloroethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.6*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	240	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.4*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	3.4*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	190	ND	ND	ND	ND	ND	ND	ND	ND	0.210	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromoethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene, Total	NE <sup>1</sup>	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	190	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	280	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	130	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1-Chlorohexane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-Dichloropropane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinylether	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chlorotoluene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003
4-Chlorotoluene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Isopropyltoluene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acrolein	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acrylonitrile	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Benzene	44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	1.9*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	350	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dichlorodifluoromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	390	ND	ND	ND	ND	ND	ND	ND	ND	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	0.008	ND	0.0096	0.028	ND	ND	ND	ND	ND	ND	ND
m&p-Xylene	500 <sup>2</sup>	ND	ND	ND	ND	ND	ND	ND	ND	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methyl tert-butyl ether	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	500	0.072	0.0052	0.0083	0.0095	0.012	0.058	0.0092	0.039	0.011	0.014	0.0077	0.033	0.038	0.058	0.0094	0.018	0.0094	0.088	0.011
Naphthalene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.012	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.092	ND	ND	ND	ND	ND	ND	ND
N-Propylbenzene	500	ND	ND	ND	ND	ND	ND	ND	ND	0.018	ND	0.013	ND	ND	ND	ND	ND	ND	ND	ND
o-Xylene	500 <sup>2</sup>	ND	ND	ND	ND	ND	ND	ND	ND	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
sec-Butylbenzene	500	0.029	ND	0.007	ND	ND	0.059	ND	0.016	0.019	ND	0.039	0.110	0.024	ND	ND	ND	ND	ND	ND
Styrene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
tert-Butylbenzene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.004	0.020	ND	ND	ND	ND	ND	ND	ND	ND
Tetrachloroethene	150	ND	ND	ND	ND	ND	ND	0.0016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0029	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0011	ND	ND	ND	ND	ND
Trichlorofluoromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Vinyl chloride	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, Total	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Total TICs	NE	19.800	5.110	0.760	0.014	0.028	0.410	0.042	11.100	1575.000	14.330	0.610	7.100	10.900	0.036	ND	0.016	ND	7.100	7.190
Total Unknown Compounds	NE	36.300	11.380	2.073	0.004	ND	4.210	0.408	4.060	977.000	14.170	1.373	47.600	44.500	0.035	ND	0.239	0.011	42.600	7.740
Total VOCs	10*	56.201	16.495	2.848	0.028	0.040	4.737	0.461	15.215	2,552.274	28.514	2.068	54.983	55.462	0.133	0.009	0.273	0.020	49.788	14.944

Notes:

Guidance levels based on BCP Track "2" Commercial Restricted Use SCOs, 6 NYCRR Part 375, Table 375-6.8(b), except as noted.

\* = Guidance level based on NYSDEC [IAGM 4046](#).

\*\* = Sample with duplicate analysis

1 - Guidance level for cis-1,2-Dichloroethene and trans-1,2-Dichloroethene is 500 ppm.

2 - Guidance level for total xylenes is 500 ppm.

NE = Not Established ND = Not Detected TICs = Tentatively Identified Compounds NA = Not Analyzed

Table 28: VOCs in Test Pit Soil Samples (TP-1 through TP-9)

All results provided in mg/kg (parts per million). Results in **bold** exceed designated guidance levels.

Compound (USEPA Method 8260)	Guidance Level	Sample Identification										
		TP-1 (1.3')	TP-2 (2.5')	TP-3 (1')	TP-4 (1')	TP-5 (2')	TP-6 (4')**	TP-6 (8.5')	TP-7 (5.9')	TP-8 (3')	TP-9 (1.5')	TP-9 (4.7')
1,1,1,2-Tetrachloroethane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.6*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	240	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	0.4*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	3.4*	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	190	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-Chloropropane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	30	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethene, Total	NE <sup>1</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	190	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	280	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichloropropane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	130	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
1-Chlorohexane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2,2-Dichloropropane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloroethylvinylether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorotoluene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-Isopropyltoluene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Acrolein	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	44	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	1.9*	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	350	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	390	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
m&p-Xylene	500 <sup>2</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methyl tert-butyl ether	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	500	0.006	0.0072	0.0063	0.0063	0.0083	0.029	0.250	0.0057	0.0057	0.0082	0.056
Naphthalene	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
n-Butylbenzene	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
N-Propylbenzene	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene	500 <sup>2</sup>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
sec-Butylbenzene	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	500	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	150	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	NE	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, Total	500	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Total TICs	NE	0.008	0.006	0.006	0.006	0.004	0.004	407.000	ND	0.013	ND	124.800
Total Unknown Compounds	NE	ND	0.008	ND	ND	ND	0.009	167.000	0.006	0.140	0.004	111.100
Total VOCs	10*	0.014	0.021	0.012	0.012	0.012	0.042	574.250	0.012	0.159	0.012	235.956

Notes:

Guidance levels based on BCP Track "2" Commercial Restricted Use SCOs, 6 NYCRR Part 375, Table 375-6.8(b), except as noted.

\* = Guidance level based on NYSDEC TAGM 4046.

\*\* = Sample with duplicate analysis

1 - Guidance level for cis-1,2-Dichloroethene and trans-1,2-Dichloroethene is 500 ppm.

2 - Guidance level for total xylenes is 500 ppm.

NE = Not Established ND = Not Detected TICs = Tentatively Identified Compounds NA = Not Analyzed

**Table 29: Total Petroleum Hydrocarbons - Diesel Range Organics (TPH-DRO) in Soil Boring Samples**

Results provided in mg/kg (parts per million).

Analyte	Sample Identification				
	2SB-10(5-6')	2SB-10(12-13')	2 SB-11A(6-7')	2 SB-11A(9-10')**	2 SB-12(6-7')
TPH-DRO	22,000.000	920.000	15,000.000	ND	530.000
	Sample Identification				
	2SB-13(6-7')	2SB-13(17-19')	2 SB-14(9')**	2SB-15(36-40")	2SB-15(18')
	21,000.000	220.000	4,250.000	7,000.000	330.000
	Sample Identification				
	2 SB-16(9')	2 SB-16(9-15')	2SB-17(36-40")	2SB-17(5-10')	2 SB-18(9-10')
	9,100.000	7,000.000	8,800.000	4,900.000	1,200.000
	Sample Identification				
	2 SB-31(8.5')	2SB-32 (9')	2 SB-33(7-8')	2SB-35(5-10')	2SB-35(20')
	ND	230.000	ND	4,200.000	ND
Notes:					
** = Sample with duplicate analysis					
A guidance level for TPH-DRO has not been established.					
ND = Not Detected					

**Table 30: Pesticides in Soil**Results provided in mg/kg (parts per million). Results shown in **bold** exceed guidance levels.

Compound (USEPA Method 8081)	Guidance Level	Sample Identification											
		SS-3	SS-4	SS-5	SS-6	SS-7	SS-10**	SB-2 (9-10')	SB-9 (4.4-5')	TP-2 (2.5')	TP-3 (1')	TP-6 (4')**	TP-9 (1.5')
4,4'-DDD	92	0.0063	ND	0.013	0.060	0.0031	ND	ND	ND	0.020	ND	0.0039	ND
4,4'-DDE	62	0.029	0.015	0.020	0.096	0.0040	0.0135	0.0038	ND	0.0096	0.031	0.028	ND
4,4'-DDT	47	0.032	0.0065	0.028	0.260	0.0042	0.0093	ND***	ND***	0.020	ND***	0.015	ND***
Aldrin	0.68	0.012	0.0055	0.00099	ND	0.0015	0.0031	ND	ND	ND	0.0011	ND	0.0065
alpha-BHC	3	ND	ND	ND	ND	ND	ND	ND	ND	0.0011	0.0013	ND	ND
beta-BHC	3	ND	ND	ND	ND	ND	ND	ND	ND	0.00058	ND	ND	ND
Chlordane	24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
delta-BHC	500	ND	0.0015	ND	ND	0.00072	ND	ND	ND	ND	ND	ND	ND
Dieldrin	1	ND	ND	ND	ND	ND	ND	ND	ND	0.0028	ND	ND	ND
Endosulfan I	200	ND	ND	ND	ND	ND	ND	ND	ND	0.0017	ND	ND	ND
Endosulfan II	200	ND	ND	ND	ND	ND	ND	ND	ND	0.0011	ND	ND	0.057
Endosulfan sulfate	200	0.024	ND	0.0038	ND	ND	0.022	0.0023	0.026	ND	0.020	0.026	0.130
Endrin	89	ND	ND	ND	ND	ND	ND	ND	ND	0.0052	ND	ND	ND
Endrin aldehyde	NE	ND	ND	ND	ND	ND	ND	ND	ND	0.013	ND	ND	ND
gamma-BHC (Lindane)	9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Heptachlor	15	ND	ND	ND	ND	0.00098	ND	ND	ND	0.00072	ND	ND	ND
Heptachlor Epoxide	0.020*	0.0027	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00098	ND
Toxaphene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

## Notes:

Guidance levels based on BCP Track "2" Commercial Restricted Use SCOs, 6 NYCRR Part 375, Table 375-6.8(b), except as noted.

\* = Guidance level based on NYSDEC TAGM 4046.

\*\* = Sample with duplicate analysis

\*\*\* = Data not suited for analysis

ND = Not Detected NE = Not Established

Table 31: VOCs in Groundwater - September 2006

All results provided in µg/L. Results in **bold** exceed designated guidance levels.

Compound (USEPA Method 8260)	Guidance Level	Sample Identification							
		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6#	MW-7	MW-8
1,1,1,2-Tetrachloroethane	5	NA	NA	NA	NA	NA	NA	NA	NA
1,1,1-Trichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	5	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichlorobenzene	5	NA	NA	NA	NA	NA	NA	NA	NA
1,2,3-Trichloropropane	0.04	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trichlorobenzene	5	NA	NA	NA	NA	NA	NA	NA	NA
1,2,4-Trimethylbenzene	5	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromo-3-Chloropropane	0.04	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dibromoethane	NE	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichlorobenzene	3	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene, Total	5*	NA	NA	NA	NA	NA	NA	NA	NA
1,2-Dichloropropane	1	ND	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	3	NA	NA	NA	NA	NA	NA	NA	NA
1,3-Dichloropropane	5	NA	NA	NA	NA	NA	NA	NA	NA
1,4-Dichlorobenzene	3	NA	NA	NA	NA	NA	NA	NA	NA
1-Chlorohexane	NE	NA	NA	NA	NA	NA	NA	NA	NA
2,2-Dichloropropane	5	NA	NA	NA	NA	NA	NA	NA	NA
2-Chloroethylvinylether	NE	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	5	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorotoluene	5	NA	NA	NA	NA	NA	NA	NA	NA
4-Isopropyltoluene	5	NA	NA	NA	NA	NA	NA	NA	NA
Acrolein	5	ND	ND	ND	ND	ND	ND	ND	ND
Acrylonitrile	5	ND	ND	ND	ND	ND	ND	ND	ND
Benzene	0.7	ND	ND	ND	ND	48	ND	ND	ND
Bromobenzene	5	NA	NA	NA	NA	NA	NA	NA	NA
Bromodichloromethane	50	ND	ND	ND	ND	ND	ND	ND	ND
Bromoform	50	ND	ND	ND	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	0.4**	ND	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	5	ND	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	5	NA	NA	NA	NA	NA	NA	NA	NA
Dichlorodifluoromethane	5	NA	NA	NA	NA	NA	NA	NA	NA
Ethylbenzene	5	ND	ND	ND	ND	59	ND	ND	ND
Hexachlorobutadiene	5	NA	NA	NA	NA	NA	NA	NA	NA
Isopropylbenzene	5	NA	NA	NA	NA	NA	NA	NA	NA
m&p-Xylene	5***	NR	NR	NR	NR	NR	NR	NR	NR
Methyl tert-butyl ether	NE	NA	NA	NA	NA	NA	NA	NA	NA
Methylene Chloride	5	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10	NA	NA	NA	NA	NA	NA	NA	NA
N-Butylbenzene	5	NA	NA	NA	NA	NA	NA	NA	NA
N-Propylbenzene	5	NA	NA	NA	NA	NA	NA	NA	NA
o-Xylene	5	NR	NR	NR	NR	NR	NR	NR	NR
sec-Butylbenzene	5	NA	NA	NA	NA	NA	NA	NA	NA
Styrene	5	NA	NA	NA	NA	NA	NA	NA	NA
tert-Butylbenzene	5	NA	NA	NA	NA	NA	NA	NA	NA
Tetrachloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	13	ND	ND	ND
trans-1,2-Dichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	0.4**	ND	ND	ND	ND	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	NA	NA	NA	NA	NA	NA	NA	NA
Vinyl chloride	2	ND	ND	ND	ND	ND	ND	ND	ND
Xylenes, Total	5	ND	ND	ND	ND	280	ND	ND	ND
Total TICs	NE	ND	ND	19	ND	292	22	ND	110
Total Unknown Compounds	NE	ND	74	ND	ND	250	39	ND	26
Total VOCs	NE	ND	74	19	ND	942	61	ND	136

Notes:

Guidance levels based on NYSDEC IOGS 1.1.1.

\*Applies to the individual isomers cis-1,2-Dichloroethene and trans-1,2-Dichloroethene.

\*\*Applies to the sum of cis- and trans-1,3-dichloropropene.

\*\*\* Applies to the individual isomers 1,3-Xylene (m-Xylene) and 1,4-Xylene (p-Xylene).

# Sample with duplicate analysis

ND = Not Detected NE = Not Established TICs = Tentatively Identified Compounds NA = Not Analyzed NR = Not Reported

Table 32: VOCs in Groundwater - February/March 2007

All results provided in µg/L. Results in **bold** exceed designated guidance levels.

Compound (USEPA Method 8260)	Guidance Level	Sample Identification									
		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6#	MW-7	MW-8	MW-9	MW-10
1,1,1,2-Tetrachloroethane	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	1	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,1-Dichloropropene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	0.04	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	ND	ND	ND	ND	NS	ND	ND	1	ND	ND
1,2-Dibromo-3-Chloropropane	0.04	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,2-Dibromoethane	NE	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,2-Dichloroethane	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,2-Dichloroethene, Total	5*	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,2-Dichloropropane	1	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,3-Dichloropropane	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1-Chlorohexane	NE	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
2,2-Dichloropropane	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
2-Chloroethylvinylether	NE	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA
2-Chlorotoluene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
4-Chlorotoluene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
4-Isopropyltoluene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Acrolein	5	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA
Acrylonitrile	5	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA
Benzene	0.7	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Bromobenzene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Bromodichloromethane	50	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Bromoform	50	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Bromomethane	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Carbon tetrachloride	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Chlorobenzene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Chloroethane	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Chloroform	7	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Chloromethane	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA
cis-1,3-Dichloropropene	0.4**	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Dibromochloromethane	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Dibromomethane	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Dichlorodifluoromethane	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Ethylbenzene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Hexachlorobutadiene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Isopropylbenzene	5	ND	ND	ND	ND	NS	ND	ND	2.2	ND	ND
m&p-Xylene	5***	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Methyl tert-butyl ether	NE	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Methylene Chloride	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Naphthalene	10	3.4	ND	ND	ND	NS	ND	ND	ND	ND	ND
N-Butylbenzene	5	ND	ND	ND	ND	NS	ND	ND	0.82	ND	ND
N-Propylbenzene	5	ND	ND	ND	ND	NS	ND	ND	1.3	ND	ND
o-Xylene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
sec-Butylbenzene	5	ND	ND	ND	ND	NS	ND	ND	1.2	ND	ND
Styrene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
tert-Butylbenzene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Tetrachloroethene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Toluene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA
trans-1,3-Dichloropropene	0.4**	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Trichloroethene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Vinyl chloride	2	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Xylenes, Total	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Total TICs	NE	ND	ND	ND	ND	NS	ND	ND	242	37.8	11.1
Total Unknown Compounds	NE	ND	ND	ND	ND	NS	ND	ND	29	ND	ND
Total VOCs	NE	3.4	ND	ND	ND	NS	ND	ND	277.52	37.8	11.1

Notes:

Guidance levels based on NYSDEC TOGS 1.1.1.

\*Applies to the individual isomers cis-1,2-Dichloroethene and trans-1,2-Dichloroethene.

\*\*Applies to the sum of cis- and trans-1,3-dichloropropene.

\*\*\*Applies to the individual isomers 1,3-Xylene (m-Xylene) and 1,4-Xylene (p-Xylene).

# Sample with duplicate analysis

ND = Not Detected NE = Not Established TICs = Tentatively Identified Compounds NA = Not Analyzed NS = Not Sampled

**Table 33: Target Analyte List (TAL) Metals in Groundwater - September 2006**All results provided in µg/L. Results in **bold** exceed designated guidance levels.

TAL METAL	Guidance Level	Sample Identification							
		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6**	MW-7	MW-8
Aluminum	100	ND	ND	ND	ND	ND	88.6	283	122
Antimony	3	ND	ND	ND	ND	ND	ND	ND	ND
Arsenic	25	11.1	ND	ND	ND	ND	ND	ND	ND
Barium	1,000	93.8	26.8	76.5	45.9	98.0	87.1	62.7	40.4
Beryllium	3	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	ND	ND	ND	ND
Calcium	NE	68,400	53,100	75,600	49,100	91,900	64,000	87,800	72,500
Chromium	50	ND	ND	ND	ND	ND	ND	ND	ND
Cobalt	5	3.6	ND	ND	ND	1.3	ND	ND	ND
Copper	200	6.1	ND	ND	4.5	4.5	6.8	6.1	ND
Iron	300*	12,200	580	2,950	66.9	ND	1,500	261	3,450
Lead	25	ND	ND	ND	ND	ND	ND	ND	ND
Magnesium	35,000	21,700	12,200	10,700	10,800	16,400	12,800	17,300	10,300
Manganese	300*	1,060	498	1,200	436	94.3	1,014	410	1,090
Mercury	0.7	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	100	4.2	1.9	0.8	1.7	8.5	1.4	1.7	1.3
Potassium	NE	8,290	2,620	4,300	3,030	5,170	5,045	4,270	6,300
Selenium	10	14.4	ND	ND	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	20,000	19,600	24,000	26,800	69,300	153,000	110,500	118,000	101,000
Thallium	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Vanadium	14	ND	ND	ND	ND	ND	ND	ND	1.2
Zinc	2,000	14.8	ND	ND	ND	11.1	24.2	ND	ND

Notes:

Guidance levels based on NYSDEC TOGS 1.1.1.

\*Guidance level for total of iron and manganese is 500 ug/L.

\*\* Sample with duplicate analysis

ND = Not Detected NE = Not Established



**Table 34: Target Analyte List (TAL) Metals in Groundwater - February/March 2007**All results provided in µg/L. Results in **bold** exceed designated guidance levels.

TAL METAL	Guidance Level	Sample Identification									
		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6**	MW-7	MW-8	MW-9	MW-10
Aluminum	100	ND	ND	ND	ND	NS	ND	400	ND	83	ND
Antimony	3	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Arsenic	25	20	ND	ND	4.8	NS	ND	ND	ND	ND	ND
Barium	1,000	56	17	47	29	NS	37	32	23	32	63
Beryllium	3	ND	0.29	0.32	0.39	NS	ND	ND	ND	ND	ND
Cadmium	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Calcium	NE	66,500	35,900	49,900	36,100	NS	32,200	68,000	49,100	24,100	85,500
Chromium	50	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Cobalt	5	ND	ND	ND	1.3	NS	ND	1	ND	2	5.6
Copper	200	ND	ND	ND	ND	NS	ND	4.3	ND	5.8	ND
Iron	300*	40,200	ND	4,600	210	NS	2,300	840	3,700	2,500	24,100
Lead	25	ND	ND	ND	ND	NS	ND	ND	4.4	ND	3
Magnesium	35,000	28,300	12,100	11,300	13,200	NS	8,800	14,100	8,900	8,700	10,200
Manganese	300*	1,700	41	1,100	760	NS	765	99	610	1,100	5,300
Mercury	0.7	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Nickel	100	1.8	1.6	1.7	1.8	NS	ND	ND	ND	1.6	4
Potassium	NE	7,400	2,800	2,800	3,400	NS	2,250	2,700	3,000	1,700	6,500
Selenium	10	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Silver	50	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Sodium	20,000	30,400	60,100	35,000	77,000	NS	67,600	89,300	88,800	42,200	114,000
Thallium	0.5	18	11	ND	14	NS	ND	ND	ND	ND	ND
Vanadium	14	ND	ND	ND	0.76	NS	0.71	1.2	2	0.85	ND
Zinc	2,000	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND

Notes:

Guidance levels based on NYSDEC TOGS 1.1.1.

\*Guidance level for total of iron and manganese is 500 µg/L.

\*\* Sample with duplicate analysis

ND = Not Detected NE = Not Established NS = Not Sampled

Table 35: SVOCs in Groundwater - September 2006

All results provided in µg/L. Results in **bold** exceed designated guidance levels.

Compound (USEPA Method 8270)	Guidance Level	Sample Identification							
		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6***	MW-7	MW-8
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine	NE*	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3	ND	ND	ND	ND	ND	ND	ND	ND
2,2-oxybis (1-chloropropane)	5	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE**	NA	NA	NA	NA	NA	NA	NA	NA
2,4-Dichlorophenol	5	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	50	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	10	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	5	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	10	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NE**	NA	NA	NA	NA	NA	NA	NA	NA
2-Methylnaphthalene	4.7	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitroaniline	5	NA	NA	NA	NA	NA	NA	NA	NA
2-Nitrophenol	NE**	NA	NA	NA	NA	NA	NA	NA	NA
3,3-Dichlorobenzidine	5	ND	ND	ND	ND	ND	ND	ND	ND
3-Nitroaniline	5	NA	NA	NA	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NE**	NA	NA	NA	NA	NA	NA	NA	NA
4-Bromophenyl phenyl ether	NE	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE**	NA	NA	NA	NA	NA	NA	NA	NA
4-Chloroaniline	5	NA	NA	NA	NA	NA	NA	NA	NA
4-Chlorophenyl phenyl ether	NE	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitroaniline	5	NA	NA	NA	NA	NA	NA	NA	NA
4-Nitrophenol	NE**	NA	NA	NA	NA	NA	NA	NA	NA
Acenaphthene	20	ND	ND	ND	ND	ND	2	ND	5
Acenaphthylene	NE	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	50	2	ND	ND	ND	ND	ND	ND	ND
Benzidine	5	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	0.002	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	NE	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(ghi)perylene	NE	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002	ND	ND	ND	ND	ND	ND	ND	ND
Benzyl alcohol	NE	NA	NA	NA	NA	NA	NA	NA	NA
Bis(2-chloroethoxy)methane	5	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	1	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	5	ND	ND	ND	ND	ND	ND	ND	ND
Butyl benzyl phthalate	50	ND	ND	ND	ND	ND	ND	ND	ND
Carbazole	NE	NA	NA	NA	NA	NA	NA	NA	NA
Chrysene	0.002	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	NE	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	NE	NA	NA	NA	NA	NA	NA	NA	NA
Diethyl phthalate	50	ND	ND	ND	ND	ND	ND	ND	2
Dimethyl phthalate	50	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	50	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	50	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	50	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	50	1	ND	ND	ND	ND	2	ND	5
Hexachlorobenzene	0.04	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.5	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	5	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002	ND	ND	ND	ND	ND	ND	ND	ND
Isophorone	50	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	10	5	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	0.4	ND	ND	ND	ND	ND	ND	ND	ND
n-Nitrosodimethylamine	NE	ND	ND	ND	ND	ND	ND	ND	ND
n-Nitroso-di-n-propylamine	NE	ND	ND	ND	ND	ND	ND	ND	ND
n-Nitrosodiphenylamine	50	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE**	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NE**	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NE**	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE**	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE**	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NE**	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	1**	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	50	3	ND	ND	ND	ND	1.5	ND	2
Phenol	1**	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	50	ND	ND	ND	ND	ND	ND	ND	ND
Total TICs	NE	8	ND	6	2	ND	109.5	ND	190
Total Unknown Compounds	NE	16	12	19	9	9	91.5	34	65
Total SVOCs	NE	35	12	25	11	9	207	34	269
Total PAHs	NE	11	ND	ND	ND	ND	5.5	ND	12
Total Carcinogenic PAHs	NE	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

Guidance levels based on NYSDEC TOGS 1.1.1.

\* Applies to the sum of 1,1- and 1,2-diphenylhydrazine.

\*\* Sum of phenolic compounds not to exceed 1 µg/L.

\*\*\* Sample with duplicate analysis

ND = Not Detected NE = Not Established TICs = Tentatively Identified Compounds NA = Not Analyzed

Table 36: SVOCs in Groundwater - February/March 2007

All results provided in µg/L. Results in **bold** exceed designated guidance levels.

Compound (USEPA Method 8270)	Guidance Level	Sample Identification									
		MW-1	MW-2	MW-3	MW-4	MW-5	MW-6***	MW-7	MW-8	MW-9	MW-10
1,2,4-Trichlorobenzene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	3	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,2-Diphenylhydrazine	NE*	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA
1,3-Dichlorobenzene	3	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	3	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
2,2'-oxybis[1-chloropropane]	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE**	NA	NA	NA	NA	NS	ND	ND	ND	ND	ND
2,4-Dichlorophenol	5	NA	NA	NA	NA	NS	ND	ND	ND	ND	ND
2,4-Dimethylphenol	50	NA	NA	NA	NA	NS	ND	ND	ND	ND	ND
2,4-Dinitrophenol	10	NA	NA	NA	NA	NS	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
2-Chloronaphthalene	10	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
2-Chlorophenol	NE**	NA	NA	NA	NA	NS	ND	ND	ND	ND	ND
2-Methylnaphthalene	4.7	0.86	ND	ND	ND	NS	ND	ND	2.3	ND	ND
2-Nitroaniline	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
2-Nitrophenol	NE**	NA	NA	NA	NA	NS	ND	ND	ND	ND	ND
3,3'-Dichlorobenzidine	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
3-Nitroaniline	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE**	NA	NA	NA	NA	NS	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE**	NA	NA	NA	NA	NS	ND	ND	ND	ND	ND
4-Chloroaniline	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
4-Nitroaniline	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
4-Nitrophenol	NE**	NA	NA	NA	NA	NS	ND	ND	ND	ND	ND
Acenaphthene	20	2.4	ND	ND	ND	NS	ND	ND	3.3	ND	ND
Acenaphthylene	NE	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Anthracene	50	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Benzidine	5	NA	NA	NA	NA	NS	ND	ND	ND	ND	ND
Benzo[a]anthracene	0.002	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Benzo[a]pyrene	NE	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Benzo[b]fluoranthene	0.002	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Benzo[g,h,i]perylene	NE	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Benzo[k]fluoranthene	0.002	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Benzyl alcohol	NE	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	1	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Butyl benzyl phthalate	50	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Carbazole	NE	2.5	ND	ND	ND	NS	ND	ND	ND	ND	ND
Chrysene	0.002	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Dibenz(a,h)anthracene	NE	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Dibenzofuran	NE	1.3	ND	ND	ND	NS	ND	ND	3.3	ND	ND
Diethyl phthalate	50	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Dimethyl phthalate	50	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Di-n-butyl phthalate	50	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Di-n-octyl phthalate	50	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Fluoranthene	50	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Fluorene	50	1.3	ND	ND	ND	NS	ND	ND	4.3	ND	ND
Hexachlorobenzene	0.04	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Hexachlorobutadiene	0.5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Hexachloroethane	5	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Indeno[1,2,3-cd]pyrene	0.002	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Isophorone	50	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Naphthalene	10	4.6	ND	ND	ND	NS	ND	ND	ND	ND	ND
Nitrobenzene	0.4	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
N-Nitrosodimethylamine	NE	NA	NA	NA	NA	NS	ND	ND	ND	ND	ND
N-Nitrosodi-n-propylamine	NE	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
N-Nitrosodiphenylamine	50	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE**	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA
2-Chlorophenol	NE**	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA
2-Nitrophenol	NE**	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA
4,6-Dinitro-2-methylphenol	NE**	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA
4-Chloro-3-methylphenol	NE**	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA
4-Nitrophenol	NE**	NA	NA	NA	NA	NS	NA	NA	NA	NA	NA
Pentachlorophenol	1**	NA	NA	NA	NA	NS	ND	ND	ND	ND	ND
Phenanthrene	50	3.1	ND	ND	ND	NS	ND	ND	1.6	ND	ND
Phenol	1**	NA	NA	NA	NA	NS	ND	ND	ND	ND	ND
Pyrene	50	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND
Total TICs	NE	ND	ND	ND	ND	NS	ND	ND	171.2	ND	ND
Total Unknown Compounds	NE	ND	ND	ND	ND	NS	ND	ND	94.9	ND	ND
Total SVOCs	NE	16.06	ND	ND	ND	NS	ND	ND	280.9	ND	ND
Total PAHs	NE	12.3	ND	ND	ND	NS	ND	ND	11.5	ND	ND
Total Carcinogenic PAHs	NE	ND	ND	ND	ND	NS	ND	ND	ND	ND	ND

Notes:

Guidance levels based on NYSDEC TOGS 1.1.1.

\* Applies to the sum of 1,1- and 1,2-diphenylhydrazine.

\*\* Sum of phenolic compounds not to exceed 1 µg/L.

\*\*\* Sample with duplicate analysis

ND = Not Detected NE = Not Established TICs = Tentatively Identified Compounds NA = Not Analyzed NS = Not Sampled

**Table 37: PCBs and Pesticides in Groundwater - September 2006**Results provided in µg/L. Results shown in **bold** exceed guidance levels.

		Guidance Level	Sample Identification							
			MW-1	MW-2	MW-3	MW-4	MW-5	MW-6**	MW-7	MW-8
<b>PCBs</b>	PCB 1016	NE	ND	ND	ND	ND	ND	ND	ND	ND
	PCB 1221	NE	ND	ND	ND	ND	ND	ND	ND	ND
	PCB 1232	NE	ND	ND	ND	ND	ND	ND	ND	ND
	PCB 1242	NE	ND	ND	ND	ND	ND	ND	ND	ND
	PCB 1248	NE	ND	ND	ND	ND	ND	ND	ND	ND
	PCB 1254	NE	ND	ND	ND	ND	ND	ND	ND	ND
	PCB 1260	NE	ND	ND	ND	ND	ND	ND	ND	ND
	PCB 1268	NE	ND	ND	ND	ND	ND	ND	ND	ND
	PCB, Total	0.9	ND	ND	ND	ND	ND	ND	ND	ND
<b>Pesticides</b>	4,4'-DDD	0.3	NA	ND	NA	NA	NA	ND	NA	NA
	4,4'-DDE	0.2	NA	ND	NA	NA	NA	ND	NA	NA
	4,4'-DDT	0.2	NA	ND	NA	NA	NA	ND	NA	NA
	Aldrin	ND	NA	ND	NA	NA	NA	ND	NA	NA
	alpha-BHC	0.01	NA	ND	NA	NA	NA	ND	NA	NA
	beta-BHC	0.04	NA	ND	NA	NA	NA	ND	NA	NA
	Chlordane	0.05	NA	ND	NA	NA	NA	ND	NA	NA
	delta-BHC	0.04	NA	ND	NA	NA	NA	ND	NA	NA
	Dieldrin	0.004	NA	ND	NA	NA	NA	ND	NA	NA
	Endosulfan I	NE	NA	ND	NA	NA	NA	ND	NA	NA
	Endosulfan II	NE	NA	ND	NA	NA	NA	ND	NA	NA
	Endosulfan sulfate	NE	NA	ND	NA	NA	NA	ND	NA	NA
	Endrin	ND	NA	ND	NA	NA	NA	ND	NA	NA
	Endrin aldehyde	5	NA	ND	NA	NA	NA	ND	NA	NA
	gamma-BHC (Lindane)	0.05	NA	ND	NA	NA	NA	ND	NA	NA
	Heptachlor	0.04	NA	ND	NA	NA	NA	ND	NA	NA
	Heptachlor Epoxide	0.03	NA	ND	NA	NA	NA	ND	NA	NA
	Toxaphene	0.06	NA	ND	NA	NA	NA	ND	NA	NA

Notes:

Guidance levels based on NYSDEC [TOGS 1.1.1](#).

\*\* Sample with duplicate analysis

ND = Not Detected    NA = Not Analyzed    NE = Not Established

**Table 39: PCBs and Pesticides in Surface Water**Results provided in µg/L. Results shown in **bold** exceed guidance levels.

		Guidance Level	Sample Identification			
			SW-1	SW-2	SW-3**	SW-4
PCBs	PCB 1016	NE	ND	ND	ND	ND
	PCB 1221	NE	ND	ND	ND	ND
	PCB 1232	NE	ND	ND	ND	ND
	PCB 1242	NE	ND	ND	ND	ND
	PCB 1248	NE	ND	ND	ND	ND
	PCB 1254	NE	ND	ND	ND	ND
	PCB 1260	NE	ND	ND	ND	ND
	PCB 1268	NE	ND	ND	ND	ND
	PCB, Total	0.000001	ND	ND	ND	ND
Pesticides	4,4'-DDD	0.00008	NA	NA	ND	ND
	4,4'-DDE	0.000007	NA	NA	ND	ND
	4,4'-DDT	0.00001	NA	NA	ND	ND
	Aldrin	0.001 <sup>#</sup>	NA	NA	ND	ND
	alpha-BHC	0.002	NA	NA	ND	ND
	beta-BHC	0.007	NA	NA	ND	ND
	Chlordane	0.00002	NA	NA	ND	ND
	delta-BHC	0.008	NA	NA	ND	ND
	Dieldrin	0.001 <sup>#</sup>	NA	NA	ND	ND
	Endosulfan I	NE	NA	NA	ND	ND
	Endosulfan II	NE	NA	NA	ND	ND
	Endosulfan sulfate	NE	NA	NA	ND	ND
	Endrin	0.002	NA	NA	ND	ND
	Endrin aldehyde	5*	NA	NA	ND	ND
	gamma-BHC (Lindane)	0.008	NA	NA	ND	ND
	Heptachlor	0.0002	NA	NA	ND	ND
	Heptachlor Epoxide	0.0003	NA	NA	0.020	0.020
	Toxaphene	0.000006	NA	NA	ND	ND

Notes:

Guidance levels based on NYSDEC TOGS 1.1.1.

<sup>#</sup> Applies to the sum of Aldrin and Dieldrin.

\*Guidance level based on protection of source of drinking water (other protection values not established)

\*\* Sample with duplicate analysis

ND = Not Detected    NA = Not Analyzed    NE = Not Established

**Table 40: VOCs in Surface Water**All results provided in µg/L. Results in **bold** exceed designated guidance levels.

Compound (USEPA Method 8260)	Guidance Level	Sample Identification			
		SW-1	SW-2	SW-3**	SW-4
1,1,1-Trichloroethane	5*	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	0.2*	ND	ND	ND	ND
1,1,2-Trichloroethane	1*	ND	ND	ND	ND
1,1-Dichloroethane	5*	ND	ND	ND	ND
1,1-Dichloroethene	0.7*	ND	ND	ND	ND
1,2-Dichloroethane	0.6*	ND	ND	ND	ND
1,2-Dichloroethene (cis)	5*	ND	ND	ND	ND
1,2-Dichloroethene (trans)	5*	ND	ND	ND	ND
1,2-Dichloropropane	1*	ND	ND	ND	ND
1,3-Dichloropropene (cis)	0.4* <sup>#</sup>	ND	ND	ND	ND
1,3-Dichloropropene (trans)	0.4* <sup>#</sup>	ND	ND	ND	ND
2-Chloroethylvinylether	NE	ND	ND	ND	ND
Acrolein	5*	ND	ND	ND	ND
Acrylonitrile	0.07*	ND	ND	ND	ND
Benzene	10	ND	ND	ND	ND
Bromodichloromethane	50*	ND	ND	ND	ND
Bromoform	50*	ND	ND	ND	ND
Bromomethane	5*	ND	ND	ND	ND
Carbon tetrachloride	0.4*	ND	ND	ND	ND
Chlorobenzene	400	ND	ND	ND	ND
Chloroethane	5*	ND	ND	ND	ND
Chloroform	7*	ND	ND	ND	ND
Chloromethane	5*	ND	ND	ND	ND
Dibromochloromethane	50*	ND	ND	ND	ND
Ethylbenzene	5*	ND	ND	ND	ND
Methylene chloride	200	ND	ND	ND	ND
total Xylenes	5*	ND	ND	ND	ND
Tetrachloroethene	1	ND	ND	ND	ND
Toluene	6,000	ND	ND	ND	ND
Trichloroethene	40	ND	ND	ND	ND
Vinyl chloride	0.3*	ND	ND	ND	ND
Total TICs	NE	ND	ND	7	ND
Total Unknown Compounds	NE	ND	ND	ND	ND
Total VOCs	NE	ND	ND	7	ND

Notes:

Guidance levels based on NYSDEC TOGS 1.1.1.

\*Guidance level based on protection of source of drinking water (other protection values not established).

\*\* Sample with duplicate analysis

<sup>#</sup>Applies to the sum of cis- and trans-1,3-dichloropropene.

ND = Not Detected NE = Not Established TICs = Tentatively Identified Compounds

Table 41: SVOCs in Surface Water

All results provided in µg/L. Results in **bold** exceed designated guidance levels.

Compound (USEPA Method 8270)	Guidance Level	Sample Identification			
		SW-1	SW-2	SW-3***	SW-4
1,2,4-Trichlorobenzene	5*	ND	ND	ND	ND
1,2-Dichlorobenzene	3*	ND	ND	ND	ND
1,2-Diphenylhydrazine	0.05*	ND	ND	ND	ND
1,3-Dichlorobenzene	3*	ND	ND	ND	ND
1,4-Dichlorobenzene	3*	ND	ND	ND	ND
2,2-oxybis (1-chloropropane)	5*	ND	ND	ND	ND
2,4-Dichlorophenol	5*	ND	ND	ND	ND
2,4-Dimethylphenol	1,000	ND	ND	ND	ND
2,4-Dinitrophenol	400	ND	ND	ND	ND
2,4-Dinitrotoluene	5*	ND	ND	ND	ND
2,6-Dinitrotoluene	0.07*	ND	ND	ND	ND
2-Chloronaphthalene	10**	ND	ND	ND	ND
3,3-Dichlorobenzidine	5*	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	ND	ND	ND	ND
Acenaphthene	20**	ND	ND	ND	ND
Acenaphthylene	NE	ND	ND	ND	ND
Anthracene	50*	ND	ND	ND	ND
Benzidine	0.02*	ND	ND	ND	ND
Benzo(a)anthracene	0.002*	ND	ND	ND	ND
Benzo(a)pyrene	0.0012	ND	ND	ND	ND
Benzo(b)fluoranthene	0.002*	ND	ND	ND	ND
Benzo(ghi)perylene	NE	ND	ND	ND	ND
Benzo(k)fluoranthene	0.002*	ND	ND	ND	ND
Bis(2-chloroethoxy)methane	5*	ND	ND	ND	ND
Bis(2-chloroethyl)ether	0.03*	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	5*	ND	ND	ND	ND
Butyl benzyl phthalate	50*	ND	ND	ND	ND
Chrysene	0.002*	ND	ND	ND	ND
Dibenzo(a,h)anthracene	NE	ND	ND	ND	ND
Diethyl phthalate	50*	ND	ND	ND	ND
Dimethyl phthalate	50*	ND	ND	ND	ND
Di-n-butyl phthalate	50*	ND	ND	ND	ND
Di-n-octyl phthalate	50*	ND	ND	ND	ND
Fluoranthene	50*	ND	ND	ND	ND
Fluorene	50*	ND	ND	ND	ND
Hexachlorobenzene	0.00003	ND	ND	ND	ND
Hexachlorobutadiene	0.01	ND	ND	ND	ND
Hexachlorocyclopentadiene	5*	ND	ND	ND	ND
Hexachloroethane	0.6	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	0.002*	ND	ND	ND	ND
Isophorone	50*	ND	ND	ND	ND
Naphthalene	10**	ND	ND	ND	ND
Nitrobenzene	0.4*	ND	ND	ND	ND
n-Nitrosodimethylamine	NE	ND	ND	ND	ND
n-Nitroso-di-n-propylamine	NE	ND	ND	ND	ND
n-Nitrosodiphenylamine	50*	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE**#	ND	ND	ND	ND
2-Chlorophenol	NE**#	ND	ND	ND	ND
2-Nitrophenol	NE**#	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE**#	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE**#	ND	ND	ND	ND
4-Nitrophenol	NE**#	ND	ND	ND	ND
Pentachlorophenol	1**#	ND	ND	ND	ND
Phenol	1**#	ND	ND	ND	ND
Phenanthrene	50*	ND	ND	ND	ND
Pyrene	50*	ND	ND	ND	ND
Total TICs	NE	9	ND	ND	ND
Total Unknown Compounds	NE	ND	ND	ND	ND
Total SVOCs	NE	9	ND	ND	ND
Total PAHs	NE	ND	ND	ND	ND
Total Carcinogenic PAHs	NE	ND	ND	ND	ND

Notes:

Guidance levels based on NYSDECTOGS 1.1.1.

\*Guidance level based on protection of source of drinking water (other protection values not established).

\*\*Guidance level based on protection of aesthetic values (other protection values not established).

\*\*\* Sample with duplicate analysis

# Sum of phenolic compounds not to exceed 1µg/L.

ND = Not Detected NE = Not Established TICs = Tentatively Identified Compounds

**Table 42: PCBs in Sediments**

Results provided in mg/kg (parts per million). Results shown in **bold** exceed probable effect concentration guidance level.

PCB Compound (USEPA Method 8082)	Sample Identification									
	Core 1 (3')	Core 2 (2.8')	Core 3 (0-2.5')**	Core 3 (5.5')	Core 4 (4.5')	Core 4 (6.5')	Core 5 (2')	Core 6 (5.5')	Core 7 (0.5')	Core 7 (4')
PCB 1016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1221	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1232	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1242	ND	ND	0.61	ND	ND	ND	0.290	ND	0.470	ND
PCB 1248	ND	0.990	0.960	0.060	0.045	ND	ND	ND	ND	0.110
PCB 1254	ND	0.920	0.260	ND	ND	ND	0.170	ND	0.240	0.150
PCB 1260	ND	0.260	0.068	ND	ND	ND	0.074	ND	0.075	0.095
PCB 1268	ND	ND	ND	0.072	0.036	0.041	ND	ND	ND	ND
PCB, Total	ND	2.170	1.898	0.132	0.081	0.041	0.534	ND	0.785	0.355

PCB Compound (USEPA Method 8082)	Sample Identification								
	Core 8-1 (0.5')	Core 8-1 (2')	Core 8-2 (1')	Core 9 (2.7')	Core 10 (0.5')	Core 10 (5')	Core 11 (2')	Core 11 (4')	Core 12 (5.5-6')
PCB 1016	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1221	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1232	ND	ND	ND	ND	ND	ND	ND	ND	ND
PCB 1242	ND	ND	6.400	ND	7.000	ND	1.100	4.800	0.070
PCB 1248	0.200	0.270	ND	ND	ND	ND	ND	ND	ND
PCB 1254	0.270	0.540	2.000	ND	1.500	ND	0.400	1.200	ND
PCB 1260	ND	ND	0.390	ND	ND	ND	0.120	0.370	ND
PCB 1268	ND	ND	ND	ND	ND	ND	ND	ND	0.220
PCB, Total	0.470	0.810	8.790	ND	8.500	ND	1.620	6.370	0.290

Notes:

Guidance level for total PCBs = 0.68 ppm, based on DECSQG.

\*\* = Sample with duplicate analysis

ND = Not Detected



**Table 43: Target Analyte List (TAL) Metals in Sediments**Results provided in mg/kg (parts per million). Results shown in **bold** exceed Probable Effect Concentration (PEC) guidance levels.

Metal	Guidance Levels	Sample Identification									
		Core 1 (3')	Core 2 (2.8')	Core 3 (0-2.5')**	Core 3 (5.5')	Core 4 (4.5')	Core 4 (6.5')	Core 5 (2')	Core 6 (5.5')	Core 7 (0.5')	Core 7 (4')
Aluminum	NE	12,900	18,900	16,850	20,200	16,000	18,000	19,000	12,200	16,600	18,800
Antimony	NE	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
Arsenic	33	6.8	16.4	8.6	18.6	23.4	16.4	10.3	7.6	7.9	17.5
Barium	NE	40.0	146	132	171	203	156	138	34.6	141	151
Beryllium	NE	ND	ND	ND	1.1	ND	0.98	ND	ND	ND	1.0
Cadmium	4.98	1.5	<b>6.4</b>	ND	4.7	4.0	3.4	3.9	ND	3.0	4.0
Calcium	NE	2,650	5,100	6,505	5,840	5,410	4,530	5,490	4,830	6,160	5,450
Chromium	111	20.9	<b>144</b>	62.3	<b>169</b>	89.1	69.7	<b>114</b>	20.4	58.5	<b>140</b>
Cobalt	NE	13.3	18.4	16.8	19.2	16.6	18.2	18.1	13.8	16.3	18.4
Copper	149	16.3	105	67.8	120	110	86.3	80.6	19.1	62.3	110
Iron	NE	27,800	36,400	33,750	40,000	36,300	37,400	36,300	25,200	32,300	37,100
Lead	128	11.8	<b>186</b>	63.8	<b>152</b>	<b>452</b>	<b>297</b>	97.5	14.6	58.8	<b>165</b>
Magnesium	NE	5,470	7,180	6,995	7,380	5,940	6,740	7,680	6,230	6,900	7,200
Manganese	NE	449	1,030	1,355	1,750	1,270	810	966	579	1,160	1,280
Mercury	1.06	ND*	0.73	0.78	0.74	<b>1.1</b>	0.72	0.048	0.46	0.99	0.99
Nickel	48.6	25.9	42.1	36.9	41.0	35.4	37.1	44.3	26.3	35.5	40.2
Potassium	NE	1,240	1,480	1,370	1,690	1,390	1,560	1,570	1,170	1,340	1,510
Selenium	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	NE	ND	1.1	ND	1.2	ND	ND	1.0	ND	ND	1.2
Sodium	NE	430	241	222	273	269	346	305	415	210	197
Thallium	NE	11.2	14.5	ND	11.9	15.2	14.9	11.9	9.3	16.3	14.7
Vanadium	NE	22.0	33.6	29.1	33.5	30.6	29.5	40.7	23.7	28.1	32.4
Zinc	459	75.2	371	205	347	377	305	248	77.0	195	340

Metal	Guidance Levels	Sample Identification								
		Core 8-1 (0.5')	Core 8-1 (2')	Core 8-2 (1')	Core 9 (2.7')	Core 10 (0.5')	Core 10 (5')	Core 11 (2')	Core 11 (4')	Core 12 (5.5-6')
Aluminum	NE	6,600	13,600	19,600	16,300	18,400	14,100	17,400	19,500	18,500
Antimony	NE	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*	ND*
Arsenic	33	4.0	11.0	12.2	6.8	17.1	7.4	7.6	10.2	16.5
Barium	NE	476	865	213	92.8	187	38.3	132	171	176
Beryllium	NE	ND	0.90	ND	ND	ND	ND	0.98	1.0	ND
Cadmium	4.98	ND	2.7	<b>9.3</b>	ND	<b>9.3</b>	ND	3.7	<b>6.5</b>	3.5
Calcium	NE	24,700	11,300	6,980	3,350	6,160	4,450	5,750	6,430	4,700
Chromium	111	11.8	35.3	<b>226</b>	27.4	<b>203</b>	22.8	96.1	<b>154</b>	70.7
Cobalt	NE	6.2	14.6	18.1	15.0	18.3	14.2	17.7	19.7	18.9
Copper	149	<b>205</b>	<b>176</b>	125	28.7	115	19.6	78.3	104	85.6
Iron	NE	14,300	26,900	37,900	30,500	35,400	28,700	34,200	37,600	40,800
Lead	128	<b>172</b>	<b>449</b>	<b>218</b>	42.1	<b>174</b>	13.8	84.2	<b>154</b>	<b>629</b>
Magnesium	NE	9,910	7,470	8,070	5,980	7,600	7,040	7,160	7,800	6,910
Manganese	NE	199	987	1,210	979	1,010	572	1,200	1,250	1,120
Mercury	1.06	0.19	0.59	0.86	0.23	0.10	ND*	0.50	0.84	1.0
Nickel	48.6	15.6	31.6	45.6	31.4	<b>48.9</b>	28.7	41.6	46.9	38.7
Potassium	NE	524	1,030	1,540	1,310	1,580	1,570	1,290	1,450	1,530
Selenium	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND
Silver	NE	ND	ND	ND	ND	1.6	ND	1.1	1.5	ND
Sodium	NE	158	215	216	411	375	6227	220	256	244
Thallium	NE	6.9	11.4	13.5	11.3	12.6	12.8	11.8	13.5	15.2
Vanadium	NE	13.0	27.4	41.5	26.1	37.1	26.3	35.0	38.9	30.1
Zinc	459	168	438	439	91.3	396	79.1	239	363	298

Notes:

Guidance levels based on PECs provided in DECSQG.

\* = Data not suited for analysis

\*\* = Sample with duplicate analysis

ND = Not Detected NE = Not Established

Table 44: SVOCs in Sediments

Results provided in mg/kg (parts per million). Results shown in **bold** exceed Probable Effect Concentration (PEC) guidance levels.

Compound (USEPA Method 8270)	Guidance Levels	Sample Identification																		
		Core 1 (3')	Core 2 (2.8')	Core 3 (0-2.5')**	Core 3 (5.5')	Core 4 (4.5')	Core 4 (6.5')	Core 5 (2')	Core 6 (5.5')	Core 7 (0.5')	Core 7 (4')	Core 8-1 (0.5')	Core 8-1 (2')	Core 8-2 (1')	Core 9 (2.7')	Core 10 (0.5')	Core 10 (5')	Core 11 (2')	Core 11 (4')	Core 12 (5.5-6')
1,2,4-Trichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,2 - Diphenylhydrazine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	NE	ND	ND	ND	ND	0.220	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,2-oxybis (1-chloropropane)	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dichlorophenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dimethylphenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrophenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4-Dinitrotoluene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,4,6-Trichlorophenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2,6-Dinitrotoluene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chloronaphthalene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Chlorophenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
2-Nitrophenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3,3-Dichlorobenzidine	NE	0.074	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4,6-Dinitro-2-methylphenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Bromophenyl phenyl ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chloro-3-methylphenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Chlorophenyl phenyl ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4-Nitrophenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthene	NE	ND	ND	ND	ND	0.160	0.260	ND	ND	ND	0.100	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	NE	ND	0.440	0.160	0.210	0.350	0.340	0.250	ND	0.170	0.430	0.230	0.130	0.240	ND	0.260	ND	ND	ND	0.160
Anthracene	NE	ND	0.460	ND	0.490	0.520	0.740	0.270	ND	0.140	0.450	0.150	0.180	0.400	ND	0.510	ND	ND	0.110	0.200
Benzidine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	1.050	ND	0.710	0.300	0.670	1.300	1.700	0.450	ND	0.270	0.660	0.550	0.650	0.730	ND	0.610	ND	0.130	0.190	0.420
Benzo(a)pyrene	1.450	ND	0.770	0.370	0.720	1.200	1.600	0.440	ND	0.280	0.700	0.510	0.630	0.820	ND	0.710	ND	0.170	0.170	ND
Benzo(b)fluoranthene	NE	ND	0.660	0.270	0.640	1.100	1.300	0.420	ND	0.270	0.580	0.400	0.640	0.720	ND	0.570	ND	ND	0.200	0.270
Benzo(ghi)perylene	NE	ND	0.300	0.175	0.500	1.300	0.600	0.190	ND	0.130	0.310	0.200	0.490	0.470	ND	0.380	ND	ND	0.130	0.260
Benzo(k)fluoranthene	NE	ND	0.580	0.340	0.570	0.670	1.300	0.370	ND	0.240	0.550	0.380	0.480	0.600	ND	0.700	ND	0.140	0.230	0.410
Bis(2-chloroethoxy)methane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-chloroethyl)ether	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl)phthalate	NE	ND	0.320	0.495	0.270	0.450	0.390	0.400	0.200	0.680	0.300	0.270	0.500	1.200	0.160	0.420	0.460	0.280	0.320	0.740
Butyl benzyl phthalate	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chrysene	1.290	ND	0.900	0.430	0.830	1.900	1.900	0.520	ND	0.330	0.830	0.580	0.790	0.950	ND	0.670	ND	0.190	0.260	0.440
Dibenzo(a h)anthracene	NE	ND	0.075	ND	0.140	0.220	0.220	ND	ND	ND	0.097	0.086	0.140	ND	ND	ND	ND	ND	ND	ND
Diethyl phthalate	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dimethyl phthalate	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Di-n-butyl phthalate	NE	ND	ND	ND	0.110	ND	ND	ND	ND	ND	ND	ND	0.200	ND	ND	ND	ND	ND	ND	ND
Di-n-octyl phthalate	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	2.230	ND	1.500	0.550	1.200	2.100	3.200	0.910	ND	0.570	1.300	0.860	1.000	1.400	ND	1.400	ND	0.210	0.230	0.700
Fluorene	NE	ND	0.150	ND	0.150	0.240	0.270	0.096	ND	ND	0.170	ND	0.082	ND	ND	ND	ND	ND	ND	0.091
Hexachlorobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachlorocyclopentadiene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Hexachloroethane	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Indeno(1 2 3-cd)pyrene	NE	ND	0.360	0.170	0.580	1.100	0.830	0.250	ND	0.170	0.360	0.260	0.530	0.410	ND	0.370	ND	0.100	0.150	0.260
Isophorone	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Naphthalene	NE	ND	0.220	ND	0.250	0.330	0.240	ND	ND	ND	0.290	0.120	0.170	ND	ND	ND	ND	ND	ND	ND
Nitrobenzene	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Nitrosodimethylamine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Nitroso-di-n-propylamine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Nitrosodiphenylamine	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pentachlorophenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	1.170	ND	0.940	0.275	0.830	1.500	2.000	0.460	ND	0.270	0.900	0.480	0.810	0.900	ND	0.820	ND	0.130	0.170	0.470
Phenol	NE	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	1.520	ND	1.200	0.475	0.990	2.600	2.100	0.630	ND	0.390	1.000	0.650	1.100	0.960	ND	0.830	ND	0.160	0.280	0.580
Total TICs	NE	6.060	6.800	12.990	7.330	ND	14.680	5.030	6.600	6.430	2.020	3.180	2.330	6.400	2.300	1.600	2.100	ND	1.300	1.270
Total Unknown Compounds	NE	26.910	38.640	50.120	36.030	56.220	35.370	41.890	29.990	43.310	42.870	31.390	11.300	41.910	14.180	36.500	15.400	23.440	28.990	24.830
Total SVOCs	NE	33.044	55.025	67.120	52.510	73.480	69.040	52.576	36.790	53.650	53.917	40.296	22.152	58.110	16.640	46.350	17.960	24.950	32.730	31.101
Total PAHs	22.800	ND	9.265	3.515	8.770	16.590	18.600	5.256	ND	3.230	8.727	5.456	7.822	8.600	ND	7.830	ND	1.230	2.120	4.261
Total Carcinogenic PAHs	NE	ND	4.055	1.880	4.150	7.490	8.850	2.450	ND	1.560	3.777	2.766	3.860	4.230	ND	3.630	ND	0.730	1.200	1.800

Notes:

Guidance levels based on PECs provided in [DECSQG](#).

\*\* = Sample with duplicate analysis

NE = Not Established ND = Not Detected TICs = Tentatively Identified Compounds

**Table 45: Pesticides in Sediments**

Results provided in mg/kg (parts per million). Results shown in **bold** exceed Probable Effect Concentration (PEC) guidance levels.

Compound (USEPA Method 8081)	Guidance Levels	Sample Identification	
		Core-3 (0-2.5')***	Core-4 (4.5')
4,4'-DDD	NE	0.0048	0.00087
4,4'-DDE	NE	0.0084	0.0019
4,4'-DDT	NE	0.0063	0.0028
Aldrin	NE	0.012	ND
alpha-BHC	NE	0.0029	ND
beta-BHC	NE	0.0036	0.0015
Total Chlordane*	0.017600	ND	ND
delta-BHC	NE	0.032	0.012
Dieldrin	0.061800	0.0025	0.00099
Endosulfan I	NE	0.00068	0.0027
Endosulfan II	NE	0.0015	ND
Endosulfan sulfate	NE	ND	ND
Endrin	0.207000	ND	ND
Endrin aldehyde	NE	ND	ND
gamma-BHC (Lindane)	0.004990	ND	0.0065
Heptachlor	NE	0.0056	ND
Heptachlor Epoxide	0.016000	0.016	ND
Toxaphene	NE	ND	ND
Total DDT**	0.572000	0.0195	0.00557

Notes:

Guidance levels based on PECs provided in DECSQG.

\* Sum of oxychlordane, alpha and gamma chlordane, and cis and trans nonachlor.

\*\* Sum of 4,4'- DDE, 4,4'- DDD, and 4,4'- DDT.

\*\*\* Sample with duplicate analysis

ND = Not Detected    NE = Not Established

**Table 46: VOCs in Sediments**All results provided in mg/kg (parts per million). Results in **bold** exceed designated guidance levels.

Compound (USEPA Method 8260)	Sample Identification					
	Core 2 (2.8')	Core 3 (0-2.5')**	Core 7 (0.5')	Core 7 (4')	Core 11 (4')	Core 12 (5.5-6')
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene (cis)	ND	ND	ND	ND	ND	ND
1,2-Dichloroethene (trans)	ND	ND	ND	ND	ND	ND
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND
1,3-Dichloropropene (cis)	ND	ND	ND	ND	ND	ND
1,3-Dichloropropene (trans)	ND	ND	ND	ND	ND	ND
2-Chloroethylvinylether	ND	ND	ND	ND	ND	ND
Acrolein	ND	ND	ND	ND	ND	ND
Acrylonitrile	ND	ND	ND	ND	ND	ND
Benzene	ND	ND	ND	ND	ND	ND
Bromodichloromethane	ND	ND	ND	ND	ND	ND
Bromoform	ND	ND	ND	ND	ND	ND
Bromomethane	ND	ND	ND	ND	ND	ND
Carbon tetrachloride	ND	ND	ND	ND	ND	ND
Chlorobenzene	ND	ND	ND	ND	ND	ND
Chloroethane	ND	ND	ND	ND	ND	ND
Chloroform	ND	ND	ND	ND	ND	ND
Chloromethane	ND	ND	ND	ND	ND	ND
Dibromochloromethane	ND	ND	ND	ND	ND	ND
Ethylbenzene	ND	ND	ND	ND	ND	ND
Methylene chloride	0.0057	0.0075	0.0089	0.0081	0.0098	0.0071
total Xylenes	ND	ND	ND	ND	ND	ND
Tetrachloroethene	ND	ND	ND	ND	ND	ND
Toluene	ND	ND	ND	ND	ND	ND
Trichloroethene	ND	ND	ND	ND	ND	ND
Vinyl chloride	ND	ND	ND	ND	ND	ND
Total TICs	0.0870	ND	ND	0.139	0.064	ND
Total Unknown Compounds	0.018	0.044	ND	0.530	0.022	ND
Total VOCs	0.111	0.052	0.0089	0.677	0.096	0.0071

Notes:

Guidance levels for VOCs are not established in DECSQG.

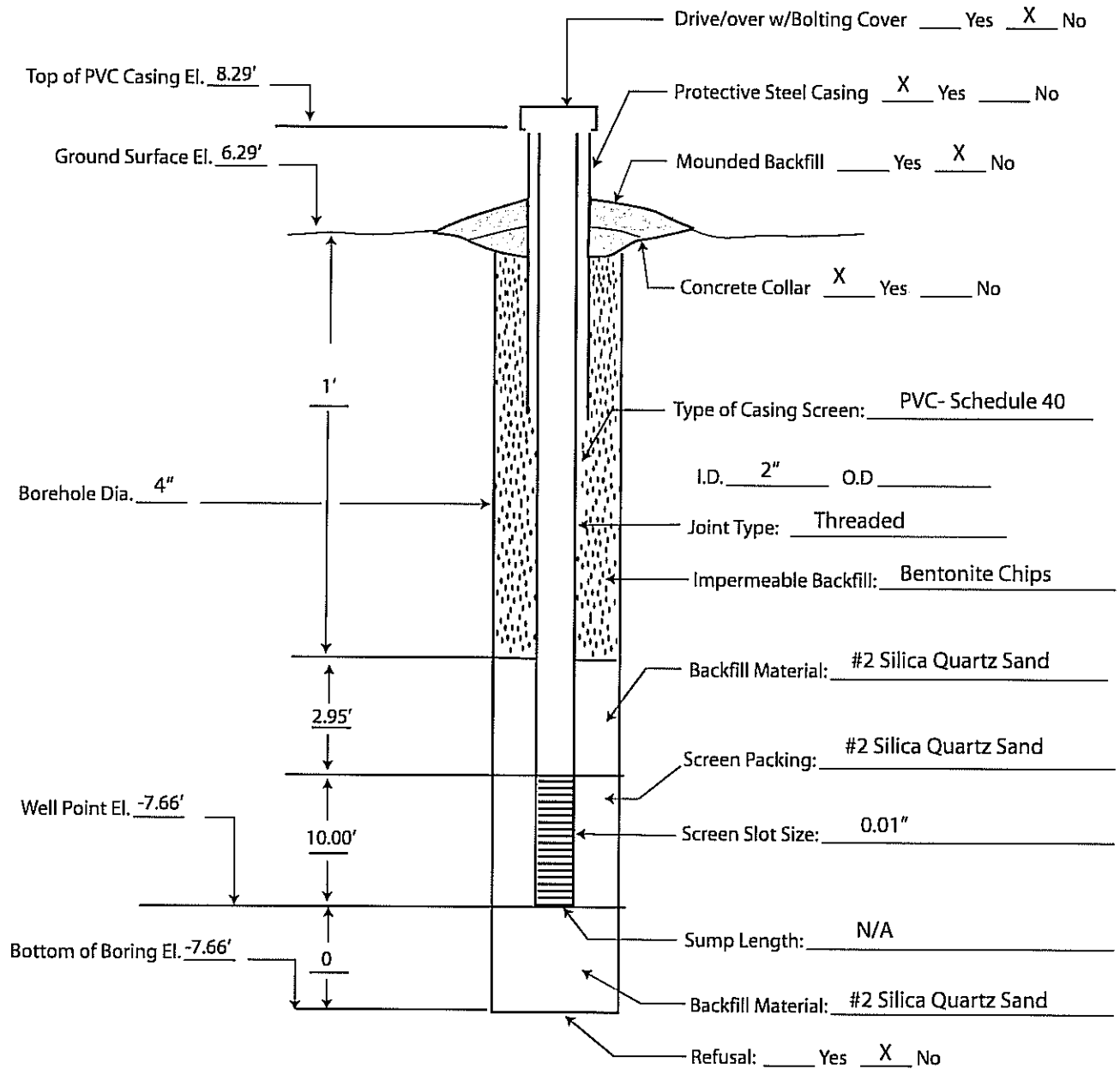
\*\* Sample with duplicate analysis

ND = Not Detected TICs = Tentatively Identified Compounds

**APPENDIX G**  
**Laboratory Reports (CD)**

## **APPENDIX H**

### **Monitoring Well Construction Logs**



## Materials Used:

Screen (PVC)	Bentonite Chips
Riser (PVC)	Concrete Mix
Plug (PVC)	Locking Exp. Plug
Silica Sand	Lock
	S/U

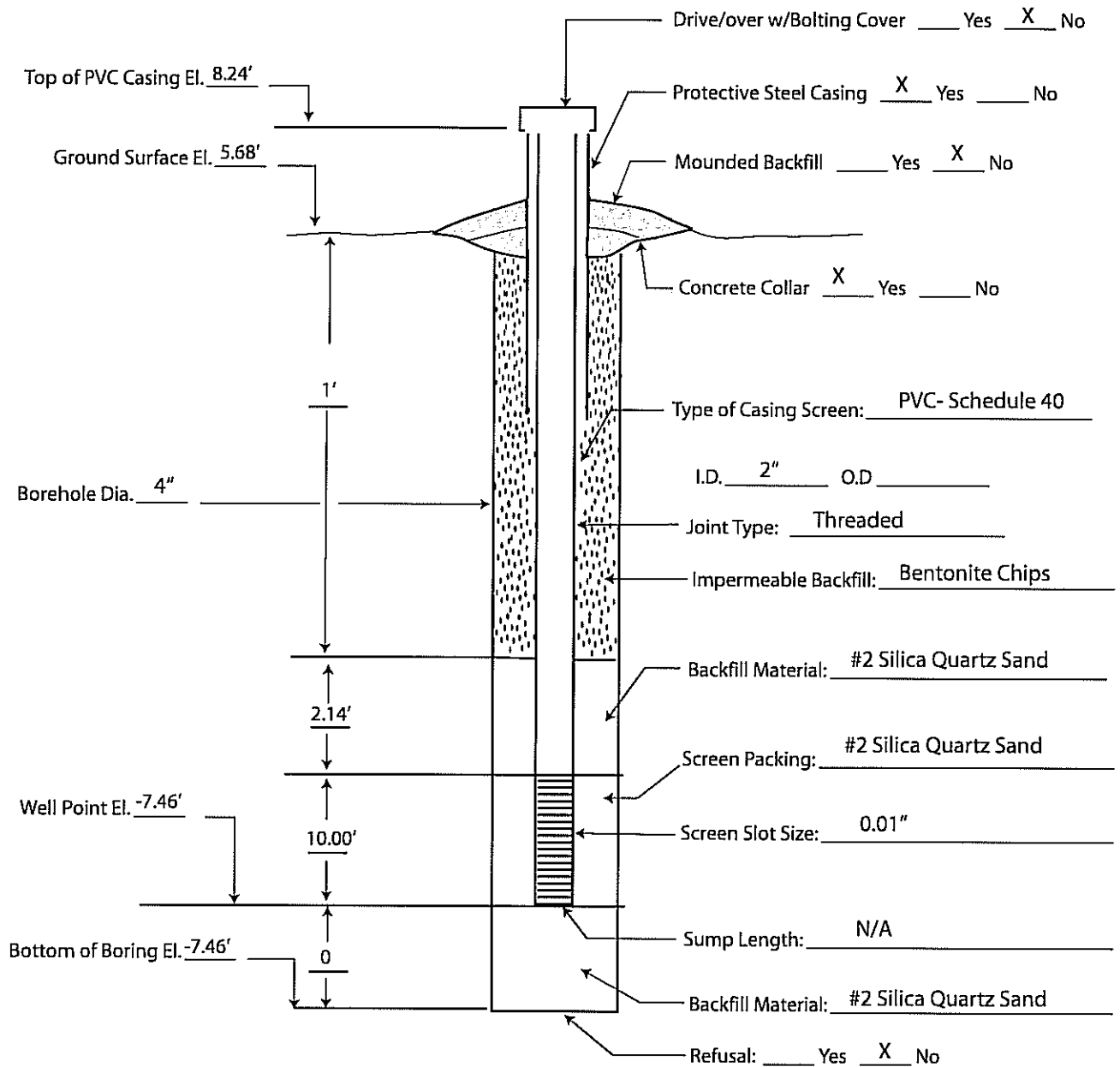
**Monitor Well MW-1 Installation Detail**

Long Dock Beacon Site  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

ESI File: SG96152.51

January 2007

Not to scale



## Materials Used:

Screen (PVC)	Bentonite Chips
Riser (PVC)	Concrete Mix
Plug (PVC)	Locking Exp. Plug
Silica Sand	Lock
	S/U

**Monitor Well MW-2 Installation Detail**

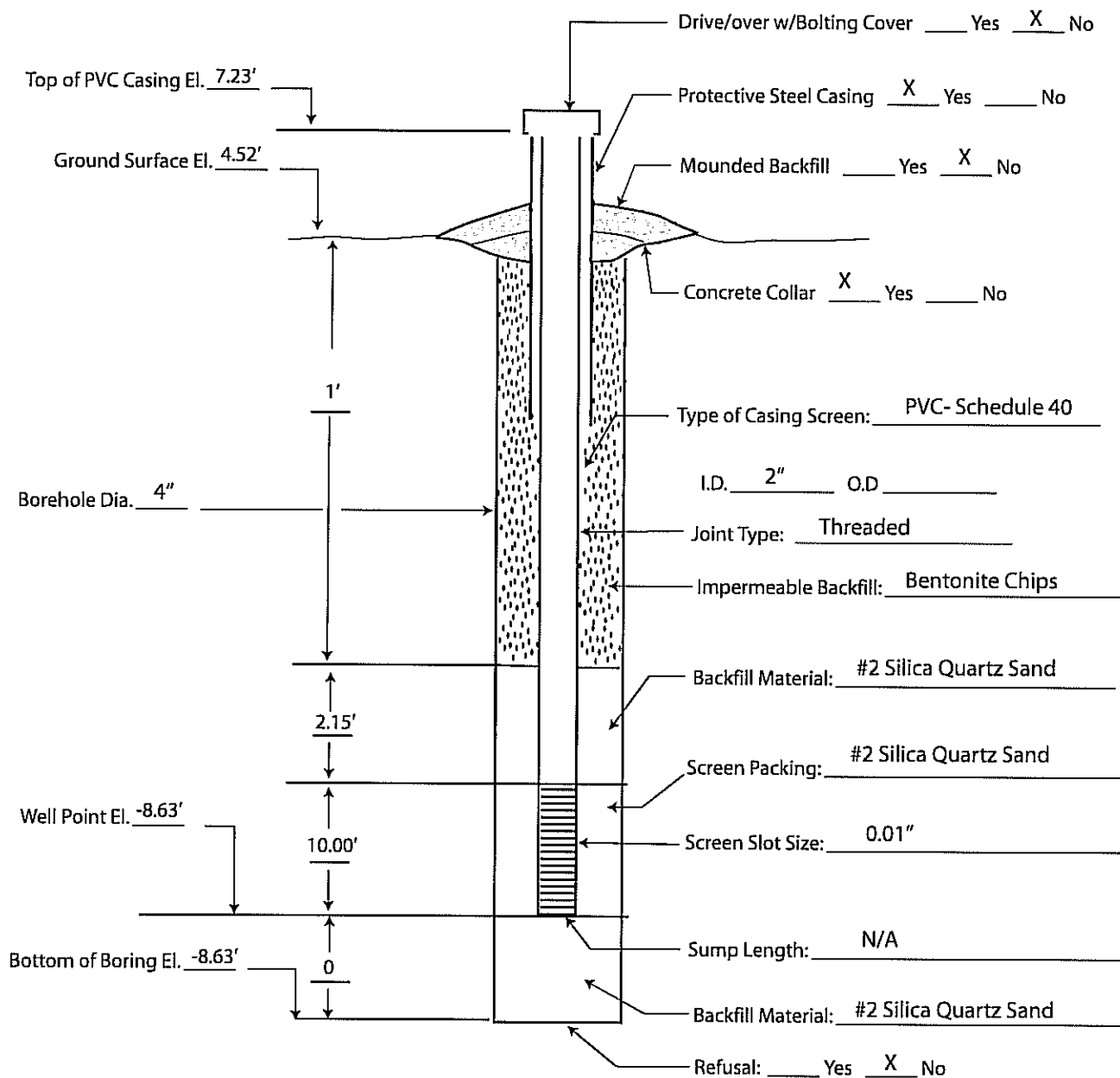
Long Dock Beacon Site  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

ESI File: SG96152.51

January 2007

Not to scale





## Materials Used:

Screen (PVC)	Bentonite Chips
Riser (PVC)	Concrete Mix
Plug (PVC)	Locking Exp. Plug
Silica Sand	Lock
	S/U

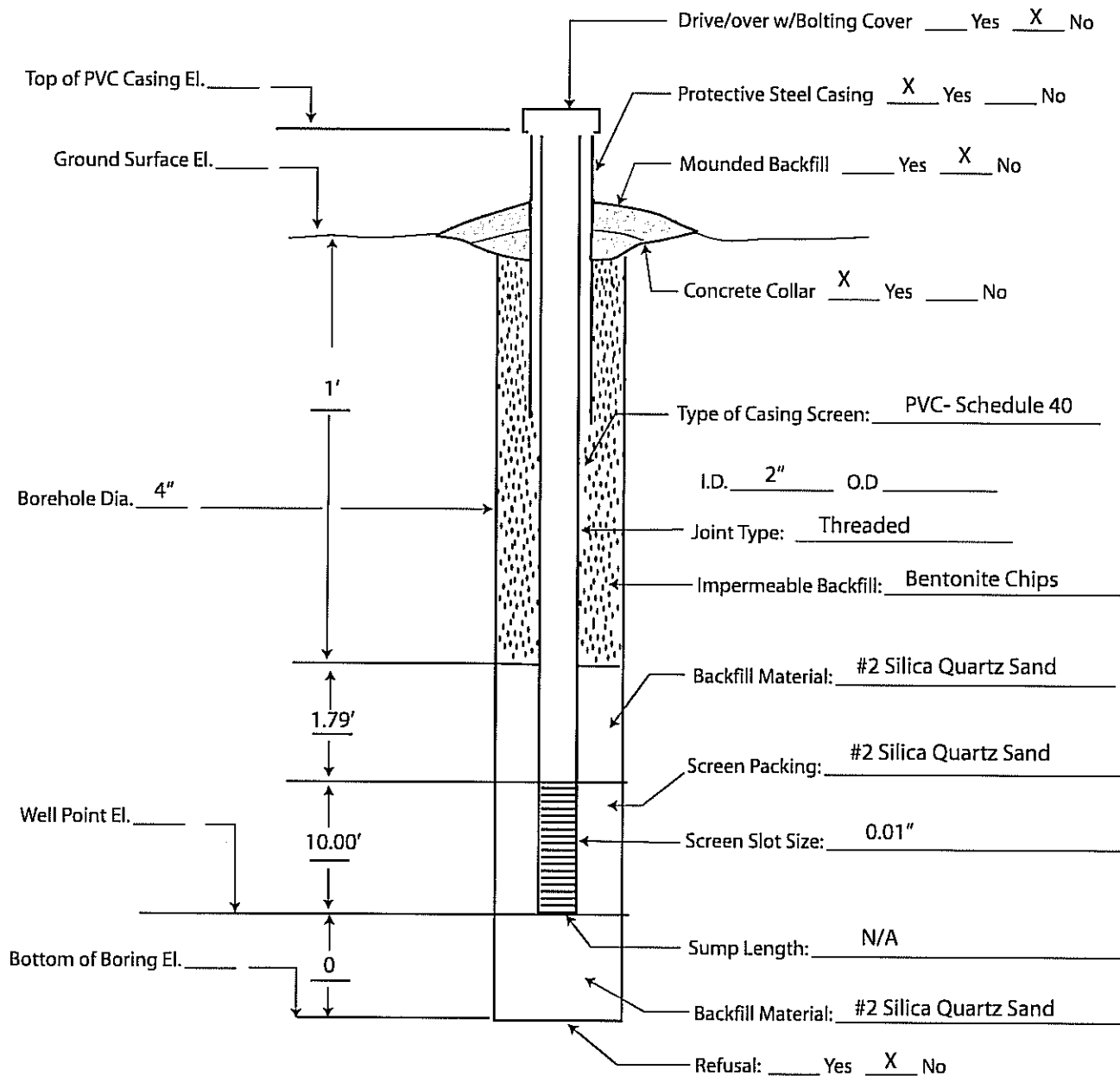
**Monitor Well MW-3 Installation Detail**

Long Dock Beacon Site  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

ESI File: SG96152.51

January 2007

Not to scale



## Materials Used:

Screen (PVC)	Bentonite Chips
Riser (PVC)	Concrete Mix
Plug (PVC)	Locking Exp. Plug
Silica Sand	Lock
	S/U

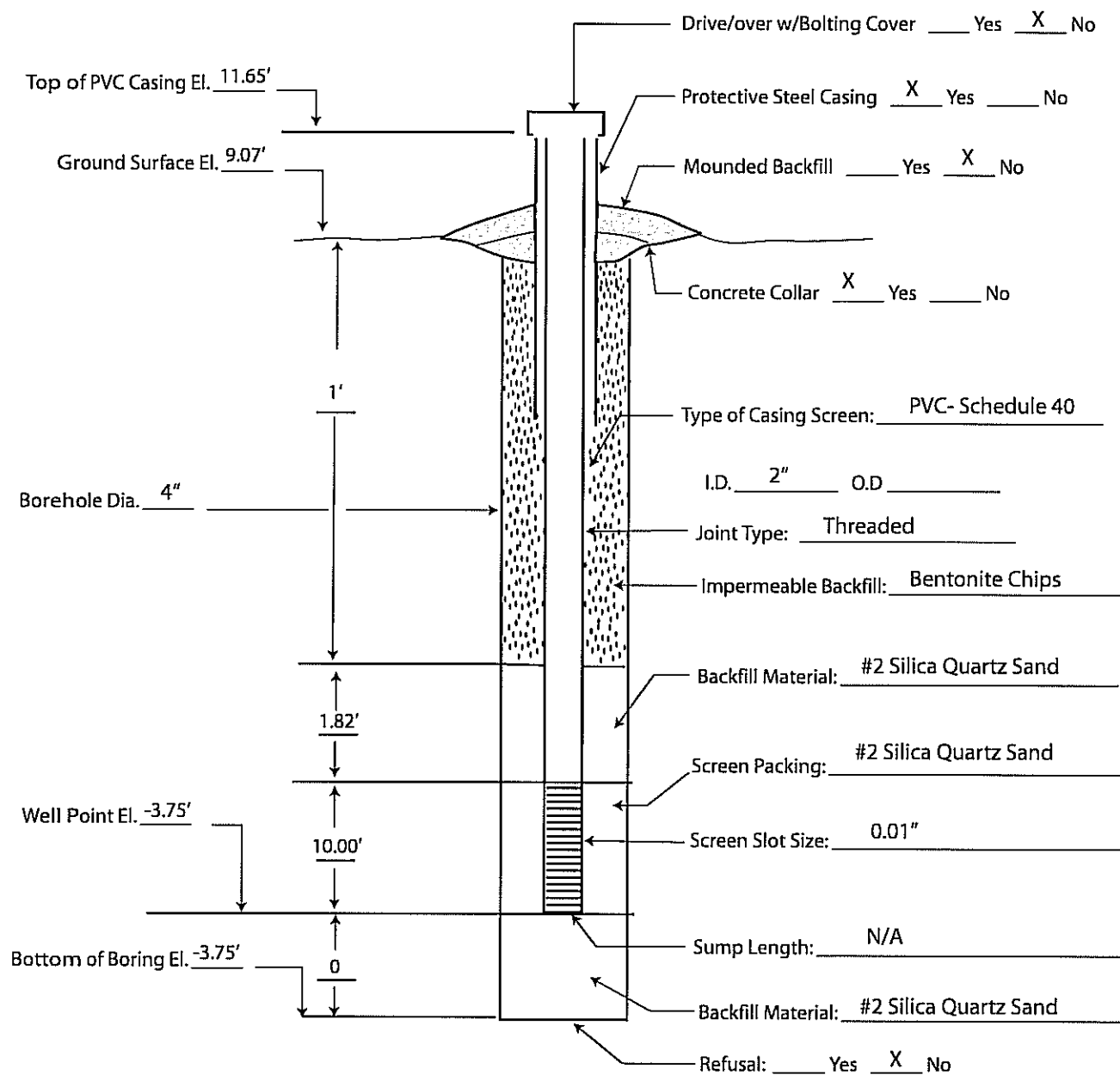
**Monitor Well MW-4 Installation Detail**

Long Dock Beacon Site  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

ESI File: SG96152.51

January 2007

Not to scale



## Materials Used:

Screen (PVC)	Bentonite Chips
Riser (PVC)	Concrete Mix
Plug (PVC)	Locking Exp. Plug
Silica Sand	Lock
	S/U

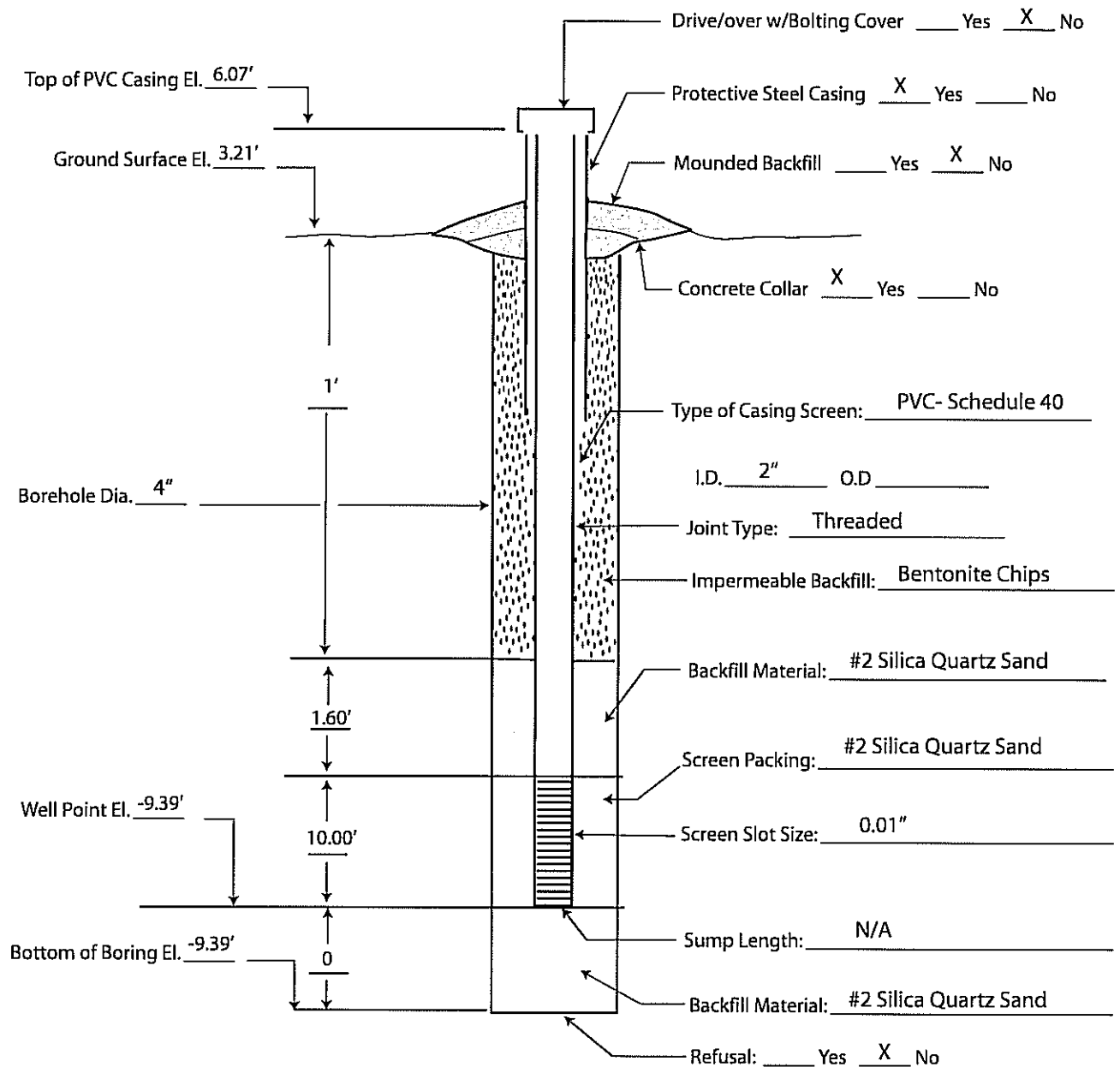
**Monitor Well MW-5 Installation Detail**

Long Dock Beacon Site  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

ESI File: SG96152.51

January 2007

Not to scale



## Materials Used:

Screen (PVC)	Bentonite Chips
Riser (PVC)	Concrete Mix
Plug (PVC)	Locking Exp. Plug
Silica Sand	Lock
	S/U

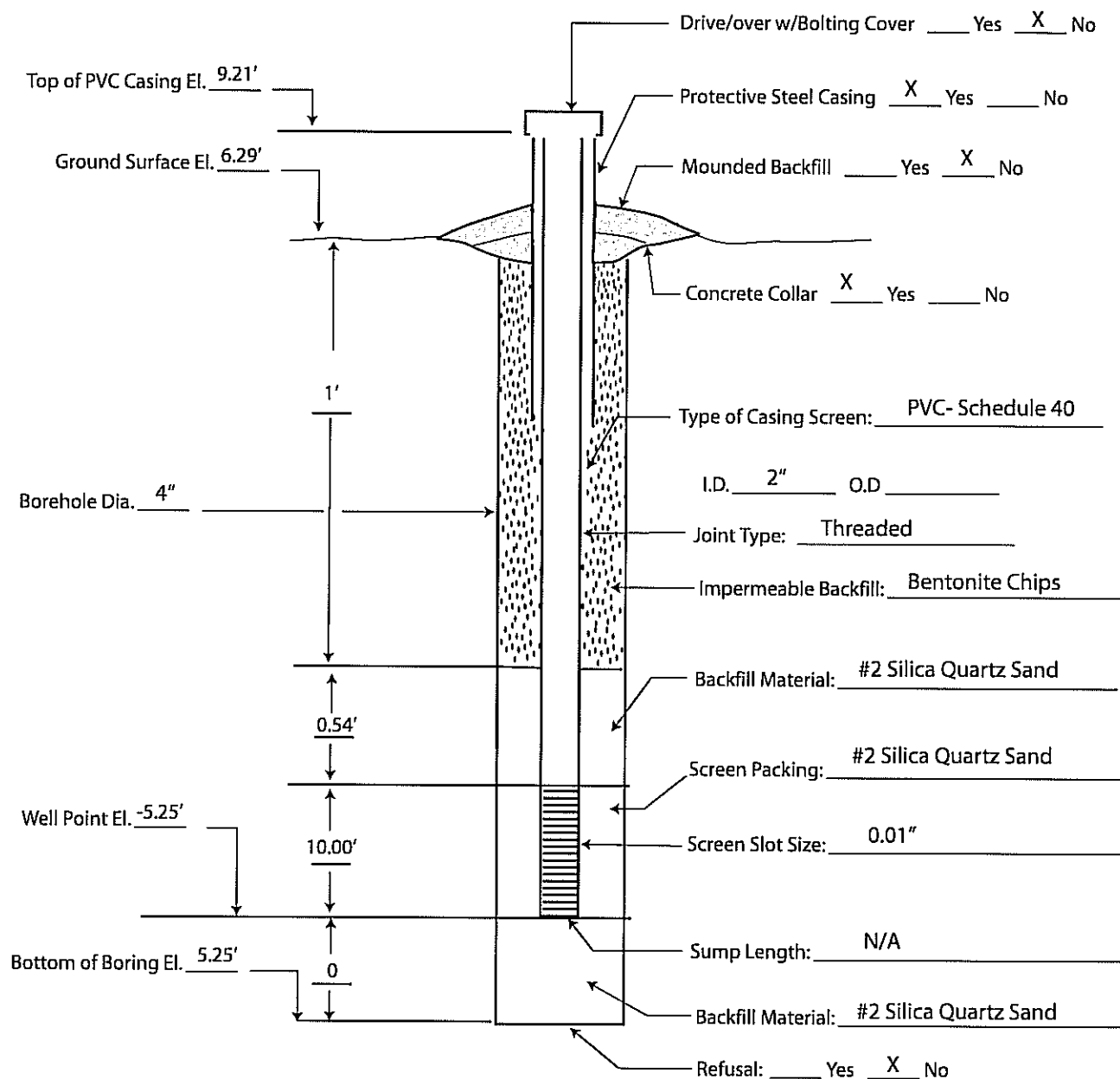
**Monitor Well MW-6 Installation Detail**

Long Dock Beacon Site  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

ESI File: SG96152.51

January 2007

Not to scale



## Materials Used:

Screen (PVC)	Bentonite Chips
Riser (PVC)	Concrete Mix
Plug (PVC)	Locking Exp. Plug
Silica Sand	Lock
	S/U

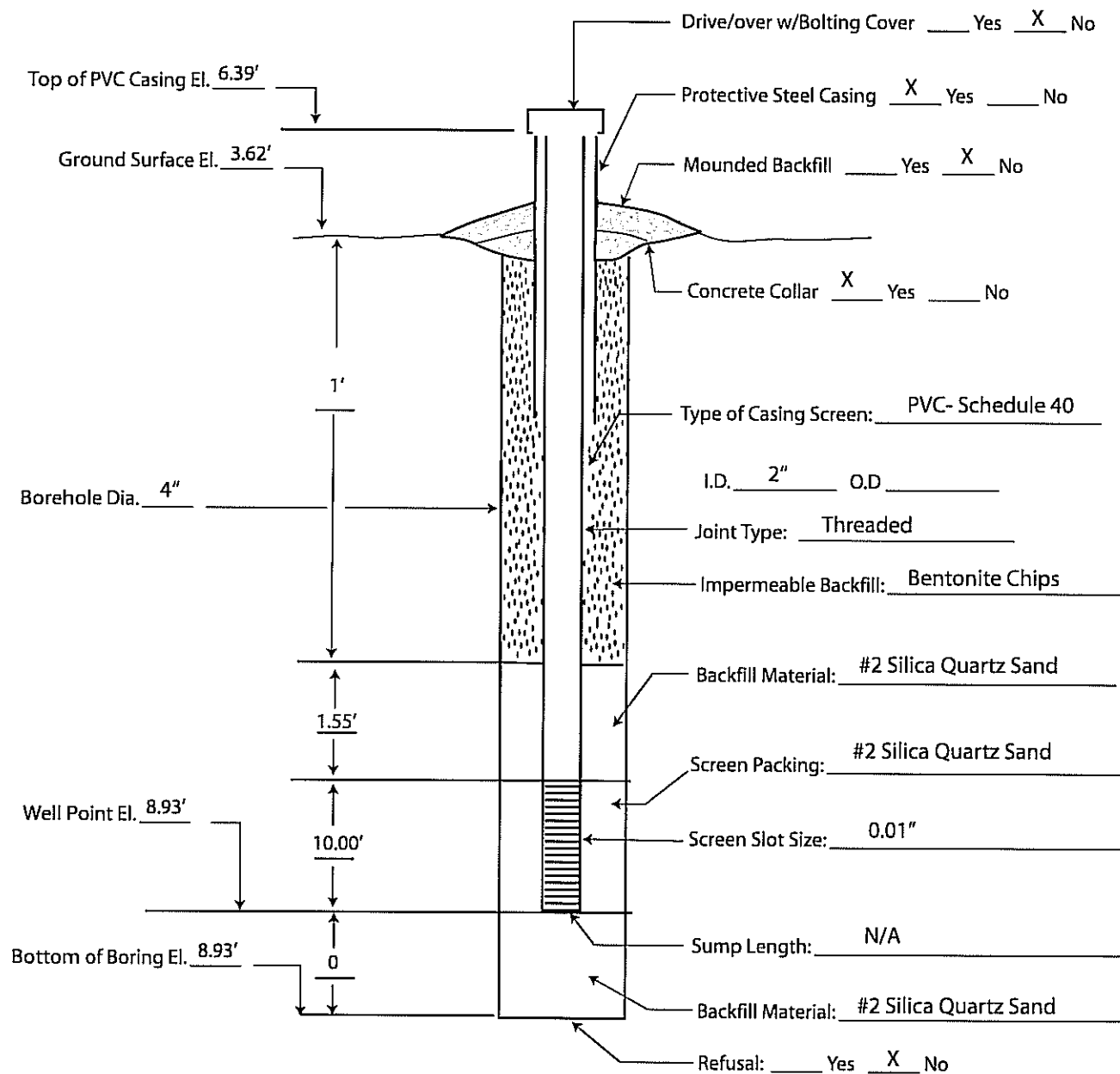
**Monitor Well MW-7 Installation Detail**

Long Dock Beacon Site  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

ESI File: SG96152.51

January 2007

Not to scale



## Materials Used:

Screen (PVC)	Bentonite Chips
Riser (PVC)	Concrete Mix
Plug (PVC)	Locking Exp. Plug
Silica Sand	Lock
	S/U

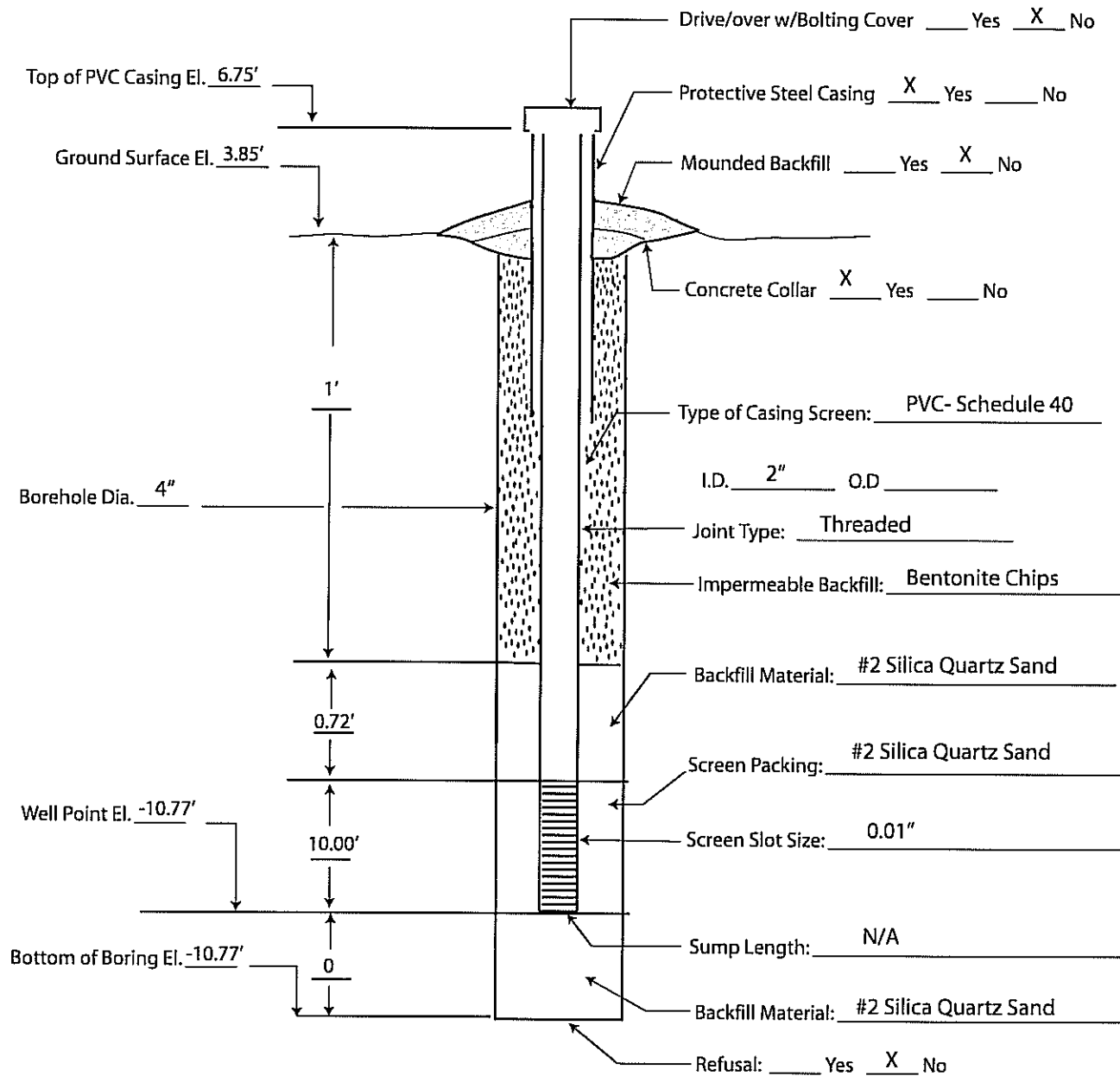
**Monitor Well MW-8 Installation Detail**

Long Dock Beacon Site  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

ESI File: SG96152.51

January 2007

Not to scale



Materials Used:

Screen (PVC)	Bentonite Chips
Riser (PVC)	Concrete Mix
Plug (PVC)	Locking Exp. Plug
Silica Sand	Lock
	S/U

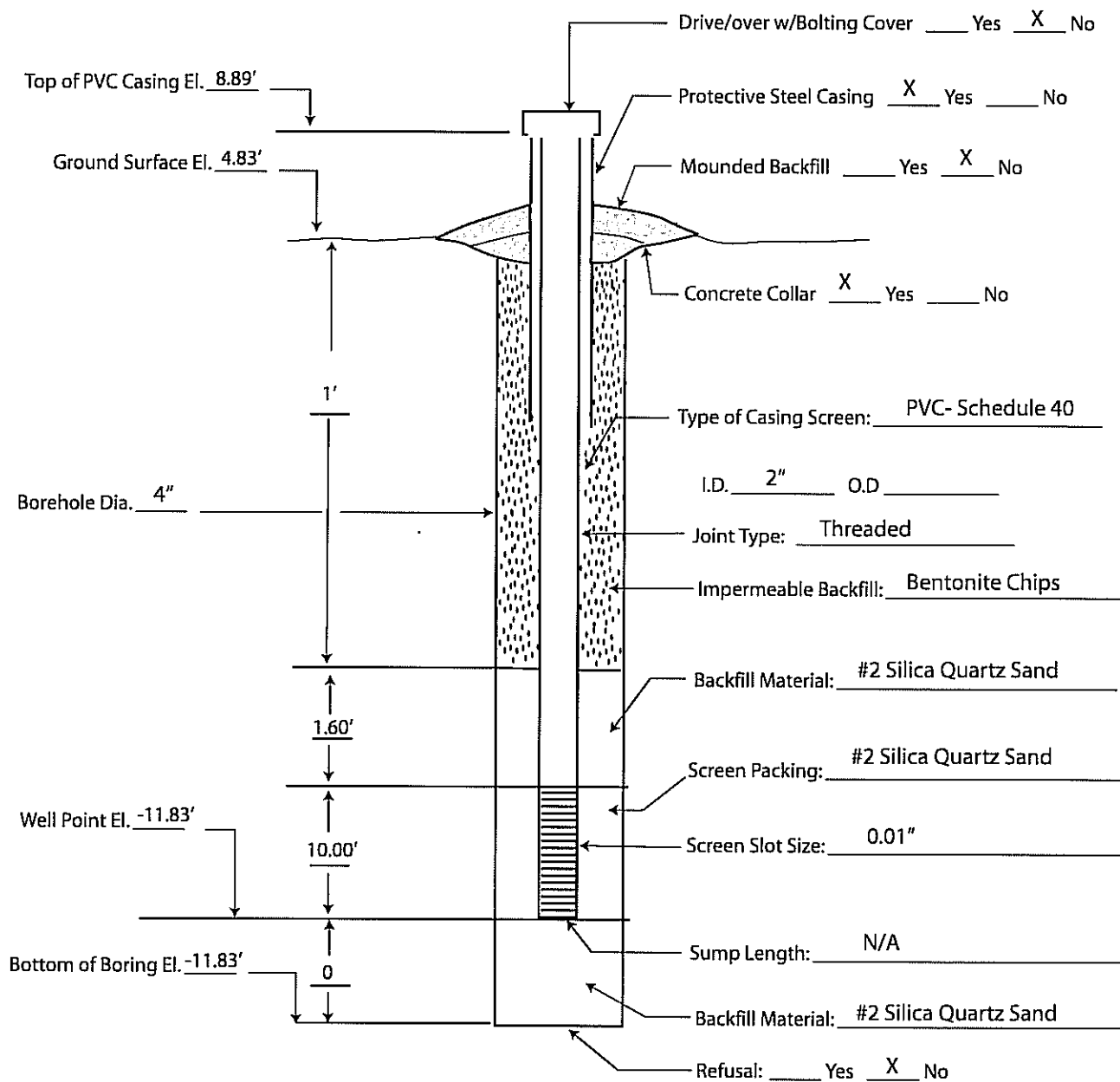
**Monitor Well MW-9 Installation Detail**

Long Dock Beacon Site  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

ESI File: SG96152.51

April 2007

Not to scale



## Materials Used:

Screen (PVC)	Bentonite Chips
Riser (PVC)	Concrete Mix
Plug (PVC)	Locking Exp. Plug
Silica Sand	Lock
	S/U

**Monitor Well MW-10 Installation Detail**

Long Dock Beacon Site  
Red Flynn Drive  
City of Beacon  
Dutchess County, New York

ESI File: SG96152.51

April 2007

Not to scale



**APPENDIX I**

**Data Usability Summary Reports**

**(provided on CD)**

**APPENDIX J**

**Soil Volume Calculations**

As contaminated soil > 16 ppm

Area 1 - W portion of Site

Area 2 - W of barn

Area 3 - E of bar

Area 4 - SE portion of Site

Area 1

$$\begin{aligned} \textcircled{a} \quad A_a &= b \times h \times 1/2 \\ &= 90' \times 45' \times 1/2 \\ &= 2025 \text{ sq. ft} \end{aligned}$$

$$\begin{aligned} \textcircled{b} \quad A_b &= 25' \times 90' \\ &= 2590 \end{aligned}$$

$$\begin{aligned} \textcircled{c} \quad A_c &= 85 \times 65 \times 1/2 \\ &= 2562.5 \text{ ft}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{d} \quad A_d &= h (b_1 + b_2) 1/2 \\ &= 55' (40' + 70') 1/2 \\ &= 3025 \text{ ft}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{e} \quad A_e &= 45' \times 15' \times 1/2 \\ &= 337.5 \text{ ft}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{f} \quad A_f &= 40' \times 65' \\ &= 2,600 \text{ ft}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{g} \quad A_g &= 1/2 \times b \times h \\ &= 1/2 \times 65' \times 35' \\ &= 1137.5 \text{ ft}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{h_1} \quad A_{h_1} &= 30' \times 30' \\ &= 900 \text{ ft}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{h_2} \quad A_{h_2} &= 85' \times 30' \times 1/2 \\ &= 1275 \text{ ft}^2 \end{aligned}$$

$$\text{Area}_1 = 16,452.5 \text{ sq. ft}$$

$$V_{\text{area 1}} = 16,452.5 \text{ ft}^2 \times 4' = 65,810 \text{ ft}^3$$

$$= \boxed{2,437.4 \text{ yd}}$$

$$A_s > 16 \text{ ppm}$$

Area 2

$$\begin{aligned} \textcircled{i} \quad A_i &= 160' \times 55' \\ &= 8800 \text{ ft}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{j} \quad A_j &= 75' \times 65' \\ &= 4875 \text{ ft}^2 \end{aligned}$$

$$\begin{aligned} V_j &= 4875 \text{ ft}^2 \times 4' = 19,500 \text{ ft}^3 \\ &= 722 \text{ yd} \end{aligned}$$

$$\begin{aligned} \textcircled{k} \quad A_k &= \frac{1}{2} (h) (b_1 + b_2) \\ &= \frac{1}{2} (80') (100' + 65') \\ &= 6600 \text{ ft}^2 \end{aligned}$$

$$\begin{aligned} \textcircled{l} \quad A_l &= 95' \times 45' \\ &= 4275 \text{ ft}^2 \end{aligned}$$

$$\begin{aligned} V_{i,k,l} &= 19,675 \times 2' = 39,350 \text{ ft}^3 \\ &= 1,457.40 \text{ yd} \end{aligned}$$

$$\text{Varca 2} = 722 + 1,457.40 = \boxed{2,179.4 \text{ yd}}$$

As > 16 ppm

Area 3

$$\textcircled{m} \quad A = 105' \times 45' \\ = 4725 \text{ ft}^2$$

$$\textcircled{n} \quad A = \frac{1}{2} (h) (b_1 + b_2) \\ = \frac{1}{2} (35') (95' + 55') \\ = 2625 \text{ ft}^2$$

$$\textcircled{o} \quad A = \frac{1}{2} b (h) \\ = \frac{1}{2} (50') (20') \\ = 200 \text{ ft}^2$$

$$\textcircled{p} \quad A = 120 \times 30 \\ = 3600 \text{ ft}^2$$

$$V_{m+n} = 7300 \text{ ft}^2 \times 9' = 66,150 \text{ ft}^3 \\ = 2,450 \text{ cyd}$$

$$V_{m+n} - V_{PAH} = 2450 \text{ cyd} - 210 \text{ cyd} \\ \text{see page 4} \\ = 2240 \text{ cyd}$$

$$V_{o+p} = 3,800 \text{ ft}^2 \times 4' \\ = 15,199.99 \text{ ft}^3 = 562.96 \text{ cyd}$$

$$V_3 = 2240 + 562.96 \text{ cyd} = 2802.96 \text{ cyd}$$

Area 4

$$\textcircled{q} \quad A = 115' \times 80' \\ = 9,200 \text{ ft}^2$$

$$V_q = 9,200 \text{ ft}^2 \times 10' \\ = 92,000 \text{ ft}^3$$

$$V_{\text{Area 4}} = 3,407.4 \text{ cyd}$$

AS VOL TOTAL

$$V_1 = 2,437.4 \text{ cyd}$$

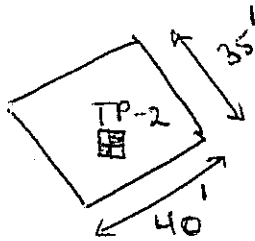
$$V_2 = 2,179.4 \text{ cyd}$$

$$V_3 = 2802.9 \text{ cyd}$$

$$V_4 = 3,407.4 \text{ cyd}$$

$$V_{AS_T} = 10,827 \text{ cyd}$$

## Pb removal at TP-2



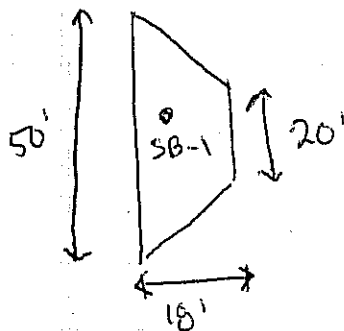
(west of house)

$$Pb A_1 = 35' \times 40' = 1,400 ft^2$$

$$Pb V_1 = 1,400 ft^2 \times 3' = 4,200 ft^3$$

$$\approx 160 \text{ cyd}$$

## PAH removal at SB-1



$$A_{PAH-R_1} = \frac{1}{2}(18')(20 + 50)'$$

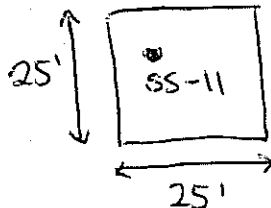
$$= 630 ft^2$$

$$V_{PAH-R_1} = 630 \times 9' = 5,670 ft^3$$

$$\approx 210 \text{ cyd}$$

Depth of Contamination  
7.8 - 8.2'

## PCB Removal at SS-11

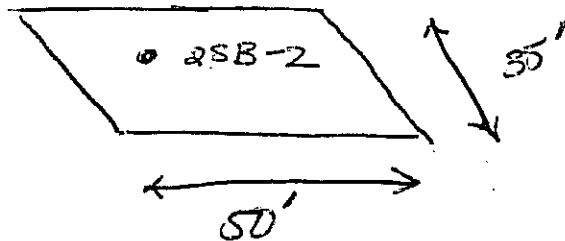


$$A_{PCB-R} = 25 \times 25' = 625 ft^2$$

$$V_{PCB-R} = 625 ft^2 \times 2 ft = 1250 ft^3$$

$$= 46 \text{ cyd} \approx 50 \text{ cyd}$$

PAH removal at ASB-2



(north of A5 contaminated  
soil in the west portion  
of the site)

$$A_{PAH-R_2} = 35' \times 50' \\ = 1,750 \text{ ft}^2$$

$$V_{PAH-R_2} = 1,750 \text{ ft}^2 \times 4 \\ = 7,000 \text{ ft}^3$$

$$\approx \boxed{260 \text{ cyd.}}$$

●  $A_s > 16$  pp  
●  $A_s < 16$  pp  
CORE-12

PARCEL 1  
AREA = 4.22 ACRES OR  
184,225 SQ.FT.  
SUBJECT TO NYS BROWNFIELD  
CLEAN UP PROGRAM  
TAX MAP NO. 5954-32-488825

MW - 03  
TOP OF CASING = 7.23  
TOP OF CONC. = 4.69  
GROUND = 4.52

MW - 07  
TOP OF CASING = 9.21  
GROUND = 6.29

MW - 04  
TOP OF CASING = 7.82  
GROUND = 7.77

Area 1

PARCEL 2  
AREA =  
TAX MAP NO.  
SUBJECT TO  
CLEAN

