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**WORK PLAN**

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***Interim Remedial Measure (IRM)  
Work Plan***

***1 West Main Street  
Beacon, New York***

**VCA Index No. D3-0005-99-04**

**Central Hudson Gas & Electric Corporation  
Poughkeepsie, New York**

**December 2006**

**BBL<sup>®</sup>**

 an ARCADIS company

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# 1. Introduction

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## 1.1 General

This *Interim Remedial Measure (IRM) Work Plan* (IRM Work Plan) describes the scope of work for soil removal activities to be conducted by Central Hudson Gas & Electric Corporation (CHGE), on behalf of Metro-North Commuter Railroad Co. (M-NR), at a property located on 1 West Main Street in Beacon, New York (Figure 1). The scope of work generally involves the removal and offsite disposal of visually impacted soils adjacent to the southeast corner of the Dorel Building on the subject property (Figure 2), which were identified during Phase I/II investigation activities conducted by M-NR between July 2005 and May 2006. The impacted soils are assumed to contain manufactured gas plant (MGP) tars that are associated with the former Beacon MGP site located just east of the subject property (Site # 314069; Figure 2). The subject property is currently owned by CCJM Company, but it is CHGE's understanding the M-NR is considering purchasing the property and using the Dorel Building as a warehouse. Access to the property required for implementing this IRM Work Plan will be obtained from the current property owner, through M-NR.

Note that work conducted by CHGE at the former Beacon MGP site was performed under Voluntary Cleanup Agreement (VCA) Index No. D3-0005-99-04. CHGE received a Release from the New York State Department of Environmental Conservation (NYSDEC) under the VCA on January 31, 2002. The work proposed in this IRM Work Plan will also be conducted under the existing VCA.

## 1.2 Site Description

The subject property is approximately 4.1 acres in size, with an approximately 32,000 square foot building located in the southern portion of the property. According to the *Modified Phase-I Environmental Site Assessment Report* (Phase I Report; YU & Associates, Inc. [YU], September 2005), the building was reportedly formerly used for office space, assembly, sales, and warehousing. A grass covered area surrounds the building and an asphalt-paved parking lot covers the northern half of the property. A contractor storage area is located in the northwest corner of the property. A fenced area located in the east-central portion of the property is used by an adjacent auto body shop to store vehicles. The southeastern portion of the property is covered with trees, high brush, and other materials. A large stockpile of stone/debris is located immediately south of the site (*Phase II ESA Project Status Report*, Day Engineering, P.C. [DAY], December 2005).

## 1.3 Site History

According to the Phase I Report (YU, September 2005), the following companies formerly occupied the subject property (based on review of Sanborn maps from 1884 to 1962):

- Hudson Straw Works;
- W.N. Cambell Sash, Door and Blind Factory;
- Federal Glue Company;
- Gillette Rubber Company;
- Beacon Tire Company;
- Harry Hooper Coal Company;

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- Hammond Paint and Chemical Company;
  - Duchess Coal Company; and
  - Inflated Products Company.

## **1.4 Previous Investigations**

Investigations conducted at the subject property include:

- Modified Phase I Environmental Site Assessment (July – August 2005);
- Phase II Environmental Site Assessment (November – December 2005); and
- Supplemental Phase II Investigation (May 2006).

Each of the investigations are summarized below. Relevant information (e.g., boring logs, data summary tables, etc.) from each of these investigations are provided in Attachment 1. Complete investigation reports are provided in Attachment 2 (on CD).

### **1.4.1 Modified Phase I Environmental Site Assessment**

A detailed discussion of the scope and findings of the Modified Phase I Environmental Site Assessment (ESA) are presented in the Phase I Report (YU, September 2005), and are summarized below. As discussed in the Phase I Report, the Phase I ESA scope of work was divided into two tasks: Task 1 – Phase I ESA and Task 2 – Pre-Phase II Investigation. The Phase I ESA was conducted in accordance with ASTM E1527, and included review of historical documentation, federal and state database/records searches, visual observation of current conditions, and reconnaissance of adjoining properties. Based on the findings of the Phase I ESA, ten Potential Concerns and five Recognized Environmental Conditions (RECs) were identified on the subject property.

Three Potential Concerns/RECs were investigated as part of the Pre-Phase II Investigation, which included the following activities:

- Advancement of four soil borings;
- Collection of three soil samples (for analysis of volatile organic compounds [VOCs], semivolatile organic compounds [SVOCs], metals, pesticides, polychlorinated biphenyls (PCBs), phenols, and cyanides); and
- Collection of one groundwater sample (for analysis of VOCs, SVOCs, metals, pesticides, and PCBs).

The locations of the four soil borings are depicted on Figure 2. Boring depths ranged from 1 to 20 feet below grade. The primary material encountered in the borings was fill material consisting of varying amounts of gravel, sand, silt, wood, concrete fragments, and brick fragments. The fill material generally extended to depths of 7 to 10 feet below grade. Native soils, consisting of mixtures of clay, silt and/or sand, were encountered below the fill material at three of the four borings. MGP tar-type material was not encountered in any of the four borings. For each boring, Table 1 summarizes the depth intervals that fill and native materials were encountered, if/where refusal was encountered, and the depths at which MGP tar-type materials were observed.

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NYSDEC Recommended Soil Cleanup Objectives for certain VOCs, SVOCs, metals, and total phenols were exceeded in one or more of the soil samples. NYSDEC Ambient Water Quality Standards for certain VOCs, SVOCs, metals, and pesticides were exceeded in the groundwater sample. Based on the results of the Pre-Phase II Investigation, additional soil and groundwater sampling and analysis were recommended in the Phase I Report (YU, September 2005).

#### 1.4.2 Phase II Environmental Site Assessment

A detailed discussion of the scope and findings of the Phase II ESA are presented in the *Phase II ESA Project Status Report* (DAY, December 2005), and are summarized below. The following investigation activities were conducted as part of the Phase II ESA:

- Advancement of 31 direct-push test borings;
- Installation of five 1-inch diameter monitoring wells;
- Collection of 15 soil samples (for analysis of VOCs, SVOCs, metals, PCBs, cyanide, pH, ignitability, and/or reactivity); and
- Collection of six groundwater samples (for analysis of VOCs, SVOCs, and/or metals).

The locations of the 31 test borings are depicted on Figure 2. Boring depths ranged from 8 to 12 feet below grade. The primary material encountered in the borings was fill material consisting of varying amounts of gravel, sand, coal, slag, wood, and brick fragments. The fill material generally extended from approximately 0.5 feet below grade (at most locations, fill was overlain by approximately 0.5 feet of asphalt pavement or topsoil) to depth of 5 to 12 feet below grade. Native soils, consisting of mixtures of clay, silt and/or sand, were encountered below the fill material at 18 of the 31 borings. Refusal of the direct push boring equipment, potentially indicative of the top of bedrock, was encountered at six borings. MGP tar-type material was encountered within the fill material at eight borings. For each boring, Table 2 summarizes the ground surface type, depth intervals that fill and native materials were encountered, if/where refusal was encountered, and the depths at which MGP tar-type materials were observed.

Groundwater was measured at depths ranging from approximately 1 to 5 feet below grade in the five monitoring wells.

NYSDEC Recommended Soil Cleanup Objectives for certain VOCs and SVOCs were exceeded in one or more of the soil samples. Metals concentrations in the soil samples were generally low and/or comparable to published background values. PCBs were not detected in any of the soil samples. Based on waste characterization testing, the fill material is not considered a characteristic hazardous waste.

NYSDEC Ambient Water Quality Standards for certain VOCs and SVOCs were exceeded in the groundwater samples collected from MW-103. VOCs and SVOCs were either not detected or detected below standards in the samples from the other wells. NYSDEC Ambient Water Quality Standards for certain metals were exceeded in the groundwater samples collected from MW-101 (lead and mercury) and MW-102 (lead).

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### 1.4.3 Supplemental Phase II Investigation

Based on the findings of the Phase II ESA, a Supplemental Phase II Investigation was conducted. A detailed discussion of the scope and findings of the Supplemental Phase II Investigation are presented in the *Supplemental Phase II Investigation Report* (YU, June 2006), and are summarized below. The following investigation activities were conducted as part of the Supplemental Phase II Investigation:

- Advancement of 11 direct-push test borings within the Doral Hat Building;
- Collection of seven soil samples (for analysis of VOCs, SVOCs, cyanide, pH, ignitability, and/or reactivity); and
- Collection of one groundwater sample from MW-103 (for analysis of VOCs and SVOCs).

The locations of the 11 test borings are depicted on Figure 2. Boring depths ranged from 4 to 16 feet below grade. The primary material encountered in the borings was fill material consisting of varying amounts of gravel, sand, silt, coal, slag, ash, and cinders. The fill material generally extended from below the concrete building floor to depths of 4 to 12.5 feet below the floor<sup>1</sup>. Native soils, consisting of mixtures of clay, silt and/or sand, were encountered below the fill material at seven of the 11 borings. Refusal of the direct push boring equipment was encountered at four borings. MGP tar-type material was encountered (generally within the fill material) at four borings. For each boring, Table 3 summarizes the depth intervals that fill and native materials were encountered, if/where refusal was encountered, and the depths at which MGP tar-type materials were observed.

NYSDEC Recommended Soil Cleanup Objectives for certain VOCs and SVOCs were exceeded in one or more of the soil samples. Based on waste characterization testing, the fill material is not considered a characteristic hazardous waste.

NYSDEC Ambient Water Quality Standards for certain VOCs and SVOCs were exceeded in the groundwater samples collected from MW-103.

### 1.5 Extent of Visually Impacted Soils

As discussed above in Section 1.4 and shown on Figure 2, visually impacted soils that contain MGP tar-type materials are present beneath the southeast corner of the Doral Hat Building and also outside of the building, adjacent to the southeast corner. Outside of the building, the visibly impacted soil area is defined to the north by TB-119 and to the south by TB-124 and TB-128 (no visibly impacted soils were observed at these borings). The presence of a steep, densely vegetated hillside that slopes up away from the Doral Hat Building toward River Street has prevented additional investigations to the east. Visually impacted soils were observed (generally in fill materials) at depths of up to 10 feet below grade. Native soils were present at the majority of the soil borings present within this area at depths beginning from 5 to 10 feet below grade. Refusal (potentially indicative of bedrock) was encountered within this area at depths ranging from 9 to 15 feet below grade.

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<sup>1</sup> Note: the building floor is approximately three feet higher than the ground surface outside of the building.

## **2. Scope of Work**

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### **2.1 General**

This section presents a description for the IRM soil removal activities that will be conducted by CHGE at the 1 West Main Street property in Beacon, New York. The following activities will be conducted:

- Remediation Contractor procurement, survey, and pre-remediation submittals;
- Mobilization/site preparation;
- Site security;
- Soil removal;
- Air monitoring;
- Water management;
- Equipment cleaning and residual waste management;
- Transportation and disposal;
- Post-removal activities; and
- Demobilization.

Each of these activities is discussed in detail below.

### **2.2 Remediation Contractor Procurement, Survey, and Pre-Remediation Submittals**

CHGE will select a Remediation Contractor to implement the IRM soil removal activities. Prior to conducting the soil removal activities, the selected Remediation Contractor will conduct a survey of the soil removal area, which is anticipated to include survey of the following features:

- Above grade physical site features including all above grade structures;
- Below grade features such as building footers;
- Horizontal limits of the proposed soil removal area;
- Surface contours at a 1-foot interval; and
- Above and below grade utilities (if applicable).

Survey control will include survey control benchmarks and monuments. A licensed surveyor will provide the surveying functions/services necessary for the proper construction and documentation of the activities.

As required/appropriate, the Remediation Contractor will prepare the following submittals for review and approval by the NYSDEC and the New York State Department of Health (NYSDOH):

- Site Operations Plan (SOP); and
- Site Health and Safety Plan (HASP).

Each of these submittals is described below.

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### **Site Operations Plan**

The SOP will provide detailed procedures for completing the IRM soil removal activities. The following topics are anticipated to be included in the SOP:

- Work schedule;
- Site security;
- Mobilization and site preparation;
- HASP and other plan preparation;
- Staging area development;
- Erosion and sedimentation control measures;
- Excavation support methods (including foundation protection adjacent to the Doral Hat Building);
- Excavation methods;
- Construction quality assurance/quality control measures;
- Material handling methods;
- Material dewatering/stabilization methods;
- Odor control;
- Dewatering liquid handling and disposal (including disposal facilities, testing requirements, permitting requirements, and pretreatment requirements, if necessary);
- Impacted soil/waste handling and disposal (including disposal facilities, testing requirements, permitting requirements, and pretreatment requirements, if necessary);
- Offsite transportation plan (including description of containers and covers, modes of transportation, permitting requirements, and expected frequency and schedule of transportation);
- Disposal facility(ies);
- Select backfill installation;
- Equipment cleaning and residual waste management;
- Demobilization; and
- Organizational chart of key personnel, including subcontractors and resumes of key personnel.

The Remediation Contractor will submit the SOP to the NYSDEC and NYSDOH at least 20 days prior to the IRM soil removal activities.

### **Site Health and Safety Plan**

The Remediation Contractor will be responsible for the preparation of the overall site-specific HASP that will establish safe working conditions at the site during the IRM soil removal activities. Each party performing work on site will comply with the overall site-specific HASP and will prepare their own task-specific HASP for their organization, which will be consistent with the overall site-specific HASP. Each task-specific HASP must meet the minimum requirements established in the site-specific HASP and 29 CFR 1910 and 1926. Each party will also agree in writing to abide by requirements set forth in the site-specific HASP. The Remediation Contractor will submit the overall site-specific HASP and the subcontractor's task-specific HASPs to NYSDEC and NYSDOH at least 20 days prior to the IRM soil removal activities.

The site-specific HASP, at a minimum, will meet the requirements of 29 CFR 1910 and 29 CFR 1926 (which includes 29 CFR 1910.120 and 29 CFR 1926.65). It is anticipated that the HASP will include, but will not be limited to, the components described below.

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- Identification of Key Personnel – Identification of the onsite and offsite health and safety personnel responsible for the implementation of health and safety procedures. All onsite personnel involved in the activities will be required to maintain OSHA 40-hour hazardous waste training (29 CFR 1910.120 and 29 CFR 1926.65) and the corresponding 8-hour refresher course update.
  - Training – A description of health and safety training requirements for supervisory and onsite personnel will be presented. Training requirements will include attending an initial site orientation prior to engaging in any onsite activities.
  - Medical Surveillance – A description of appropriate medical examinations required for supervisory and onsite personnel to conduct the tasks associated with the performance of the remedy will be presented. Associated tasks may include the following: working with chemicals, heavy lifting, using respiratory protection, using personal protective equipment (PPE) and conducting hazardous substance operations in accordance with 29 CFR 1910.120 and 1926.65.
  - Task Specific Risk/Hazard Analysis – A description of chemical and physical hazards associated with removal of the impacted soil within the soil removal area will be presented in the HASP. In addition, a discussion of identifying and mitigating foreseeable chemical and physical hazards associated with the work will be presented. Foreseeable chemical and physical hazards may include, but will not be limited to, hazards associated with exposure to constituents of concern, heavy equipment operation, site conditions, weather, biological hazards, materials handling, and work around excavated areas and water.
  - Work Zones – A description of the work zones that will be established during the IRM soil removal activities will be presented. The work zones will be preliminarily delineated on a figure that depicts the designation of zones including: (1) Exclusion Zones; (2) Contamination Reduction Zones; and (3) Support Zones. The level of personal protection required for each work zone will be specified.
  - Personal Safety Equipment and Protective Clothing – The HASP will identify personal safety equipment and protective clothing to be used and available onsite. This will include identification of expected levels of protection for the work, and the action levels for PPE upgrades. Also included will be a respiratory protection program that meets the requirements of 29 CFR 1910.134, which establishes specific requirements for any respirator use.
  - Air Monitoring Plan – An air monitoring plan that identifies air-monitoring requirements within the soil removal area and at the perimeter for site-specific constituents of concern. The air-monitoring plan may contain requirements for personnel monitoring and will present trigger concentrations for site-specific constituents of concern that will require corrective action.
  - Equipment Cleaning – The methods and procedures for cleaning of personnel, vehicles, and equipment will be described.
  - Confined Space Entry – The HASP will describe procedures for confined space entry in accordance with OSHA's Permit-Required Confined Space Standard (29 CFR 1910.146). In addition, requirements for Confined Space Entry Training for all authorized personnel in accordance with 29 CFR 1910.146 will be presented.

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- Overhead and Electrical Safety – The HASP will describe procedures for electrical safety in accordance with the requirements of OSHA (29 CFR 1926.550), New York State High Voltage Proximity Act, New York State Department of Transportation (Code SB-92-2), and New York State Department of Labor, Code Rule 57, Section 202-h (High Voltage Proximity Act).
  - Material Safety Data Sheets – Material Safety Data Sheets (MSDSs) for all materials to be brought onsite, as well as constituents that are expected to be encountered in the course of remediation, will be presented as an attachment or appendix to the HASP.
  - Excavation Safety – Excavation and trenching safety procedures as specified in 29 CFR 1926 Subpart P including, but not limited to soil classification, excavation inspections, protective systems, and designated competent persons will be discussed.
  - Procedures and Programs – Standard operating procedures and safety programs as required by applicable sections of Section 1910 of 29 CFR 1910 and 29 CFR 1926.
  - Contingency Plan – The HASP will also contain a contingency plan to be implemented in the event of various emergency or non-routine events. The contingency plan will set forth procedures for addressing spill prevention and emergency response procedures, odor control, emergency vehicular access/egress, evacuation, emergency notification and contacts, and emergency medical procedures.

### **2.3 Mobilization/Site Preparation**

Prior to commencing the remediation, the Remediation Contractor will perform mobilization and site preparation activities. The following mobilization/site preparation activities are anticipated to be conducted by the Remediation Contractor (the exact methods used by the Remediation Contractor will be specified in the SOP):

- Identifying the location of all aboveground and underground utilities (e.g., electric, gas, water, sewer, telephone, etc.), equipment, and structures (as necessary to implement the IRM soil removal activities);
- Obtaining any necessary permits required by federal, state, and local codes, rules, or regulations;
- Mobilizing necessary remediation personnel, equipment, and materials to the subject property;
- Clearing of vegetation to facilitate the soil excavation activities;
- Constructing a stabilized construction entrance consisting at or near the soil removal area exit and establishing onsite and offsite traffic controls and patterns;
- Constructing a material staging area(s) for overall management and dewatering, stabilizing, and staging of excavated material;
- Constructing an equipment cleaning pad for trucks, equipment, and personnel that come into contact with impacted materials during soil removal activities;
- Establishing work zones (i.e. soil removal area, staging area, cleaning area, and other areas needed for the remediation) and health and safety zones (i.e. Exclusion Zone, Contamination Reduction Zone, and Support Zone);
- Installing erosion and sedimentation control measures in accordance with the SOP
- Constructing either an onsite water management system and associated piping connections (if applicable) to the sewer system for subsequent discharge to the local sewer system or a groundwater management area for staging water prior to offsite disposal in accordance with the water management procedures specified in the SOP;

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- Abandoning groundwater monitoring wells that lie within the soil removal area;
  - Installing and maintaining temporary fencing or other temporary barriers to limit unauthorized access to the areas where soil removal activities will be conducted; and
  - Stabilizing the building foundation adjacent to the soil removal area by installing underpinning piles beneath/adjacent to the existing building foundation or other appropriate methods specified in the SOP.

## 2.4 Site Security

The level of site security will be dependent on the activities being performed and location of activities; however, the following security measures are anticipated to be implemented: fencing and/or barriers, warning tape/signs, maintenance of sign-in/sign-out sheets, and implementation of safe work practices. Descriptions of site security measures are provided below. The exact methods used by the Remediation Contractor will be specified in the SOP.

- Fencing – At a minimum, the soil removal area will be enclosed with a fence, to control access for non-authorized personnel. Access gates will provide ingress and egress access to the soil removal area. In addition, temporary construction fencing will also be used, as needed, to delineate and secure areas of the ongoing remediation activities. Temporary fencing is anticipated to be used in the following areas:
  - Areas where stockpiling (if applicable) or loading for offsite transport occurs;
  - Areas designated as health and safety zones;
  - Areas utilized for personal or equipment cleaning activities; and
  - Any areas where the remediation activities may cause a disruption to the normal vehicular or pedestrian traffic.
- Posting of Warning Tape and Signs – To restrict access during remediation activities, warning tape may be installed at certain locations, such as open excavations, cleaning areas, and stockpile areas.
- Sign-In/Sign-Out Sheet – For the duration of remediation activities, a sign-in/sign-out sheet will be maintained. All site personnel and site visitors will be required to sign in upon entering the site and sign out upon leaving.
- Implementation of Safe Work Practices – Implementation of safe work practices will provide for additional site security during remediation. Safe work practices that will contribute to overall security include the following:
  - Maintaining fencing and signage around all open excavations and other potentially dangerous areas;
  - Parking heavy equipment in a designated area each night and removing keys;
  - Maintaining an organized work area, including maintaining access roads, proper storage of all tools and equipment;
  - Conducting a daily security review and health and safety meetings; and
  - Maintaining covers on staging areas and associated sumps.

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## 2.5 Soil Removal

The following subsections discuss the anticipated soil excavation method and approach, and soil dewatering/stabilization methods. The exact methods to be used will be specified in the Remediation Contractor's SOP.

### 2.5.1 Soil Excavation Method and Approach

As discussed above in Section 1.5 and shown on Figure 2, the anticipated horizontal soil removal limits encompass soil borings MW-103, TB-105, TB-106, TB-117, TB-121, TB-122, and TB-123 where visibly impacted soil containing MGP tar-type materials were observed. The soil removal area is defined to the north by TB-119 and to the south by TB-124 and TB-128 (no visibly impacted soils were observed at these borings). The Doral Hat Building defines the western limit of the soil removal area and the steep, densely vegetated hillside defines the eastern limit of the soil removal area. Within this area, MGP tar-type materials were observed (generally in fill materials) at depths of up to 10 feet below grade. Native soils were present at the majority of the soil borings present within this area at depths beginning from 5 to 10 feet below grade (MGP tar-type materials were generally not encountered within the native soils). Refusal (potentially indicative of bedrock) was encountered within this area at depths ranging from 9 to 15 feet below grade.

Within the soil removal area depicted on Figure 2, soils will be initially excavated to a depth of approximately 8 feet below existing grade, or to the top of the native soil or bedrock, whichever occurs first. If, after reaching a depth of 8 feet below grade or the top of the native soil, MGP tar-type materials are still present, excavation will continue until MGP tar-type materials are no longer observed, or until bedrock is encountered. The soil removal limits identified on Figure 2 encompass an area of approximately 4,200 square feet. Based on this area, and an assumed average removal depth of 8 feet, the resulting volume of soils anticipated to be removed from this area is 1,250 cubic yards (cy).

Soil excavation will generally be conducted using conventional excavation equipment. Soils visually impacted by MGP tar-type materials will be segregated from visually non-impacted soils to the extent feasible. Impacted materials will be handled, stabilized (as necessary), transported, and disposed of as set forth in the Remediation Contractor's SOP. Visually non-impacted soils will be stockpiled near or within the soil removal area and used as backfill.

Due to the anticipated excavation depths (up to 10 feet below grade) and soil characteristics, excavation support will be required to provide for stable and safe sidewalls. Due to the depth to bedrock within the soil removal area (estimated to be 9 to 15 feet below grade), sheetpiling is not anticipated to be a feasible excavation support mechanism. Instead, sloping or benching of the sidewalls will likely be the preferred excavation support method. Along the Doral Hat Building, underpinning (or other appropriate methods) of the building foundation may also be required to maintain the integrity of the building foundation. The exact excavation and building support methods will be specified in the Remediation Contractor's SOP.

Soil excavated from above the groundwater table will generally not require dewatering. However, soil excavated from below the groundwater table (anticipated to be encountered at approximately 1 to 5 feet below grade) will likely require dewatering and possibly stabilization. Dewatering of excavated materials, if needed to meet disposal requirements, will be performed in accordance with the requirements of the disposal facility. Soil dewatering/stabilization requirements are further described in Section 2.5.2

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Odor/vapor and dust monitoring and control action levels will be specified in the overall site HASP (prepared by the Remedial Contractor) and NYSDOH's Generic Community Air Monitoring Plan (CAMP; Attachment 3). At a minimum, odor/vapor and dust controls will be initiated when work area action levels, as presented in the HASP, or perimeter action levels as specified in the CAMP are exceeded. Odor/vapor and dust control of the excavation and excavated materials, if necessary, is anticipated to be conducted through one or more of the following methods:

- Foam suppression;
- Water spray;
- Cover excavation and/or soil in staging area(s) with ultraviolet resistant polyethylene plastics at least 5-mil thick;
- Minimize extent of excavation areas; and/or
- Methods selected by the Remediation Contractor.

## **2.5.2 Soil Dewatering/Stabilization**

Impacted soils will be direct loaded, to the extent practicable, in a manner that minimizes the potential for inadvertent releases to the environment, unsafe conditions for onsite personnel, and delays or complications in soil removal implementation. However, excavated impacted soil containing free liquids, if any, may require dewatering prior to offsite transportation and disposition as specified by the treatment/disposal facility. In general, excavated impacted soil that contains free liquid may be dewatered using gravity drainage and/or stabilized with other materials. Methods to be implemented during soil dewatering/stabilization activities will be further discussed in the Remediation Contractor's SOP. Following gravity dewatering, the paint filter test (USEPA SW-846 Method 9095) and/or visual observation may be used to determine if excavated impacted soil contains free liquids. If excavated impacted soil still contains free liquids, additional stabilizing agent will be mixed with the excavated material to reduce moisture content. Gravity dewatering and/or stabilizing operations will be conducted in a dedicated staging area constructed at location selected by the Remediation Contractor.

The anticipated staging area requirements are as follows:

- The excavated soil will be placed onto a 30 mil low-permeability liner of sufficient strength and thickness to prevent puncture during use. The placement and/or removal of soil into the staging area will not involve any equipment or procedures that may jeopardize the integrity of the underlying low-permeability liner;
- The staging area will be continuously covered with a properly anchored membrane, except while soil is actively being placed, stabilized, or removed. This membrane will be maintained for the duration of staging activities;
- A perimeter berm will be constructed around the staging area to contain water that has drained from the staged soils and to mitigate the potential for surface water run-on to come in contact with the staged soils;
- The staging area will be sloped and equipped with a sump to collect water that has drained from the stockpiled soils. Drained water will be removed from the sump, as required, and handled in accordance with Section 2.8 of this IRM Work Plan;

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- Stabilizing operations may be conducted within the staging area, but only if the integrity of the low-permeability liner and perimeter berm is maintained throughout the work. Stabilizing operations include the addition of a stabilization agent to soils by some type of mechanical mixing (i.e., pug mill, backhoe, etc.). Stabilizing operations may also be conducted after the soil has been loaded into lined rollofts for offsite disposition provided the integrity of the liner is maintained; and
  - The staging area will be inspected daily and noted deficiencies will be promptly addressed.

## **2.6 Air Monitoring**

An air-monitoring program will be established prior to, and will be implemented during, the soil removal activities to protect the health and safety of site workers and the surrounding community, address potential nuisance odors, and establish appropriate response protocols for potential emission source control. This effort will include both work area and perimeter air monitoring programs. The onsite air monitoring program will be conducted in accordance with the site specific HASP and the perimeter air monitoring program will be conducted in accordance with the NYSDOH's Generic CAMP (Attachment 3). The methods to control odors and/or vapors during remediation activities will be specified in the SOP, and may include the measures previously described in Section 2.5.1.

The work area/breathing zone air monitoring program is anticipated to be implemented by employing direct-reading survey instruments to identify the appropriate level of PPE needed based on total organic vapor and particulate concentrations. Excavations are anticipated to be monitored for total organic vapors, total particulate, lower explosive limit (LEL), oxygen, and hydrogen sulfide.

A perimeter air-monitoring program will be established and is anticipated to consist of air monitoring stations at the perimeter of the subject property. Perimeter monitoring will include use of hand held direct-reading survey instruments and/or dedicated direct-reading survey instruments for total organic vapors and particulate monitoring.

Action levels will be established for the worker area/breathing zone and perimeter air-monitoring program to determine if health and safety protocols or construction technique modifications need to be performed to reduce odor/vapor or dust emissions.

## **2.7 Water Management**

During the soil excavation activities, surface water diversion methods and groundwater hydraulic controls will be implemented to minimize the amount of water that enters an excavation area. Surface water diversion methods may include (but are not limited to) channeling surface water flow around the soil excavation areas by excavating a temporary ditch, construction of berms, or installing piping to create a preferential flow path for the surface water around each excavation area. During the soil excavation activities, groundwater (or surface water) that accumulates within the excavation area will be removed to assist in dewatering the soil and to facilitate sedimentation/erosion control. Groundwater (or surface water) that accumulates within an excavation area will be removed via pumping (to the extent practicable). To minimize the amount of soil being removed during pumping activities, a sump may be constructed within the soil removal area using one of, or a combination of, the following techniques:

- 
- Excavation of a sump and backfilling the sump with washed gravel and installing geotextile, as needed;
  - Cutting perforations into a cylindrical object (i.e., a corrugated metal pipe or 55-gallon drum) and wrapping the perforated object with a non-woven geotextile fabric;
  - Installing straw bales and/or silt fence around the area that the water is being pumped from; and/or
  - Other methods selected by the Remediation Contractor.

Water generated as a result of the remediation activities will either be pretreated onsite and discharged to the local sewer system in accordance with applicable permits or be collected for offsite disposal in accordance with applicable federal, state and local regulations.

## **2.8 Equipment Cleaning and Residual Waste Management**

Equipment cleaning will be utilized to prevent the transport of waste materials that may be present on the equipment used for remediation activities (e.g., excavators, loaders). The Remediation Contractor will select the methods and approach (as part of the SOP) for equipment cleaning activities. Specific equipment cleaning procedures will be required, at a minimum, to include the following:

- Each transport vehicle will be visually inspected before leaving the loading area. Accumulations of soil on the vehicle tires or other exterior surfaces will be removed manually or, if necessary, by using a high-pressure water and/or steam spray in the equipment cleaning area.
- Material handling equipment that has come into contact with waste-containing soils will be cleaned in the equipment cleaning area before it enters non-work areas, handles "clean" materials (e.g., backfill), or leaves the site. Equipment cleaning will likely be performed manually, utilizing a high-pressure water spray, and/or steam cleaning.
- Liquid materials, such as cleaning water (and other residual material collected during equipment cleaning), will be collected and containerized for offsite disposal and/or pretreated, if necessary, and discharged to the local sewer system.
- A visual inspection of heavy equipment (e.g., excavators, loaders) will be performed following final equipment cleaning. If the visual inspection indicates waste materials remain, the equipment will be recleaned and reinspected.
- Following completion of water treatment activities the temporary water treatment system (if installed as part of the water management system) will be subject to cleaning. Any accumulated material will be removed, containerized and sampled for the required disposal parameters of the selected disposal facilities to determine appropriate disposition. The treatment system components will then be cleaned by high-pressure water spray or flushing. The wash water will be collected and containerized for appropriate disposal.

Residual wastes likely to be generated during excavation activities include used disposable equipment, PPE, sampling equipment, cleaning residuals, etc. These materials will be containerized as generated and staged for subsequent disposal by the Remediation Contractor in accordance with federal, state, and local requirements. If soil transport activities are in progress, residual materials may be included with the materials subject to offsite disposal. Waste characterization samples (if any) will be submitted to an NYSDOH ELAP-approved laboratory for analysis.

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## **2.9 Transportation and Disposal**

Impacted soils will be direct loaded, to the extent practicable, in a manner that minimizes the potential for inadvertent releases to the environment, unsafe conditions for onsite personnel, and delays or complications in the soil removal implementation. Ultimately, the removed soils will be transported to offsite facilities for appropriate treatment/disposal in accordance with applicable regulations for disposal.

In addition, groundwater will be extracted from the excavation areas as part of the excavation dewatering process. The extracted groundwater (as well as rainwater that contacts impacted soil and water generated as part of equipment cleaning) will be subject to pretreatment (as required) and discharged to the local sewer system or containerized for offsite disposal.

The Remediation Contractor will identify the means and methods (as part of the SOP) for dewatering soils so that such soils can be direct loaded and meet the disposal requirements, to eliminate to the extent practicable the need to stockpile soils onsite, and to control odors. The Remediation Contractor will be required to prepare contingency plans (as part of the SOP) for soil dewatering/stabilization and soil stockpiling.

### **2.9.1 Disposal of Impacted Soils and Debris**

Visibly impacted soil/fill or debris will be handled, loaded, transported, and disposed of at one or more permitted disposal facilities capable of accepting MGP-materials in a manner consistent with NYSDEC program policy, TAGM 4061 (Management of Coal Tar Waste and Coal Tar Contaminated Soils and Sediment from Former Manufactured Gas Plants) dated January 11, 2002. The final disposal of all visibly impacted soil/fill or debris will be at an appropriately permitted facility that has been approved by CHGE.

If direct loading of excavation spoils for offsite disposition is the proposed method in the SOP, the Remediation Contractor will conduct pre-excavation characterization sampling in accordance with the treatment/disposal facility(ies) requirements. Otherwise the Remediation Contractor will conduct excavation characterization sampling in accordance with the treatment/disposal facility(ies) requirements. Existing data from the Phase I and II ESAs conducted by M-NR may also be used for waste characterization purposes in lieu of collecting additional samples. Characterization samples collected will be submitted to a NYSDOH ELAP-approved laboratory for analysis.

The Remediation Contractor will perform all aspects of the transport and disposal of materials. Materials subject to offsite disposal will be transported via the selected and permitted transport mechanisms to the appropriate disposal facilities. The Remediation Contractor will be responsible for cleaning and visually inspecting the disposal vehicles prior to leaving the site. Licensed haulers will perform all transport of materials in accordance with appropriate local, state, and federal regulations. Loaded vehicles leaving the site will be appropriately lined, tarped, manifested, and placarded in accordance with appropriate federal, state, local, and New York State Department of Transportation (NYSDOT) requirements (or other applicable transportation requirements).

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### **2.9.2 Water**

As part of the SOP, the Remediation Contractor will select the methods and approach for handling and disposition of water generated during the IRM soil removal activities. Methods may include containerization and subsequent offsite disposition or pretreatment followed by discharge to the local sewer system for subsequent treatment at the local publicly owned treatment works (POTW). The Remediation Contractor will be required to obtain and comply with applicable permits required for disposition of wastewater generated during the IRM soil removal activities.

### **2.9.3 Non-Aqueous Phase Liquid**

Free phase non-aqueous phase liquid (NAPL), if encountered, will be handled in accordance with TAGM 4061 (Management of Coal Tar Waste and Coal Tar Contaminated Soils and Sediment from Former Manufactured Gas Plants).

### **2.9.4 Miscellaneous Waste**

Miscellaneous waste generated during the IRM soil removal activities may be classified as general refuse or remediation-related waste material.

General refuse (i.e., material that has not contacted any impacted site media) including, but not limited to, used disposable equipment and temporary fencing will be managed as a non-hazardous waste and disposed of at a non-hazardous solid waste disposal facility.

Remediation-related materials that are either in, or come in contact with, impacted soils during the remediation activities will be considered contaminated. This material may include ancillary wastes generated as a result of the remediation activities, including (but not limited to) materials used to construct the materials handling and dewatering/staging areas, equipment cleaning pads, and PPE. The Remediation Contractor will be required to characterize the miscellaneous waste prior to offsite disposition at an acceptable facility based on waste characterization activities to be conducted by the Remediation Contractor. With approval of the disposal facility, this material may also be included with the impacted soil wastes.

## **2.10 Post-Removal Activities**

Post-removal activities will include backfilling the excavation and completing the surface restoration. Following soil excavation activities, visually non-impacted soils will be placed back into the excavation and select backfill will be used to fill the remainder of the excavation. Backfill will be placed and compacted to restore the ground surface within the soil removal area to pre-remediation conditions minus approximately 4 to 6 inches. Restoration of the ground surface will include placing 4 to 6 inches of topsoil materials and seeding.

Backfill and topsoil from offsite sources will be sampled and analyzed to verify that the proposed materials are free of contaminants and suitable for their intended use as backfill. At a minimum, proposed backfill and topsoil source(s) will be sampled and analyzed for VOCs, SVOCs, PCBs, pesticides, herbicides and metals.

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## **2.11 Demobilization**

The Remediation Contractor will be responsible for demobilizing all labor, equipment, and materials (not designated for offsite disposal) from the subject property. The Remediation Contractor will be required to clean (in accordance with the SOP) all equipment and materials prior to removal from the subject property.

The Remediation Contractor will also be responsible for performing any follow-up coordination and maintenance activities, including the following:

- Restoring areas disturbed to accommodate support areas (e.g., staging area, equipment cleaning area, storage area, temporary water management area, access area) to pre-remediation conditions;
- Removing any temporary access areas and restoring the disturbed access areas to pre-remediation conditions; and
- Removing sediment and erosion control measures and disposing of the materials in accordance with acceptable rules and regulations as a non-hazardous waste.

### ***3. Institutional Controls***

---

Institutional controls to be implemented following completion of the IRM soil removal activities include establishing an environmental easement and a site management plan (SMP). The environmental easement will prohibit the use of groundwater and restrict the land use to commercial or industrial. The SMP will include institutional and engineering controls to: (a) address residual impacted soils that may be excavated from beneath the Doral Hat Building and other areas outside of the proposed excavation limits (Figure 2); (b) evaluate the potential for vapor intrusion if the Doral Hat Building is occupied in the future; (c) identify any use restrictions on property development or groundwater use; (d) provide an annual certification to NYSDEC that the institutional and engineering controls have been followed.

## 4. Reporting

---

A final engineering report and certification of completion will be submitted to NYSDEC following implementation of the IRM soil removal activities. The final engineering report is anticipated to include the following:

- A description of the IRM soil removal activities performed;
- A description of any changes to the remediation;
- Sampling and monitoring results;
- A copy of the applicable Remediation Contractor records and record drawings showing changes made during construction;
- Groundwater treatment/disposal data and information; and
- Soil disposal data and information.

A Professional Engineer registered in New York State, the Remediation Engineer, will provide certification that the construction was completed in substantial conformance with the approved IRM Work Plan, and/or approved field changes; this certification will be appropriately signed and stamped.

## **5. Project Organization**

---

This section presents the anticipated project organization and associated roles, including key personnel, descriptions of duties, and lines of authority in the management of the IRM Work Plan. Information regarding the organizations/personnel and their associated responsibilities is provided below.

### **NYSDEC**

NYSDEC will serve as the lead regulatory agency for this remediation. The NYSDEC project manager is anticipated to be Gardiner Cross, who will be responsible for providing and coordinating regulatory oversight and direction.

### **NYSDOH**

The NYSDOH will work closely with NYSDEC and will provide input from a health and safety perspective. The NYSDOH contact is anticipated to be Gary Litwin.

### **CHGE**

CHGE will be responsible for implementing the IRM soil removal activities at the subject property. The primary contact for CHGE will be Jeffrey Clock.

### **M-NR**

M-NR will be responsible for implementing the institutional and engineering controls after the IRM soil removal activities have been completed by CHGE. CHGE will coordinate with M-NR and the current property owner during the implementation of the soil removal activities.

### **Remediation Contractor**

The Remediation Contractor selected for this project will provide services associated with soil removal and disposal, groundwater dewatering and disposal, air monitoring, emergency spill response services (if necessary), and management of waste transport and disposal.

The Remediation Contractor may retain various subcontractors for the purposes of completing the project, if necessary. Remediation Contractor and subcontractor responsibilities will be set forth in the SOP.

### **Remediation Engineer**

The Remediation Engineer selected for this project will provide full-time engineering observation services for the duration of the IRM soil removal activities to document the activities are conducted in accordance with this IRM Work Plan and associated plans submitted by the Remediation Contractor. The Remediation Engineer will be responsible for certifying the construction was completed in substantial conformance with the approved IRM Work Plan, and/or approved field changes. In addition to oversight and final engineering certification, the Remediation Engineer may review plans such as the SOP, HASP, and other appropriate plans.

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### **Analytical Laboratory**

A NYSDOH ELAP-certified laboratory will provide analytical services required for this project.

### **Offsite Disposal Facilities**

The excavated materials will be transported to and disposed of at licensed disposal facilities. The disposal facilities used must be licensed to accept MGP-contaminated soils and materials. Transportation to these facilities will be via legally permitted (such as permits required in NYCRR Part 364 and NYCRR Part 360) and NYSDEC-acceptable methods.

## ***Tables***

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**TABLE 1**  
**SUMMARY OF PRE-PHASE II SOIL BORING INFORMATION**

1 West Main Street  
Beacon, New York

Boring ID	Depth of Fill Material (feet below grade)	Depth to Native Material (feet below grade)	Depth of Refusal (feet below grade)	Depth MGP Tar-Type Material Observed (feet below grade)
B-1	0-7	7	--	--
B-2	0-6	6	--	--
B-3	0-10	10	--	--
B-4	0-1	--	--	--

**Note:**

-- = not applicable

1. Information summarized above based on interpretation of boring logs prepared by YU & Associates, Inc.
2. Descriptions from last sample interval not interpolated to extend past depth of recovery.

**TABLE 2  
SUMMARY OF PHASE II SOIL BORING INFORMATION**

1 West Main Street  
Beacon, New York

Boring ID	Ground Surface Type	Depth of Fill Material (feet below grade)	Depth to Native Material (feet below grade)	Depth to Refusal (feet below grade)	Depth MGP Tar-Type Material Observed (feet below grade)
MW-101	fill	0-6.5	6.5	--	--
MW-102	fill	0-6.5	6.5	--	--
MW-103	fill	0-5	5	9	0-5
MW-104	vegetated topsoil	0.5-6	6	--	--
MW-105	vegetated topsoil	0.5-9.5	9.5	--	--
TB-101	vegetated topsoil	0.5-11.2	--	--	--
TB-105	vegetated topsoil	0.5-8.9	--	11	4.5-8.9
TB-106	vegetated topsoil	0.5-9	9	10.5	5-9
TB-107	vegetated topsoil	0.5-8.8	--	--	0.5-4
TB-108	vegetated topsoil	0.5-8.8	--	--	--
TB-110	asphalt and fill	0.3-5.6	--	8	--
TB-111	asphalt and fill	0.3-9.2	--	--	--
TB-112	asphalt and fill	0.7-7	7	--	--
TB-113	asphalt and fill	0.3-9.8	--	--	--
TB-115A	fill	0-6	6	--	--
TB-116	vegetated topsoil	0.5-6	6	--	--
TB-117	vegetated topsoil	0.5-10	10	--	7.5-10
TB-118	vegetated topsoil	0.5-8.8	--	--	--
TB-119	vegetated topsoil	0.5-8.8	--	--	--
TB-120	asphalt and fill	0.3-10.5	10.5	--	--
TB-121	vegetated topsoil	0.5-9.5	9.5	15	6-9.5
TB-122	vegetated topsoil	0.5-8	8	10.6	0.5-8
TB-123	vegetated topsoil	0.5-6	6	10.5	0.5-6
TB-124	vegetated topsoil	0.5-8.5	8.5	--	--
TB-125	vegetated topsoil	0.5-9.5	9.5	--	--
TB-126	vegetated topsoil	0.5-8	8	--	--
TB-127	vegetated topsoil	0.5-6.4	--	--	--
TB-128	fill	0-8.4	--	--	--
TB-129	fill	0-8.4	--	--	--
TB-130	asphalt	1-9	--	--	--
TB-131	asphalt and fill	0.7-11.2	--	--	--

**Notes:**

-- = not applicable

1. Information summarized above based on interpretation of boring logs prepared by Day Engineering, inc.
2. Descriptions from last sample interval not interpolated to extend past depth of recovery.

**TABLE 3**  
**SUMMARY OF SUPPLEMENTAL PHASE II SOIL BORING INFORMATION**

1 West Main Street  
Beacon, New York

Boring ID	Depth of Fill Material (feet below floor)	Depth to Native Material (feet below floor)	Depth to Refusal (feet below floor)	Depth MGP/Tar-Type Material Observed (feet below floor)
TB-200	0.5-5	--	5	--
TB-201	0.7-6	--	6.5	--
TB-202	0.5-6	--	6.5	--
TB-203	0.4-3.3	--	4	--
TB-204	0.5-12.5	12.5	--	8-12.5
TB-205	0.7-12.5	12.5	--	--
TB-206	0.5-9.5	9.5	--	--
TB-207	0.5-10	10	--	8.5-10.3
TB-208	0.5-9	9	--	8.5-9
TB-209	0.5-9.5	9.5	--	8.5-9.5
TB-210	0.5-10	10-12	--	--

**Notes:**

-- = not applicable

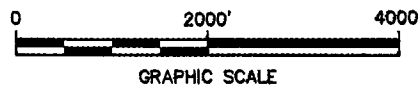
1. Information summarized above based on interpretation of boring logs prepared by YU & Associates, Inc.
2. Descriptions from last sample interval not interpolated to extend past depth of recovery.
3. Concrete floor inside Doral Hat building approximately 3 feet higher than ground surface outside the building.

## *Figures*

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FROM USGS WAPPINGERS FALLS, N.Y. QUADRANGLE PHOTOREVISED 1981



CENTRAL HUDSON GAS AND ELECTRIC CORP.  
 BEACON SITE  
 INTERIM REMEDIAL MEASURE WORK PLAN

SITE LOCATION MAP



FIGURE  
 1

[SR-85-LAF] STR-85-LAF LAF LAF LAYER: ON=\*, OFF=REF\*  
F:\ACTIVE\TOM\ACT\20537005\20537001.DWG SAVED: 12/27/2006 2:06 PM LAYOUT: Layout1 PAGESETUP: D2B-730002-SR PENTABLE: PLTULLCTB PRINTED: 12/27/2006 2:06 PM BY: LFORAKER  
PROJECTNAME: 20537001  
PREFS: IMAGES



- LEGEND:**
- PROPERTY LINE
  - ▭ BUILDING
  - x- FENCE
  - ROAD
  - ||||| RAILROAD
  - ~~~~~ TREELINE
  - ⊕ TEST BORING LOCATION AND ID
  - ⊙ GROUNDWATER MONITORING WELL LOCATION AND ID
  - TEST BORING/MONITORING WELL WHERE MGP-TYPE TAR MATERIAL OBSERVED (SEE NOTE 3)
  - PROPOSED SOIL REMOVAL LIMITS

- NOTES:**
1. BASEMAP INFORMATION OBTAINED FROM AN AERIAL PHOTOGRAPH BY YU & ASSOCIATES, INC. DATED 9/9/05 AND A FIGURE BY DAY ENGINEERING, P.C. ENTITLED "SITE PLAN WITH AREAS OF CONTAMINATION" DATED 12/30/2005 AT A SCALE OF 1"=50'.
  2. ALL LOCATIONS ARE APPROXIMATE.
  3. BASED ON INTERPRETATION OF BORING LOGS PREPARED BY DAY ENGINEERING, INC. AND/OR YU & ASSOCIATES, INC.

CENTRAL HUDSON GAS AND ELECTRIC CORP.  
BEACON, NEW YORK  
**INTERIM REMEDIAL MEASURE WORK PLAN**

**SITE PLAN AND PROPOSED  
SOIL REMOVAL LIMITS**

**BBL**  
an ARCADIS company

FIGURE  
**2**

## ***Attachments***

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## ***Attachment 1***

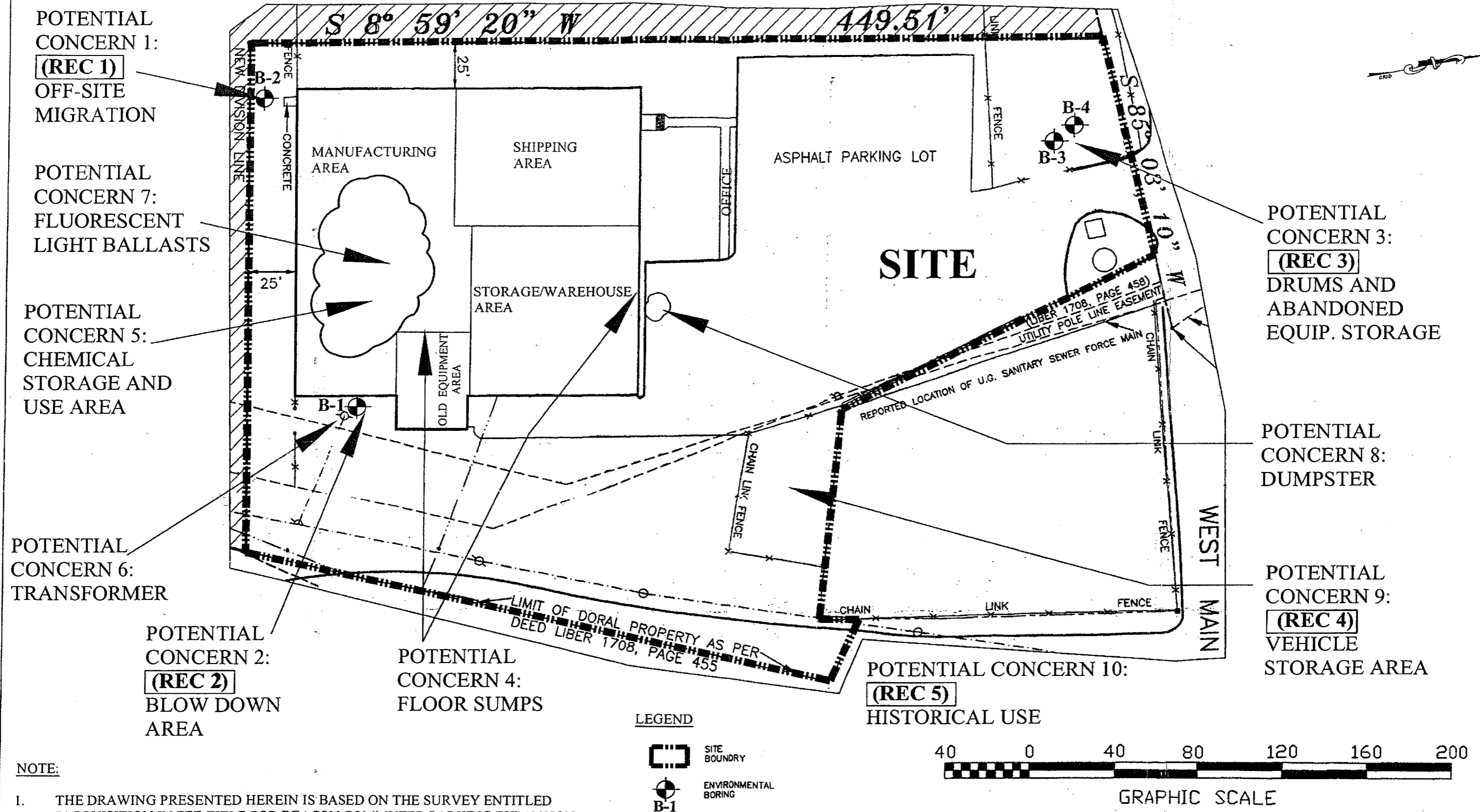
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### **Relevant Information from Previous Investigations**

## Modified Phase I ESA

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G:\YU&ASSOC\PROJECTS\05075 (Metro North Beacon)\Drawings\Dorel Hat Final Report\Fig3\_AOC-Dorel Hat Report.dwg Sep 29, 2005 - 2:11pm asf:ur



**YU & Associates, Inc.**  
Geotechnical, Environmental and Civil Engineering

611 River Drive  
Elmwood Park, NJ 07407

Tel: (201) 791-0075  
Fax: (201) 791-4533

Certificate of Authorization #24GA27976700

**RECOGNIZED ENVIRONMENTAL  
CONDITIONS PLAN  
DOREL HAT**

BEACON

DUTCHESS

NEW YORK

JOB NO.: 0507501

SCALE: AS SHOWN

DATE: 09/29/05

FIG. 3

PROJECT NAME: Metro North Beacon, Dorel Hat

LOCATION: Beacon, NY

GROUND ELEVATION:

NORTHING: EASTING:

RIG TYPE: Geoprobe Advance 66 DT.

DRILLING METHOD: Direct Push Geoprobe

CASING: NA

CORING: NA

STARTED: 08/04/05

COMPLETED: 08/04/05

CONTRACTOR: Land Air Water

Environmental Services

DRILLER: Ernesto Santiago

INSPECTOR: A. Garg

Boring No. B-1

## BOREHOLE FLUID LEVEL

DATE	DEPTH (FEET)
08/04/05 9:30 AM	3.8

DEPTH (feet)	USC System	DESCRIPTION (based on Burmister system)	Recovery (in/in)	PID (ppm)	Hg (mg/m3)	SAMPLE	
						Env. Sample	Depth (feet)
1	FILL	0-6": Hand Augering Brown to Dark Brown, c-f SAND, some c-f gravel, little silt, root fragments, dry	42/60	1.0	0.0 (throughout)	B1-3.0 (Soil)	3-4
2		± 2'					
3		Brown to Grayish Brown c-f SAND, some silt, some c-f gravel, concrete fragments, dry					
4		Grayish Black c-f SAND, some c-f gravel, trace silt, wet, black stained					
5		± 4.5'					
6	CL	Grayish Black c-f SAND and c-f GRAVEL, trace silt, wet, black stained, oil sheen	30/60	5.5		B1-GW (Groundwater)	6-7
7		± 6.5'					
8		Gray c-f GRAVEL, little c-f sand, little silt & clay, wet, oil sheen					
9		± 7'					
10		Gray CLAY & SILT, medium plasticity, wet					
11		± 10'					
12		END OF BORING @ 10 FEET					

## REMARKS:

B1-6.0 on hold

Oil sheen observed from 5'-7.5'.

Yu &amp; Associates, Inc.

PROJECT NAME: Metro North Beacon, Dorel Hal

LOCATION: Beacon, NY

GROUND ELEVATION:

NORTHING: EASTING:

RIG TYPE: Geoprobe Advance 66 DT.

DRILLING METHOD: Direct Push Geoprobe

CASING: NA

CORING: NA

STARTED: 08/04/05

COMPLETED: 08/04/05

CONTRACTOR: Land Air Water

Environmental Services

DRILLER: Ernesto Santiago

INSPECTOR: A. Garg

Boring No. B-2

BOREHOLE FLUID LEVEL

DATE	DEPTH (FEET)
NA	NA

DEPTH (feet)	USC System	DESCRIPTION (based on Burmister system)	Recovery (In/In)	PID (ppm)	Hg (mg/m3)	SAMPLE	
						Env. Sample	Depth (feet)
1	FILL	Brown c-f SAND, some silt, some c-f gravel, root matters, dry ± 0.6'	42/60	0 (throughout)	0.003	B2-5.0 (Soil)	5-6
2		Gray c-f GRAVEL, some c-f sand, little silt, dry ± 2'			0		
3		Dark Brown c-f SAND, some c-f gravel, trace silt, moist			0		
4							
5		Grayish Brown c-f SAND, some silt, little c-f gravel, dry ± 3.5'					
6	ML	Gray-light Brown SILT & CLAY, moist ± 6'	43/60	0 (throughout)		B2-5.0 (Soil)	5-6
7							
8							
9							
10		Same as above ± 10'					
11			30/60	0 (throughout)		B2-5.0 (Soil)	5-6
12							
13							
14							
15		END OF BORING @ 15 FEET ± 15'					
16							

REMARKS:

Yu & Associates, Inc.

PROJECT NAME: Metro North Beacon, Dorel Hat

LOCATION: Beacon, NY

GROUND ELEVATION:

NORTHING: EASTING:

RIG TYPE: Geoprobe Advance 66 DT.

DRILLING METHOD: Direct Push Geoprobe

CASING: NA

CORING: NA

STARTED: 08/04/05

COMPLETED: 08/04/05

CONTRACTOR: Land Air Water

Environmental Services

DRILLER: Ernesto Santiago

INSPECTOR: A. Garg

Boring No. B-3

## BOREHOLE FLUID LEVEL

DATE	DEPTH (FEET)
08/04/05	12.5

DEPTH (feet)	USC System	DESCRIPTION (based on Burmister system)	Recovery (in/in)	SAMPLE									
				PID (ppm)	Hg (mg/m <sup>3</sup> )	Env. Sample	Depth (feet)						
1	FILL	Brown c-f SAND, some silt, some c-f gravel, root matters, dry ± 1'	44/60	0 (throughout)	0 (throughout)								
2		Dark Brown c-f SAND, some silt and c-f gravel, with concrete fragments, brick fragments, moist/dry ± 3.7'											
3													
4													
5													
6	SM	Dark Gray- Brown c-f SAND, some c-f gravel, little silt, trace Clay, moist ± 6'	28/60			0 (throughout)	0 (throughout)	B3-5.5 (Soil)	5.5-6.5				
7		Gray- Brown Clayey SILT, little c-f sand, trace gravel, moist, pocket of brick fragments at 7 ft. ± 7.3'											
8													
9													
10													
11	PT	Dark-Brown c-f SAND, some silt, little m-f gravel, moist, with wood fragments ± 11.5'	60/60					0 (throughout)	0 (throughout)	B3-11.5 (Soil)	11.5-12.5		
12		Dark Brown SILT & CLAY, little c-f sand, trace gravel organic matter, fibers, wood, moist (PEAT), low plasticity ± 12.5'											
13		Gray silty CLAY, some c-f gravel, some c-f sand, fibers, wet (PEAT), low plasticity ± 15'											
14													
15													
16	PT	Dark Gray-Brown SILT & CLAY, little m-f sand, organic matter, wood fragments, wet, low plasticity ± 16.3'	60/60							0 (throughout)	0 (throughout)		
17		Dark Brown Clayey SILT, some m-f sand, trace gravel, wood fragments, moist, low plasticity ± 19.5'											
18													
19													
20													
21	SM	Dark Brown c-f SAND and SILT, trace c-f gravel, wood fragments, moist ± 20'											
		END OF BORING @ 20 FEET											

REMARKS: Groundwater encountered at 12.5 ft. Approximately 500 ml of water was sampled, before the flow of water stopped. Per the driller, it was a small amount of water sitting over the underlying clayey strata.

Yu &amp; Associates, Inc.

PROJECT NAME: Metro North Beacon, Dorel Hat

LOCATION: Beacon, NY

GROUND ELEVATION:

NORTHING: EASTING:

RIG TYPE: Geoprobe Advance 66 DT.

DRILLING METHOD: Hand Auger

CASING: NA

CORING: NA

STARTED: 08/04/05

COMPLETED: 08/04/05

CONTRACTOR: Land Air Water

Environmental Services

DRILLER: Ernesto Santiago

INSPECTOR: A. Garg

Boring No. B-4

BOREHOLE FLUID LEVEL	
DATE	DEPTH (FEET)
NA	NA

DEPTH (feet)	USC System	DESCRIPTION (based on Burmister system)	Recovery (In/In)	PID (ppm)	Hg (mg/m <sup>3</sup> )	SAMPLE	
						Env. Sample	Depth (feet)
1	FILL	Brown c-f SAND, some silt, burnt leaves/wood pieces, black staining at top ±1'		0	0	B4-0.5 (Soil)	0.5-1.0
2		END OF BORING @ 1 FOOT		0	0		
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							

REMARKS: Black stained area was observed adjacent to the two 55-gallon drums inside the junk yard area. Surface soil sample was collected at 0.5 ft.

Yu & Associates, Inc.

TABLE 1

**SAMPLING SUMMARY TABLE  
DOREL HAT - PRE PHASE II INVESTIGATION  
BEACON, NY  
Project # 0507501**

Sample Number	Area of Concern	Date Collected	Depth (ft)	Matrix	Analytical Parameters
B1-3.0	Blow Down Area	8/4/2004	3.0-4.0	SOIL	Not Analyzed
B1-6.0	Blow Down Area	8/4/2004	6.0-7.0	SOIL	PP+40
B2-5.0	Off Site Migration Area	8/4/2004	5.0-6.0	SOIL	PP+40
B3-5.5	Drums and Abandoned Equipment Storage Area	8/4/2004	5.5-6.5	SOIL	Not Analyzed
B3-11.5	Drums and Abandoned Equipment Storage Area	8/4/2004	11.5-12.5	SOIL	Not Analyzed
B4-0.5	Drums and Abandoned Equipment Storage Area	8/4/2004	0.5-1.5	SOIL	PP+40
B1-GW	Blow Down Area	8/4/2004	NA	AQUEOUS	VO+15, BN+25, Pesticides, PCBs
VO+15 - Volatile Organic compounds plus 15 additional compounds BN+25 - Base Neutral Compounds plus 25 additional compounds PP+40 - Priority Pollutants plus 40 additional compounds PCBs - Polychlorinated Biphenyls NA - Not Applicable					

Table 2

## Soil Volatile Organic Analytical Results Summary

Dorel Hat- Pre Phase II Investigation

Beacon, NY

Project # 0507501

Sample ID	B1-6.0	B2-5.0	B4-0.5	NYSDEC	NYSDEC
Lab Sample ID	D0921-02C	D0921-03C	D0921-06C	Rec. Soil	Soil cleanup
Sampling Date	8/4/2005	8/4/2005	8/4/2005	Cleanup	objectives
Sample Depth (ft)	6.0-7.0	5.0-6.0	0.5-1.0	Objective	to protect
Matrix	Soil	Soil	Soil		GW quality
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor	200	1	1		
VOCs					
Methylene Chloride	ND	0.031 J	0.007 J	0.1	0.1
Chloroform	ND	0.012 J	0.003 J	0.3	0.3
Trichloroethene	ND	0.081	ND	0.7	0.7
Toluene	<b>41</b> J	ND	ND	1.5	1.5
Tetrachloroethene	ND	ND	0.0008 J	1.4	1.4
Xylene (Total)	<b>96</b> J	ND	ND	1.2	1.2
1,2,4-Trimethylbenzene	<b>58</b> J	ND	ND	NA	NA
Napthalene	<b>3200</b>	ND	0.003 J	13	13

## Qualifiers

J - Analyte detected Below quantitation limits

ND - Not Detected at the method detection limit

NA - Not Available

**55** - Concentration of compounds that are detected are listed and identified in bold type.**55** - Concentration of compounds that exceed the NYSDEC Soil Cleanup Criteria are listed and identified in bold and boxed.

Use professional Judgement based on data use

## Note:

The data presented herein is based on the Preliminary Results of Volatile Organics analyses.



Table 3

# Soil Semivolatile Organic Analytical Results Summary

Dorel Hat- Pre Phase II Investigation

Beacon, NY

Project # 0507501

Sample ID	B1-6.0	B2-5.0	B4-0.5	NYSDEC	NYSDEC
Lab Sample ID	D0921-02A	D0921-03A	D0921-06A	Rec. Soil	Soil cleanup
Sampling Date	8/4/2005	8/4/2005	8/4/2005	Cleanup	objectives
Sample Depth (ft)	6.0-7.0	5.0-6.0	0.5-1.0	Objective	to protect
Matrix	Soil	Soil	Soil		GW quality
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor	20	1	1		
<b>SVOCs</b>					
2,4-Dimethylphenol	<b>7.2</b> J	ND	ND	NA	NA
Naphthalene	<b>3800</b> E	ND	<b>0.07</b> J	13	13
2-Methylnaphthalene	<b>990</b> E	ND	ND	36.4	36.4
Acenaphthylene	<b>1000</b> E	ND	ND	41	41
Acenaphthene	<b>170</b> E	ND	ND	50	90
Dibenzofuran	<b>860</b> E	ND	ND	6.2	6.2
Fluorene	<b>960</b> E	ND	ND	50	350
Phenanthrene	<b>2300</b> E	ND	ND	50	220
Anthracene	<b>670</b> E	ND	ND	50	700
Carbazole	<b>270</b> E	ND	ND	NA	NA
Fluoranthene	<b>1500</b> E	<b>0.044</b> J	ND	50	1900
Pyrene	<b>1500</b> E	<b>0.05</b> J	ND	50	665
Benzo(a)anthracene	<b>680</b> E	<b>0.041</b> J	ND	MDL	3
Chrysene	<b>390</b> E	<b>0.06</b> J	ND	0.4	0.4
bis(2-Ethylhexyl)phthalate	<b>ND</b> E	<b>0.05</b> J	ND	50	435
Benzo(b)fluoranthene	<b>590</b> E	<b>0.05</b> J	ND	1.1	1.1
Benzo(k)fluoranthene	<b>200</b> E	<b>0.027</b> J	ND	1.1	1.1
Benzo(a)pyrene	<b>230</b> E	<b>0.038</b> J	ND	MDL	11
Indeno(1,2,3-cd)pyrene	<b>170</b> E	ND	ND	3.2	3.2
Dibenzo(a,h)anthracene	<b>33</b> E	ND	ND	MDL	165000
Benzo(g,h,i)perylene	<b>140</b> E	ND	ND	50	800

## Qualifiers

J - Analyte detected Below quantitation limits

E - Value above quantitation range

ND - Not Detected at the method detection limit

NA - Not Available

**55** - Concentration of compounds that are detected are listed and identified in bold type.

**55** - Concentration of compounds that exceed the NYSDEC Soil Cleanup Criteria are listed and identified in bold and boxed.

## Note:

The data presented herein is based on the Preliminary Results of Semivolatile Organic Compounds analyses.

Table 4

Soil PP-Metals Analytical Results Summary

Dorel Hat- Pre Phase II Investigation

Beacon, NY

Project # 0507501

Sample ID	B1-6.0	B2-5.0	B4-0.5	NYSDEC
Lab Sample ID	D0921-02	D0921-03	D0921-06	Rec. Soil
Sampling Date	8/4/2005	8/4/2005	8/4/2005	Cleanup
Sample Depth (ft)	6.0-7.0	5.0-6.0	0.5-1.0	Objective
Matrix	Soil	Soil	Soil	
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor	1	1	1	
PP Metals				
Antimony	ND	1.2	2.5	SB
Arsenic	19	7.3	5.1	7.5 or SB
Beryllium	2.9	0.48	0.33	0.16 or SB
Cadmium	0.59	0.62	1.5	1 or SB
Chromium	42	20	13	10 or SB
Copper	100	48	140	25 or SB
Lead	28	61	54	SB
Nickel	9.7	21	19	13 or SB
Zinc	40	57	870	20 or SB
Mercury	0.22	0.075	0.04	0.1

Qualifiers

J - Analyte detected Below quantitation limits

SB - Site Background

ND - Not Detected at the method detection limit

NA - Not Available

55 - Concentration of compounds that are detected are listed and identified in bold type.

55 - Concentration of compounds that exceed the NYSDEC Soil Cleanup Criteria are listed and identified in bold and boxed.

Note:

The data presented herein is based on the Preliminary Results of PP-Metals analyses.

Table 5

## Soil Pesticides Analytical Results Summary

Dorel Hat- Pre Phase II Investigation

Beacon, NY

Project # 0507501

Sample ID	B1-6.0	B2-5.0	B4-0.5	NYSDEC	NYSDEC
Lab Sample ID	D0921-02A	D0921-03A	D0921-06A	Rec. Soil	Soil cleanup
Sampling Date	8/4/2005	8/4/2005	8/4/2005	Cleanup	objectives
Sample Depth (ft)	6.0-7.0	5.0-6.0	0.5-1.0	Objective	to protect
Matrix	Soil	Soil	Soil		GW quality
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor	20	1	1		
Pesticides/PCBs					
4,4'-DDD	<b>0.18</b>	P ND	ND	2.9	7.7
4,4'-DDT	<b>0.36</b>	ND	ND	2.1	2.5
Methoxychlor	<b>0.86</b>	P ND	ND	NA	900
Endrin ketone	<b>0.28</b>	P ND	ND	NA	NA
Endrin aldehyde	<b>0.11</b>	P ND	ND	NA	NA
gamma-Chlordane	<b>0.47</b>	ND	ND	0.54	14

## Qualifiers

J - Analyte detected Below quantitation limits

P - Use professional Judgement based on data use

ND - Not Detected at the method detection limit

NA - Not Available

55 - Concentration of compounds that are detected are listed and identified in bold type.

55 - Concentration of compounds that exceed the NYSDEC Soil Cleanup Criteria are listed and identified in bold and boxed.

## Note:

The data presented herein is based on the Preliminary Results of Pesticides/PCBs analyses.

Table 6

Soil Total Phenol Analytical Results Summary  
Dorel Hat- Pre Phase II Investigation

Beacon, NY

Project # 0507501

Sample ID	B1-6.0	B2-5.0	B4-0.5	NYSDEC	NYSDEC
Lab Sample ID	D1022-01A	D1022-02A	D1022-03A	Rec. Soil	Soil cleanup
Sampling Date	8/4/2005	8/4/2005	8/4/2005	Cleanup	objectives
Sample Depth (ft)	6.0-7.0	5.0-6.0	0.5-1.0	Objective	to protect
Matrix	Soil	Soil	Soil		GW quality
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor	1	1	1		
Total Phenol	<b>5.3</b>	< 1.1	< 1.0	0.03	0.0003

Qualifiers

**55** - Concentration of compounds that are detected are listed and identified in bold type.

**55** - Concentration of compounds that exceed the NYSDEC Soil Cleanup Criteria are listed and identified in bold and boxed.

< 1.1 The detection limit for the sample exceeds the NYSDEC Soil Cleanup Criteria

Note:

The data presented herein is based on the Preliminary Results of Pesticides/PCBs analyses.

Table 7

Groundwater Volatile Organic Analytical Results Summary  
Dorel Hat- Pre Phase II Investigation

Beacon, NY

Project # 0507501

Sample ID	B1-GW	NYSDEC
Lab Sample ID	D0921-07C	Ambient Water Quality
Sampling Date	8/4/2005	Standards and
Matrix	Water	Guidance Values
Units	ug/l	ug/l
Dilution Factor	100	
VOCs		
Methylene Chloride	ND	5
Chloroform	ND	7
Trichloroethene	ND	5
Toluene	<b>150</b> J	5
Tetrachloroethene	ND	5
Xylene (Total)	<b>150</b> J	5
1,2,4-Trimethylbenzene	<b>100</b> J	5
Napthalene	<b>4600</b> J	10

Qualifiers

J - Analyte detected below quantitation limits

NA - Not Available

**55** - Concentration of compounds that are detected are listed and identified in bold type.

**55** - Concentration of compounds that exceed the NYSDEC Groundwater Standards are listed and identified in bold type and boxed.

Note:

The data presented herein is based on the Preliminary Results of Volatile Organics analyses.

**Groundwater Semivolatile Organic Analytical Results Summary**  
**Dorel Hat- Pre Phase II Investigation**  
**Beacon, NY**  
**Project # 0507501**

Sample ID Lab Sample ID Sampling Date Matrix Units Dilution Factor	BI-GW D0921-07A 8/4/2005 Water ug/l 1	NYSDEC Ambient Water Quality Standards and Guidance Values ug/l
<b>SVOCs</b>		
Phenol	<b>9</b> J	1
2-Methylphenol	<b>11</b>	1
4-Methylphenol	<b>22</b>	1
2,4-Dimethylphenol	<b>56</b>	1
Naphthalene	<b>4000</b> E	10
2-Methylnaphthalene	<b>430</b> E	NA
Acenaphthylene	<b>330</b> E	NA
Acenaphthene	<b>39</b>	20
Dibenzofuran	<b>140</b>	NA
Fluorene	<b>110</b>	50
Phenanthrene	<b>140</b>	50
Anthracene	<b>31</b>	50
Carbazole	<b>200</b>	NA
Fluoranthene	<b>28</b>	50
Pyrene	<b>22</b>	50
Benzo(a)anthracene	<b>8</b> J	0.002
Chrysene	<b>6</b> J	0.002
Benzo(b)fluoranthene	<b>4</b> J	0.002
Benzo(k)fluoranthene	<b>2</b> J	0.002
Benzo(a)pyrene	<b>4</b> J	0.002
Indeno(1,2,3-cd)pyrene	<b>2</b> J	0.002
Benzo(g,h,i)perylene	<b>2</b> J	NA

**Qualifiers**

J - Analyte detected below quantitation limits

E - Value above quantitation range

NA - Not Available

**55** - Concentration of compounds that are detected are listed and identified in bold type.

**55** - Concentration of compounds that exceed the NYSDEC Groundwater Standards are listed and identified in bold type and boxed.

**Note:**

The data presented herein is based on the Preliminary Results of Semi-volatile Organics analyses.

Table 9

**Grounwater PP Metals Organic Analytical Results Summary**  
**Dorel Hat- Pre Phase II Investigation**

**Beacon, NY**

**Project # 0507501**

Sample ID	BI-GW	NYSDEC
Lab Sample ID	D0921-07	Ambient Water Quality
Sampling Date	8/4/2005	Standards and
Matrix	Water	Guidance Values
Units	ug/l	ug/l
Dilution Factor	1	
PP Metals		
Antimony	34	3
Arsenic	590	25
Beryllium	34	3
Cadmium	42	5
Chromium	1400	50
Copper	2800	200
Lead	1000	25
Nickel	1200	100
Zinc	4500	NA
Mercury	0.96	0.7

**Qualifiers**

NA - Not Available

PP-Metals - Priority Pollutant Metals

**55** - Concentration of compounds that are detected are listed and identified in bold type.

**55** - Concentration of compounds that exceed the NYSDEC Groundwater Standards are listed and identified in bold type and boxed.

**Note:**

The data presented herein is based on the Preliminary Results of PP-Metals analyses.

Table 10

**Groundwater Pesticides Analytical Results Summary**  
**Dorel Hat- Pre Phase II Investigation**  
**Beacon, NY**  
**Project # 0507501**

Sample ID	BI-GW	NYSDEC
Lab Sample ID	D0921-07A	Ambient Water Quality
Sampling Date	8/4/2005	Standards and
Matrix	Water	Guidance Values
Units	ug/l	ug/l
Dilution Factor	1	
Pesticides/PCBs		
Heptachlor epoxide	<b>0.11</b> P	0.03
4,4'-DDD	<b>0.21</b> P	NA
4,4'-DDT	<b>0.46</b> P	NA
Endrin ketone	<b>1.4</b>	5
gamma-Chlordane	<b>0.1</b> P	NA

**Qualifiers**

PCBs - Polychlorinated Biphenyls

NA - Not Available

P - Use professional judgement based on data use

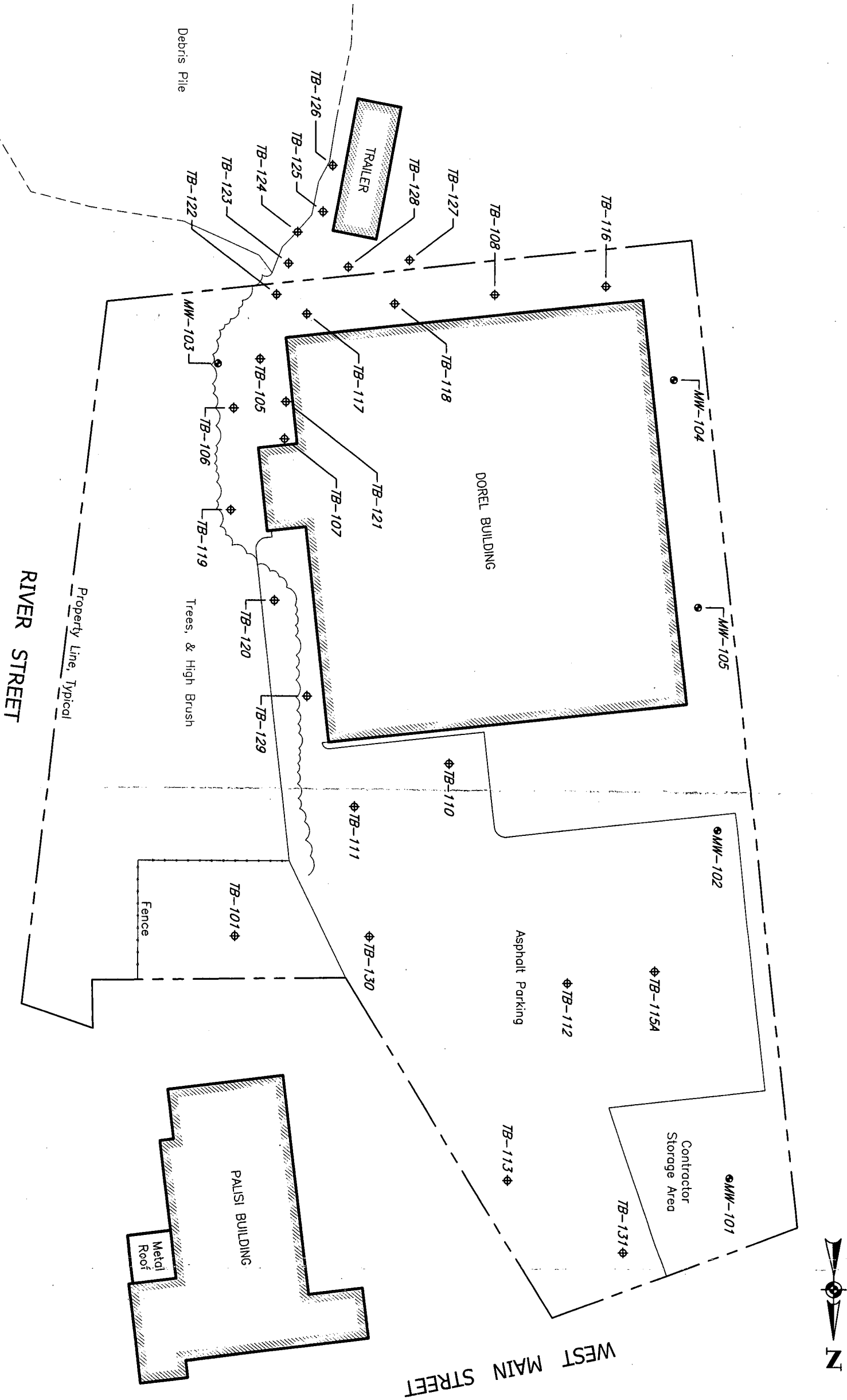
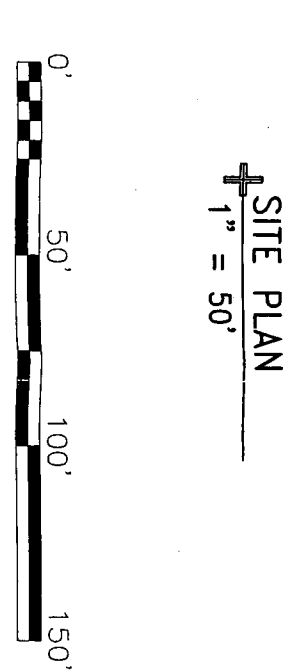
**55** - Concentration of compounds that are detected are listed and identified in bold type.**55** - Concentration of compounds that exceed the NYSDEC Groundwater Standards are listed and identified in bold type and boxed.**Note:**

The data presented herein is based on the Preliminary Results of Pesticides/PCBs analyses.

## Phase II ESA

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- NOTES:
1. Site plan produced from drawing by Yu & Associates, Inc. entitled "Tax Map Dorel Hat (Vicinity of Beacon Station), dated 09/29/05, and a drawing entitled "Recognized Environmental Conditions Plan, 7 West Main Street", dated 09/06/05.
  2. Test boring and monitoring well locations were obtained in the field by a Trimble GeoXT GPS. Locations should be considered accurate to the degree implied by the method used.



- LEGEND
- TB-110 Test Boring location and designation
  - MW-102 Groundwater Monitoring Well location and designation

PROJECT TITLE  
**METRO-NORTH RAILROAD  
1 & 7 WEST MAIN STREET  
BEACON, NEW YORK**

DRAWING TITLE  
**Site Plan**

PROJECT NO.  
**01-30231**

**FIGURE 1**

**day**

DAY ENGINEERING, P.C.  
ENVIRONMENTAL ENGINEERING CONSULTANTS  
ROCHESTER, NEW YORK 14614-1008  
NEW YORK, NEW YORK 10165-1617

FIELD VERIFIED BY <b>NS</b>	DATE <b>11-2005</b>
DRAWN BY <b>RJM</b>	DATE DRAWN <b>11-23-2005</b>
SCALE <b>1" = 50'</b>	DATE ISSUED <b>12-30-2005</b>

**day**

DAY ENVIRONMENTAL, INC.

ENVIRONMENTAL CONSULTANTS

AN AFFILIATE OF DAY ENGINEERING, P.C.

Project #: PC.26961-01  
Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

TEST BORING NO. MW-101

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_ Page of 1 of 1  
Date Started: 11/15/2006 Date Ended: 11/15/2005  
Borehole Depth: 12.0' Borehole Diameter: 2.0"  
Completion Method: ☒ Well installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	Dark brown Sandy Silt, some Gravel, intermixed with Brick and Coal Fragments, moist (FILL)	
2	NA	S-1	0-4	100	NA	0.0	0.0		
3							0.0		
4							0.0	Black Sandy Gravel, trace Silt, intermixed with Brick and Coal Fragments, moist (FILL)	
5							0.0	...wet	
6	NA	S-2	4-8	60	NA	0.0	0.0		
7								Green/Gray Sandy SILT, some Gravel, wet	
8							0.0		
9							0.0		
10	NA	S-3	8-12	40	NA	0.0	0.0	Gray Sandy GRAVEL, little Rock Fragments, trace Silt, wet	
11									
12							0.0		
								BOH @ 12.0'	

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

TEST BORING NO. MW-101

40 COMMERCIAL STREET  
ROCHESTER, NEW YORK 14614-1008  
(585) 454-0210  
FAX (585) 454-0825

NEW YORK, NEW YORK 10165-1617  
(212) 986-8645  
FAX (212) 986-8657

[www.dayenvironmental.com](http://www.dayenvironmental.com)

Simon:\My Documents\mes0090 PC26961-01 Boring Logs

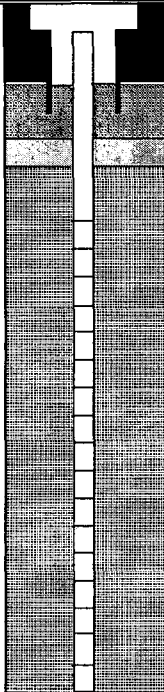
3/14/2006



DAY ENVIRONMENTAL, INC.

ENVIRONMENTAL CONSULTANTS  
AN AFFILIATE OF DAY ENGINEERING, P.C.

## MONITORING WELL INSTALLATION LOG

Project #: <u>PC.2696I-01</u>		MONITORING WELL MW-101	
Project Address: <u>1 West Main Street</u> <u>Beacon, New York</u>			
DAY Representative: <u>Nate Simon</u>	Ground Elevation: _____	Datum: _____	Page 1 of 1
Drilling Contractor: <u>Miller Environment</u>	Date Started: <u>11/15/2005</u>	Date Ended: <u>11/15/2005</u>	
Water Level (Date/Time): <u>4.23' 12/01/2005</u>			
Refer to Test Boring Log TB- MW-101 for Soil Description		← Flush Mounted Roadbox	
		0.20 Depth to Top of Riser Pipe (ft)	
		0.33 Depth to Bottom of Cement Surface Patch (ft)	
		Backfill Type <u>N/A</u>	
		0.53 Depth to Top of Bentonite Seal (ft)	
		0.70 Depth to Bottom of Bentonite Seal (ft)	
		2.0 Depth to Top of Well Screen (ft)	
		2.5 Diameter of Borehole (in)	
		Backfill Type <u>Sand</u>	
		2.0 Inside Diameter of Well (in)	
	Type of Pipe <u>PVC</u>		
	Screen slot size <u>#10</u>		
	12.0 Depth to Bottom of Well Screen (ft)		
	12.0 Depth of Borehole (ft)		
Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions. 2) NA = Not Available or Not Applicable			
			MONITORING WELL MW-101

Simon:\My Documents\mes0091 PC2696I-01 Monitoring Well Installation Logs

40 COMMERCIAL STREET  
ROCHESTER, NEW YORK 14614-1008  
(585) 454-0210  
FAX (585) 454-0825

www.dayenvironmental.com

NEW YORK, NEW YORK 10165-1617  
(212) 986-8645  
FAX (212) 986-8657

**day**

DAY ENVIRONMENTAL, INC.

ENVIRONMENTAL CONSULTANTS

AN AFFILIATE OF DAY ENGINEERING, P.C.

Project #: PC-26961-01  
Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

TEST BORING NO. MW-102

Page of 1 of 1

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/15/2006 Date Ended: 11/15/2006  
Borehole Depth: 12.0' Borehole Diameter: 2.0"  
Completion Method: ☒ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQP%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	Black, Sandy Gravel, trace Silt, intermixed with Brick and Coal Fragments, moist (FILL)	
2	NA	S-1	0-4	50	NA	0.0	0.0		
3									
4							0.0	...wet	
5							0.0		
6	NA	S-2	4-8	40	NA	0.0	0.0		
7								Gray Silty CLAY, some Sand, trace Gravel, wet	
8							0.0		
9							0.0	Green/Gray Silty SAND, trace Clay, trace Gravel, wet	
10	NA	S-3	8-12	100	NA	0.0	0.0		
11								...some Gravel	
12							0.0		
								BOH @ 12.0'	

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

TEST BORING NO. MW-102

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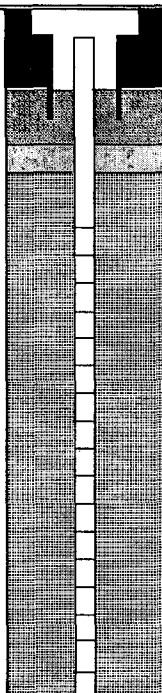
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## MONITORING WELL INSTALLATION LOG

Project #:	PC.2696I-01			MONITORING WELL MW-102	
Project Address:	1 West Main Street				
	Beacon, New York	Ground Elevation:	Datum:	Page 1 of 1	
DAY Representative:	Nate Simon	Date Started:	11/15/2005	Date Ended:	11/15/2005
Drilling Contractor:	Miller Environment	Water Level (Date/Time):			1.55' 12/01/2005

Refer to Test Boring Log TB-MW-102 for Soil Description



← Flush Mounted Roadbox  
0.15 Depth to Top of Riser Pipe (ft)  
0.33 Depth to Bottom of Cement Surface Patch (ft)  
Backfill Type N/A  
0.48 Depth to Top of Bentonite Seal (ft)  
0.7 Depth to Bottom of Bentonite Seal (ft)  
2.0 Depth to Top of Well Screen (ft)  
2.5 Diameter of Borehole (in)  
Backfill Type Sand  
2.0 Inside Diameter of Well (in)  
Type of Pipe PVC  
Screen slot size #10  
12.0 Depth to Bottom of Well Screen (ft)  
12.0 Depth of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) NA = Not Available or Not Applicable

MONITORING WELL MW-102

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Project #: PC.26961-01  
Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

TEST BORING NO. MW-103

Page of 1 of 1

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/16/2006 Date Ended: 11/16/2006  
Borehole Depth: 9.0' Borehole Diameter: 2.0"  
Completion Method: ☒ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	Black Sandy Gravel, trace Silt, intermixed with Coal Tar, Coal, Coal Slag and Brick Fragments, moist (FILL)	
2	NA	S-1	0-4	50	NA	2.1	0.5	...Coal Tar Type Odor	
3							2.4	...wet ( water has a sheen)	
4							10.8		
5								Black Silty CLAY, some Sandy Gravel, wet	
6	NA	S-2	4-8	60	NA	155	58.6		
7									
8							24.2		
9	NA	S-3	8-9	0	NA	-	-		
								Refusal @ 9.0'	

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

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MONITORING WELL INSTALLATION LOG

Project #: PC.2696I-01  
Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environment

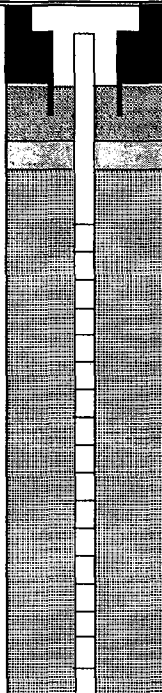
Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/15/2005 Date Ended: 11/15/2005

MONITORING WELL MW-103

Page 1 of 1

Water Level (Date/Time): 2.00' 12/01/2005

Refer to Test Boring Log TB- MW-103 for Soil Description



← Flush Mounted Roadbox  
0.15 Depth to Top of Riser Pipe (ft)  
0.33 Depth to Bottom of Cement Surface Patch (ft)  
Backfill Type N/A  
0.48 Depth to Top of Bentonite Seal (ft)  
0.7 Depth to Bottom of Bentonite Seal (ft)  
2.0 Depth to Top of Well Screen (ft)  
1.5 Diameter of Borehole (in)  
Backfill Type Sand  
1.0 Inside Diameter of Well (in)  
Type of Pipe PVC  
Screen slot size #10  
9.0 Depth to Bottom of Well Screen (ft)  
9.0 Depth of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) NA = Not Available or Not Applicable

MONITORING WELL MW-103

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Project #: PC-26961-01  
Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

TEST BORING NO. MW-104

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/29/2006 Date Ended: 11/29/2006  
Borehole Depth: 12.0' Borehole Diameter: 2"  
Completion Method: ☒ Well Installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

Page of 1 of 1

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQP%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL AND ROOTS	
2	NA	S-1	0-4	20	NA	0.4	0.0	Black Sandy Gravel, some Brick Fragments, moist (FILL)	
3									
4							0.7	...wet	
5							0.0		
6	NA	S-2	4-8	40	NA	1.1	0.0	Tan Silty CLAY, trace Gravel, wet	
7									
8							0.0		
9									
10	NA	S-3	8-12	0	NA	-	-		
11									
12								BOH @ 12.0'	

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

TEST BORING NO. MW-104

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MONITORING WELL INSTALLATION LOG

Project #: PC.2696I-01  
Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environment

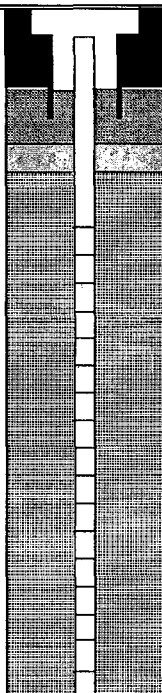
Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/29/2005 Date Ended: 11/29/2005

MONITORING WELL MW-104

Page 1 of 1

Water Level (Date/Time): 5.40' 12/01/2005

Refer to Test Boring Log TB-MW-104 for Soil Description



← Flush Mounted Roadbox  
3.0 AGS Depth to Top of Riser Pipe (ft)  
N/A Depth to Bottom of Cement Surface Patch (ft)  
Backfill Type N/A  
0.0 Depth to Top of Bentonite Seal (ft)  
2.0' Depth to Bottom of Bentonite Seal (ft)  
2.0 Depth to Top of Well Screen (ft)  
2.0 Diameter of Borehole (in)  
Backfill Type Sand  
1.0 Inside Diameter of Well (in)  
Type of Pipe PVC  
Screen slot size #10  
12.0 Depth to Bottom of Well Screen (ft)  
12.0 Depth of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) NA = Not Available or Not Applicable

MONITORING WELL MW-104

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Project #: PC 26961-01  
Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/29/2005 Date Ended: 11/29/2005  
Borehole Depth: \_\_\_\_\_ Borehole Diameter: \_\_\_\_\_  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

TEST BORING NO. MW-105

Page of 1 of 1

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL	
2	NA	S-1	0-4	30	NA	0.3	0.0	Black Sandy Gravel, some Silt, intermixed with Coal, Coal Slag and Brick Fragments, moist (FILL)	
3							0.0		
4							0.0		
5							0.0	...wet	
6	NA	S-2	4-8	20	NA	0.2	0.0	Brown Silty Sand, some Gravel intermixed with Brick Fragments, wet (FILL)	
7							0.0		
8							0.0		
9							0.0		
10	NA	S-3	8-12	60	NA	0.4	1.1	Green/Gray Silty CLAY, trace Gravel, trace Sand, wet	
11									
12							1.0		
								BOH @ 12.0'	

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 aV lamp.  
4) NA = Not Available or Not Applicable

TEST BORING NO. MW-105

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Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environment

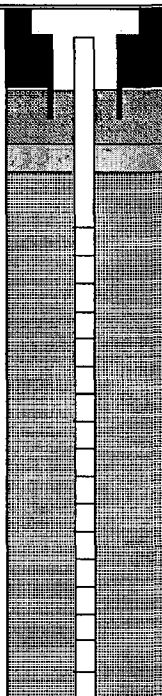
MONITORING WELL MW-105

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/30/2005 Date Ended: 11/30/2005

Page 1 of 1

Water Level (Date/Time): 4.35' 12/01/2005

Refer to Test Boring Log TB-MW-105 for Soil Description



← Flush Mounted Roadbox  
1.75 AGS Depth to Top of Riser Pipe (ft)  
N/A Depth to Bottom of Cement Surface Patch (ft)  
Backfill Type N/A  
0.0 Depth to Top of Bentonite Seal (ft)  
0.5' Depth to Bottom of Bentonite Seal (ft)  
2.0 Depth to Top of Well Screen (ft)  
2.0 Diameter of Borehole (in)  
Backfill Type Sand  
1.0 Inside Diameter of Well (in)  
Type of Pipe PVC  
Screen slot size #10  
12.0 Depth to Bottom of Well Screen (ft)  
12.0 Depth of Borehole (ft)

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) NA = Not Available or Not Applicable

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Project #: PC26961-01  
Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/30/2006 Date Ended: 11/30/2005  
Borehole Depth: 12.0' Borehole Diameter: 2.0"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

TEST BORING NO. TB-101

Page of 1 of 1

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL AND ROOTS	
2	NA	S-1	0-4	60	NA	0.0	0.7	Black Silty Sand, little Gravel, trace Clay, intermixed with Brick, Coal Slag and Coal Fragments, moist (FILL)	
3							1.0	...wet	
4							0.0		
5							0.2	Black Sandy Gravel, little Silt, trace Clay, intermixed with Coal Fragments, wet (FILL)	
6	NA	S-2	4-8	80	NA	0.6	0.4		
7							0.0		
8							0.0	Brown fine Sand, some Gravel, trace Silt, intermixed with Brick Fragments, wet (FILL)	
9							0.0		
10	NA	S-3	8-12	80	NA	0.6	0.0	Brown coarse Sand, some Gravel, trace Silt, intermixed with Brick Fragments, wet (FILL)	
11							0.0		
12								BOH @ 12.0'	

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

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DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

**TEST BORING NO. TB-105**

Page of 1 of 1

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/15/2006 Date Ended: 11/15/2005  
Borehole Depth: 11.0' Borehole Diameter: 2.0"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL AND ROOTS	
2	NA	S-1	0-4	80	NA	0.0	0.2	Black Sandy Gravel, trace Silt, Intermixed with Brick and Coal Fragments, moist (FILL)	
3								Coal Slag Fragments, wet	
4							0.2		
5								Black Sandy Gravel, trace Silt, Intermixed with Coal Tar and Coal Slag Fragments, wet (FILL)	
6	NA	S-2	4-8	30	NA	3.2	10.8	...water is black with sheen	
7									
8							12.4		
9							22.4		
10	NA	S-3	8-11	30	NA	4.8	12.8		
11							11.6		
								Refusal @ 11.0'	

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

**TEST BORING NO. TB-105**

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Project #: PC.26961-01  
Project Address: 1 West Main Street  
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DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

**TEST BORING NO. TB-106**

Page of 1 of 1

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/15/2006 Date Ended: 11/15/2005  
Borehole Depth: 10.5' Borehole Diameter: 2.0"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL AND ROOTS	
2	NA	S-1	0-4	60	NA	1.6	2.3	Black Sandy Gravel, trace Silt, intermixed with Coal and Coal Slag Fragments, moist (FILL)	
3							4.6	...wet (water has sheen)	
4							10.6	Black stained Gravel, some Silty Sand, intermixed with Coal Tar and Coal Slag Fragments, wet (FILL)	
5							33.1		
6	NA	S-2	4-8	40	NA	5.9			
7							42.2		
8							12.8		
9	NA	S-3	8-10.5	30	NA	3.7	7.2	Green/Gray Silty CLAY, wet	
10							5.6		
								Refusal @ 10.5'	

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

**TEST BORING NO. TB-106**

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Project #: PC.26961-01  
Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/15/2006 Date Ended: 11/15/2005  
Borehole Depth: 12.0' Borehole Diameter: 2.0"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

**TEST BORING NO. TB-107**

Page of 1 of 1

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL AND ROOTS	
2	NA	S-1	0-4	40	NA	3.4	1.6	Black Sandy Gravel, trace Silt, intermixed with Coal Tar, Coal and Coal Slag Fragments, moist (FILL)	
3							2.8	Coal Slag Fragments some Sand, trace Gravel, wet	
4							3.4	...water is black with sheen	
5								Black Stained Gravel, some Silty Sand intermixed with Coal Slag Fragments, wet (FILL)	
6	NA	S-2	4-8	30	NA	6.4	28.6		
7									
8							41.2		
9							4.6		
10	NA	S-3	8-12	20	NA	1.9	6.2		
11									
12							12.4		
BOH @ 12.0'									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

**TEST BORING NO. TB-107**

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Project #: PC.26961-01  
Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/15/2006 Date Ended: 11/15/2005  
Borehole Depth: 12.0' Borehole Diameter: 2.0"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

**TEST BORING NO. TB-108**

Page of 1 of 1

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL AND ROOTS	
2	NA	S-1	0-4	60	NA	0.0	0.0	Black Sandy Gravel, some Silt, intermixed with Coal Fragments, moist (FILL)	
3									
4							0.0	...wet	
5							0.0		
6	NA	S-2	4-8	40	NA	0.1	0.0		
7									
8							0.0		
9							0.0		
10	NA	S-3	8-12	20	NA	0.0	0.0		
11									
12							0.0		
BOH @ 12.0'									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

**TEST BORING NO. TB-108**

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AN AFFILIATE OF DAY ENGINEERING, P.C.

Project #: PC.26961-01  
Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/29/2006 Date Ended: 11/29/2005  
Borehole Depth: \_\_\_\_\_ Borehole Diameter: 2.0"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

**TEST BORING NO. TB-110**

Page of 1 of 1

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	0.3' Asphalt and FILL	
2	NA	S-1	0-4	60	NA	1.1	0.0	Brown Sandy Gravel intermixed with Coal Fragments, moist (FILL)	
3								...Black Sandy Gravel	
4							0.0	...wet	
5							0.0		
6	NA	S-2	4-8	40	NA	1.1	0.0		
7									
8							0.0		
								Refusal @ 8.0'	

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

**TEST BORING NO. TB-110**

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Project #: PC.26961-01  
Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

**TEST BORING NO. TB-111**

Page of 1 of 1

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/15/2006 Date Ended: 11/15/2005  
Borehole Depth: 12.0' Borehole Diameter: 2.0"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	0.3' Asphalt and FILL	
2	NA	S-1	0-4	60	NA	0.9	0.8	Brown Sand, some Gravel, trace Silt, intermixed with Coal Fragments, moist (FILL)	
3							1.7	...wet	
4							0.3	Black Sandy Gravel, intermixed with Coal Slag and Coal Fragments, wet (FILL)	
5									
6	NA	S-2	4-8	40	NA	1.0	0.4		
7									
8							0.4		
9							0.4		
10	NA	S-3	8-12	30	NA	0.3	0.6		
11								Black Silty SAND, trace Gravel, wet	
12							0.5		
BOH @ 12.0'									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

**TEST BORING NO. TB-111**

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Project #: PC.26961-01  
Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/30/2006 Date Ended: 11/30/2005  
Borehole Depth: 12.0' Borehole Diameter: 2.0'  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

**TEST BORING NO. TB-112**

Page of 1 of 1

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	0.75' Asphalt and FILL	
2	NA	S-1	0-4	50	NA	1.0	0.0	Brown Sandy Gravel, some Silt, intermixed with Brick and Coat Fragments, moist (FILL)	
3									
4							0.0	...wet	
5							0.0		
6	NA	S-2	4-8	20	NA	1.3	0.0		
7									
8							0.0	Green Silty CLAY, wet	
9									
10	NA	S-3	8-12	0	NA	-	-	...no recovery	
11									
12								BOH @ 12.0'	

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

**TEST BORING NO. TB-112**

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Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/30/2006 Date Ended: 11/30/2005  
Borehole Depth: 12.0' Borehole Diameter: 2.0"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

**TEST BORING NO. TB-113**

Page of 1 of 1

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	0.3' Asphalt and FILL	
2	NA	S-1	0-4	80	NA	0.9	0.0	Black Sandy Silt, little Gravel, intermixed with Brick and Coal Fragments, moist (FILL)	
3									
4							0.0		
5							0.0	...wet	
6	NA	S-2	4-8	80	NA	0.4	0.0	Gray Silty Sand, little Gravel, intermixed with Brick and Coal Fragments, wet (FILL)	
7								...Black Sandy Silt	
8							0.0		
9									
10	NA	S-3	8-11	60	NA	0.3	0.0		
11								Black Sandy Gravel, little Silt, intermixed with Wood and Brick Fragments, wet (FILL)	
12							0.0		
BOH @ 12.0'									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

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DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

**TEST BORING NO. TB-115A**

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_ Page of 1 of 1  
Date Started: 11/15/2006 Date Ended: 11/15/2005  
Borehole Depth: 8.0' Borehole Diameter: 2.0"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	Black Sandy Gravel, some Silt, intermixed with Coal and Brck Fragments, moist (FILL)	
2	NA	S-1	0-4	70	NA	0.0	0.0		
3							0.0		
4							0.0	...wet	
5							0.0		
6	NA	S-2	4-8	30	NA	0.0	0.0	Green/Gray coarse SAND, little Gravel, trace Silt, wet	
7									
8							0.0		
								BOH @ 8.0'	

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

**TEST BORING NO. TB-115A**

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DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

**TEST BORING NO. TB-116**

Page of 1 of 1

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/15/2006 Date Ended: 11/15/2005  
Borehole Depth: 12.0' Borehole Diameter: 2.0"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL and ROOTS	
2	NA	S-1	0-4	90%	NA	0.0	0.0	Black Sandy Gravel, trace Silt, intermixed with Coal Fragments, moist (FILL)	
3									
4							0.0	...wet	
5							0.0		
6	NA	S-2	4-8	100	NA	0.2	0.0	Brown/Green Silty CLAY, trace Sand, wet	
7									
8							0.0		
9							0.0	Brown SILT, trace Sand, wet	
10	NA	S-3	8-12	90	NA	0.0	0.0		
11									
12							0.0		
BOH @ 12.0'									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

**TEST BORING NO. TB-116**

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DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

TEST BORING NO. TB-117

Page of 1 of 1

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/15/2006 Date Ended: 11/15/2006  
Borehole Depth: 12.0' Borehole Diameter: 2.0"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1								TOPSOIL and ROOTS	
2	NA	S-1	0-4	80	NA	1.7	5.3	Black Sandy Gravel, some Silt, intermixed with Coal Fragments, moist (FILL)	
3									
4							17.1	...wet (water has sheen)	
5									
6	NA	S-2	4-8	60	NA	23.5	34.6	...some Coal Slag Fragments	
7									
8							49.2	Black Sandy Gravel, some Silt, intermixed with Coal Fragments and Coal Tar, wet (FILL)	
9							37.2		
10	NA	S-3	8-12	40	NA	1.7	29.1		
11								Gray Silty CLAY, some sand, wet	
12							7.6		
								BOH @ 12.0'	

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

TEST BORING NO. TB-117

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Project #: PC.26961-01  
Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/15/2006 Date Ended: 11/15/2005  
Borehole Depth: 12.0' Borehole Diameter: 2.0"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

**TEST BORING NO. TB-118**

Page of 1 of 1

Depth (ft)	Blows per 0.5 ft	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL and ROOTS	
2	NA	S-1	0-4	60	NA	0.0	0.0	Black Sandy Gravel, some Silt, intermixed with Coal Fragments, moist (FILL)	
3									
4							0.0	...wet	
5							0.0		
6	NA	S-2	4-8	40	NA	0.0	0.0		
7									
8							0.0		
9							0.0		
10	NA	S-3	8-12	20	NA	0.0	0.0		
11									
12							0.0		
BOH @ 12.0'									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

**TEST BORING NO. TB-118**

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Project #: PC.26961-01  
Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/16/2006 Date Ended: 11/16/2005  
Borehole Depth: 12.0' Borehole Diameter: 2.0"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

**TEST BORING NO. TB-119**

Page of 1 of 1

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSCIL and ROOTS	
2	NA	S-1	0-4	70	NA	4.3	1.3	Brown coarse Sand, some Gravel, trace Silt, moist (FILL)	
3							0.8	...wet (water has sheen)	
4							1.1	Black Stained Gravel, trace Sand, intermixed with Coal Fragments, wet (FILL)	
5							2.1		
6	NA	S-2	4-8	20	NA	2.1	2.1		
7							3.0		
8							2.4	Black Sandy Silt, some Gravel, trace Clay, wet (FILL)	
9							2.9		
10	NA	S-3	8-12	20	NA	14.1	2.9		
11							3.2		
12								BOH @ 12.0'	

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

**TEST BORING NO. TB-119**

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Project #: PC 2696I-01  
Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/16/2006 Date Ended: 11/16/2005  
Borehole Depth: 12.0' Borehole Diameter: 2.0"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

**TEST BORING NO. TB-120**

Page of 1 of 1

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	0.3' Asphalt and FILL	
2	NA	S-1	0-4	80	NA	2.2	0.2	Black Sandy Gravel intermixed with Coal and Coal Slag Fragments, moist (FILL)	
3							0.4	...wet (water has sheen)	
4							0.9		
5									
6	NA	S-2	4-8	40	NA	3.0	2.1		
7									
8							3.9		
9							3.2		
10	NA	S-3	8-12	20	NA	4.7	2.9		
11								Gray Silty SAND, some Gravel, trace Clay, wet	
12							3.8		
								BOH @ 12.0'	

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

**TEST BORING NO. TB-120**

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Project #: PC.26961-01  
Project Address: 1 West Main Street  
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DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

**TEST BORING NO. TB-121**

Page 1 of 1

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/29/2005 Date Ended: 11/29/2005  
Borehole Depth: 15.0' Borehole Diameter: 2.0"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL and ROOTS	
2	NA	S-1	0-4	80%	NA	2.1	0.0	Black Sandy Gravel, some Silt, intermixed with Coal and Coal Slag Fragments, moist (FILL)	
3									
4							1.0	...wet (water has sheen), Coal Tar Type Odor	
5							1.1		
6	NA	S-2	4-8	60	NA	2.2	2.1	Black Sandy Gravel and Coal, intermixed with Coal Slag Fragments and Coal Tar, wet (FILL)	
7									
8							1.0		
9							323		
10	NA	S-3	8-12	60	NA	39.9	81.6	Black Silty CLAY, trace Silt, trace Gravel, wet	
11									
12							106		
13							6.4	Gray Silty SAND, some Gravel, wet	
14	NA	S-4	12-15	80	NA	3.0	5.6		
15							6.2		
								Refusal @ 15.0'	

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

**TEST BORING NO. TB-121**

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AN AFFILIATE OF DAY ENGINEERING, P.C.

Project #: PC.26961-01  
Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/29/2006 Date Ended: 11/29/2005  
Borehole Depth: 10.6' Borehole Diameter: 2.0"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

**TEST BORING NO. TB-122**

Page of 1 of 1

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL and ROOTS	
2	NA	S-1	0-4	60	NA	12.4	0.0	Black Sandy Gravel, some Silt, intermixed with Coal Tar, Coal Slag and Coal Fragments, moist (FILL)	
3									
4							9.3	...wet (water has sheen)	
5							3.6		
6	NA	S-2	4-8	50	NA	2.1	1.2		
7									
8							1.0		
9	NA	S-3	8-12	40	NA	2.8	1.2	Gray Silty CLAY, wet	
10							0.8		
								Refusal @ 10.6'	

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

**TEST BORING NO. TB-122**

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Project #: PC-2696I-01  
Project Address: 1 West Main Street  
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DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

TEST BORING NO. TB-123

Page of 1 of 1

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/29/2006 Date Ended: 11/29/2006  
Borehole Depth: 10.5' Borehole Diameter: 2.0"  
Completion Method: ☐ Well installed ☐ Backfilled with Grout ☐ Backfilled with Cuttings  
Water Level (Date/Time): \_\_\_\_\_

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL and ROOTS	
2	NA	S-1	0-4	80	NA	16.9	3.1	Black Sandy Gravel, some Silt, intermixed with Coal and Coal Slag Fragments, Coal Tar, moist (FILL)	
3								Coal Slag Fragments, some Sandy Gravel, trace Silt, intermixed with Coal Tar, moist (FILL)	
4							7.2	...wet (water has sheen)	
5							3.6		
6	NA	S-2	4-8	50	NA	14.8	6.8	Gray Silty CLAY, trace Sand, wet	
7									
8							4.8		
9	NA	S-3	8-12	60	NA	0.7	13.8		
10							1.8		
								Refusal @ 10.5'	

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MinRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

TEST BORING NO. TB-123

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Project #:	PC.26961-01	TEST BORING NO. TB-124	
Project Address:	1 West Main Street Beacon, New York	Ground Elevation:	Page of 1 of 1
DAY Representative:	Nate Simon	Date Started:	Date Ended:
Drilling Contractor:	Miller Environmental	Borehole Depth:	Borehole Diameter:
Sampling Method:	Direct Push	Completion Method:	
		Water Level (Date/Time):	

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-value or RQD%	Headspace PID Heading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL and ROOTS	
2	NA	S-1	0-4	80	NA	0.7	0.0	Black Silty Sand, Intermixed with Coal and Coal Slag Fragments, moist (FILL)	
3									
4							0.0	...wet (water has sheen)	
5							0.8		
6	NA	S-2	4-8	60	NA	0.9	1.2	Coal Slag Fragments, some Gravel, wet (FILL)	
7									
8							3.6		
9							48.1	Gray Silty CLAY, wet	
10	NA	S-3	8-12	40	NA	8.1	96.2		
11									
12							18.9		
								BOH @ 12.0'	

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

TEST BORING NO. TB-124

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Project #:	PC 26961-01	TEST BORING NO. TB-125	
Project Address:	1 West Main Street Beacon, New York	Ground Elevation:	Datum:
DAY Representative:	Nate Simon	Date Started:	11/29/2006
Drilling Contractor:	Miller Environmental	Date Ended:	11/29/2005
Sampling Method:	Direct Push	Borehole Depth:	12.0'
		Borehole Diameter:	2.0"
		Completion Method:	<input type="checkbox"/> Well Installed <input type="checkbox"/> Backfilled with Grout <input checked="" type="checkbox"/> Backfilled with Cuttings
		Water Level (Date/Time):	Not Measured

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL and ROOTS	
2	NA	S-1	0-4	70	NA	2.3	0.0	Black Gravel, some Coal Fragments, moist (FILL)	
3									
4							0.0	Black Gravel, intermixed with Coal and Coal Slag Fragments, moist (FILL)	
5							0.0		
6	NA	S-2	4-8	70	NA	1.6	0.1	...wet Coal Slag Fragments, some Gravel, wet (FILL)	
7									
8							0.1		
9							0.0		
10	NA	S-3	8-12	40	NA	8.1	0.0	Gray Silty CLAY, wet	
11									
12							0.0	BOH @ 12.0'	

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

TEST BORING NO. TB-125

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Project #: PC-26961-01  
Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

TEST BORING NO. TB-126

Page of 1 of 1

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/29/2006 Date Ended: 11/29/2005  
Borehole Depth: 12.0' Borehole Diameter: 2.0"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL and ROOTS	
2	NA	S-1	0-4	70	NA	1.2	0.0	Black Sandy Silt, some Gravel, trace Clay, Intermixed with Coal and Brick Fragments, moist (FILL)	
3							0.0		
4							0.0		
5							0.0		
6	NA	S-2	4-8	80	NA	2.3	0.2	Coal Slag Fragments, trace Sandy Gravel, moist (FILL)	
7							0.8	Wood (RR Tie), moist (FILL)	
8							0.0	Gray CLAY, trace Silt, wet	
9									
10	NA	S-3	8-12	40	NA	0.8	0.0		
11									
12							0.0		
BOH @ 12.0'									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

TEST BORING NO. TB-126

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DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

TEST BORING NO. TB-127

Page of 1 of 1

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/29/2005 Date Ended: 11/29/2005  
Borehole Depth: 12 Borehole Diameter: 2"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	TOPSOIL and ROOTS	
2	NA	S-1	0-4	60	NA	3.9	0.0	Black Sandy Gravel, some Silt, Intermixed with Coal, Coal Slag, and Brick Fragments, moist (FILL)	
3									
4							0.0		
5							0.0		
6	NA	S-2	4-6	60	NA	0.6	0.0	...wet	
7									
8							0.8		
9									
10	NA	S-3	8-12	0	NA	NA	NA		
11									
12								BOH @ 12.0'	

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 dV lamp.  
4) NA = Not Available or Not Applicable

TEST BORING NO. TB-127

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Project #: PC.2696I-01  
Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

TEST BORING NO. TB-128

Page of 1 of 1

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/29/2006 Date Ended: 11/29/2006  
Borehole Depth: 12.0' Borehole Diameter: 2"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

Depth (ft)	Blows per 0.5 ft	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	Brown Silty Sand, some Gravel, Intermixed with Brick, Coal, and Coal Slag Fragments, moist (FILL)	
2	NA	S-1	0-4	40	NA	2.0	0.0	Black Silty Sand, some Gravel, Intermixed with Brick, Coal, and Coal Slag Fragments, moist (FILL)	
3									
4							0.0	Brown Sandy Gravel, Intermixed with Brick, Coal, and Coal Slag Fragments, moist (FILL)	
5							0.0		
6	NA	S-2	4-8	10	NA	NA	1.2	...wet	
7									
8							3.6		
9							3.4		
10	NA	S-3	8-12	10	NA	NA	2.1		
11									
12							2.4		
BOH @ 12.0'									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

TEST BORING NO. TB-128

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Project #: PC-2696I-01  
Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/29/2005 Date Ended: 11/29/2005  
Borehole Depth: 12.0' Borehole Diameter: 2"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

**TEST BORING NO. TB-129**

Page of 1 of 1

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	Black Sandy Gravel intermixed with Coal and Coal Slag Fragments, moist (FILL)	
2	NA	S-1	0-4	60	NA	14.7	0.8	Black Sandy Gravel trace Silt, some Coal Slag Fragments, moist (FILL)	
3							1.1	...wet (water has a sheen)	
4							1.3		
5									
6	NA	S-2	4-8	20	NA	5.4	2.3		
7									
8							1.0		
9							2.4		
10	NA	S-3	8-12	10	NA	9.2	3.1		
11									
12							3.6		
BOH @ 12.0'									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

**TEST BORING NO. TB-129**

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Project #: PC.26961-01  
Project Address: 1 West Main Street  
Beacon, New York  
DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

**TEST BORING NO. TB-130**

Page of 1 of 1

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/30/2006 Date Ended: 11/30/2005  
Borehole Depth: 12.0' Borehole Diameter: 2"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	Asphalt and Sub-base	
2	NA	S-1	0-4	40	NA	1.1	0.8	Black Sandy Gravel, some Silt, Intermixed with Coal, Brick, and Wood Fragments, moist (FILL)	
3							0.7	...wet	
4							0.8		
5							2.4		
6	NA	S-2	4-8	10	NA	0.8	2.4	Black Coal Slag, some Gravel, Intermixed with Coal, Brick and Wood Fragments, wet (FILL)	
7							2.7		
8							0.0	Gray Silty Clay some Silt, trace Gravel, wet (FILL)	
9									
10	NA	S-3	8-12	25	NA	1.0	0.0		
11								Gray coarse Sand, some Gravel, Intermixed with Coal and Brick Fragments, wet (FILL)	
12							0.0		
BOH @ 12.0'									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

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Project Address: 1 West Main Street  
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DAY Representative: Nate Simon  
Drilling Contractor: Miller Environmental  
Sampling Method: Direct Push

**TEST BORING NO. TB-131**

Page of 1 of 1

Ground Elevation: \_\_\_\_\_ Datum: \_\_\_\_\_  
Date Started: 11/30/2006 Date Ended: 11/30/2005  
Borehole Depth: 12.0' Borehole Diameter: 2"  
Completion Method: ☐ Well Installed ☐ Backfilled with Grout ☒ Backfilled with Cuttings  
Water Level (Date/Time): Not Measured

Depth (ft)	Blows per 0.5 ft.	Sample Number	Sample Depth (ft)	% Recovery	N-Value or RQD%	Headspace PID Reading (ppm)	PID Reading (ppm)	Sample Description	Notes
1							0.0	0.7' Asphalt and FILL	
2	NA	S-1	0-4	40	NA	0.4	0.0	Black Sandy Gravel, some Silt, intermixed with Coal and Brick Fragments, moist (FILL)	
3							0.0		
4							0.0	Coal Fragments	
5							0.0	Black Sandy Gravel, little Silt, intermixed with Coal and Brick Fragments, moist (FILL)	
6	NA	S-2	4-8	90	NA	0.4	0.0	...wet	
7							0.0	Gray Silty Clay, some Sand, intermixed with Coal and Brick Fragments, wet (FILL)	
8							0.0	Sandy Gravel intermixed with Wood and Coal Fragments, wet (FILL)	
9							0.0		
10	NA	S-3	8-12	80	NA	0.5	0.0		
11							0.0		
12							0.0		
BOH @ 12.0'									

Notes: 1) Water levels were made at the times and under conditions stated. Fluctuations of groundwater levels may occur due to seasonal factors and other conditions.  
2) Stratification lines represent approximate boundaries. Transitions may be gradual.  
3) PID readings are referenced to a benzene standard measured in the headspace above the sample using a MiniRae 2000 equipped with a 10.6 eV lamp.  
4) NA = Not Available or Not Applicable

**TEST BORING NO. TB-131**

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TABLE 1  
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1 WEST MAIN STREET  
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VOLATILE ORGANIC COMPOUND (VOC) AND NAPHTHALENE TEST RESULTS: SOIL SAMPLES

DETECTED VOCs AND NAPHTHALENE	SAMPLE AND LOCATION						NYSDEC TAGM 4046 RSCO <sup>(1)</sup> (PPB)
	TB-105 (8.0')	TB-106 (8.0')	TB-107 (8.0')	TB-111 (12.0')	TB-115A (4.0')	TB-117 (8.0')	
1,2,4-Trimethylbenzene	ND	500	3,300	ND	ND	6,900	10,000
1,3,5-Trimethylbenzene	ND	170	1,300	ND	ND	2,800	3,300
Benzene	ND	160	1,200	ND	ND	300	60
Ethylbenzene	ND	110	440	ND	ND	1,200	5,500
Total Xylenes	ND	740	7,000	ND	ND	8,300	1,200
Toluene	ND	240	3,100	ND	ND	1,400	1,500
Styrene	ND	ND	1,000	ND	ND	ND	NL
Vinyl Chloride	ND	ND	ND	ND	ND	ND	200
n-Butylbenzene	ND	ND	ND	ND	ND	ND	10,000
sec-Butylbenzene	ND	ND	ND	ND	ND	ND	10,000
Chloroform	ND	ND	ND	ND	ND	ND	300
Isopropylbenzene	ND	ND	ND	ND	ND	ND	2,300
p-Isoprppyltoluene	ND	ND	ND	ND	ND	ND	10,000
2-Butanone	410	280	ND	15	ND	ND	300
Total VOCs	410	2,200	17,340	15	ND	20,900	10,000
Naphthalene	5,600	130,000	1,100,000	ND	ND	1,500,000	13,000

Concentrations shown in ug/kg or parts per billion (ppb).

(1) = Recommended soil cleanup objective (RSCO) as referenced in NYSDEC TAGM 4046 dated January 24, 1994 as amended by the NYSDEC's supplemental Tables dated August 22, 2001.

ND = Not Detected at concentration above reported analytical laboratory detection limit.

410 = Exceeds RSCO.

NL = Not Listed in TAGM 4046.

TABLE 1  
PAGE 2 of 2

1 WEST MAIN STREET  
BEACON, NEW YORK

VOLATILE ORGANIC COMPOUND (VOC) AND NAPHTHALENE TEST RESULTS: SOIL SAMPLES

DETECTED VOCs AND NAPHTHALENE	SAMPLE AND LOCATION						NYSDEC TAGM 4046 RSCO <sup>(1)</sup> (PPB)
	TB-118 (4.0')	TB-120 (8.0')	TB-124 (10.0')	TB-126 (4.0')	TB-127 (8.0')	TB-129 (8.0')	
1,2,4-Trimethylbenzene	ND	130	3,600	ND	ND	ND	10,000
1,3,5-Trimethylbenzene	ND	ND	1,400	ND	ND	ND	3,300
Benzene	ND	ND	340	3	ND	ND	60
Ethylbenzene	ND	ND	740	ND	ND	ND	5,500
Total Xylenes	ND	ND	10,500	2	ND	ND	1,200
Toluene	ND	ND	3,200	3	ND	ND	1,500
Styrene	ND	ND	ND	ND	ND	ND	NL
Vinyl Chloride	ND	ND	ND	ND	ND	ND	200
n-Butylbenzene	ND	ND	110	ND	ND	12	10,000
sec-Butylbenzene	ND	ND	ND	ND	ND	21	10,000
Chloroform	ND	ND	ND	ND	ND	ND	300
Isopropylbenzene	ND	ND	130	ND	ND	ND	2,300
p-Isoprpyltoluene	ND	ND	110	ND	ND	ND	10,000
2-Butanone	18	4,501	ND	ND	ND	ND	300
Total VOCs	18	4,631	20,130	8	ND	33	10,000
Naphthalene	ND	9,000	43,000	ND	ND	390	13,000

Concentrations shown in ug/kg or parts per billion (ppb)

(1) = Recommended soil cleanup objective (RSCO) as referenced in NYSDEC TAGM 4046 dated January 24, 1994 as amended by the NYSDEC's supplemental Tables dated August 22, 2001.

ND = Not Detected at concentration above reported analytical laboratory detection limit

4,501 = Exceeds RSCO

NL = Not Listed in TAGM 4046

TABLE 2  
PAGE 1 of 2

1 WEST MAIN STREET  
BEACON, NEW YORK

SEMI-VOLATILE ORGANIC COMPOUND (SVOC) TEST RESULTS: SOIL SAMPLES

DETECTED SVOCs	SAMPLE AND LOCATION								NYSDEC TAGM 4046 RSCO <sup>(1)</sup> (PPB)
	TB-101 (4.0')	TB-105 (8.0')	TB-106 (8.0')	TB-107 (8.0')	TB-110 (8.0')	TB-111 (12.0')	TB-112 (4.0')	TB-115A (4.0')	
2-Methylnaphthalene	ND	1,500	1,900	2,500	130	ND	ND	1,500	36,400
Acenaphthene	ND	2,700	2,900	1,400	1,600	ND	ND	ND	50,000
Acenaphthylene	ND	2,200	1,500	3,600	220	ND	ND	1,600	50,000
Anthracene	300	5,600	4,300	7,800	230	ND	56	1,700	50,000
Benzo(a)anthracene	880	5,300	2,900	5,500	320	ND	270	2,600	224
Benzo(a)pyrene	1,100	4,800	2,700	4,300	280	ND	270	3,600	61
Benzo(b)fluoranthene	1,200	4,600	2,400	3,500	380	ND	390	2,700	220
Benzo(g,h,i)perylene	260	500	490	760	ND	ND	ND	ND	50,000
Benzo(k)fluoranthene	1,500	4,600	2,400	4,100	420	ND	500	3,400	220
Chrysene	980	4,100	2,500	4,500	340	ND	290	2,400	400
Dibenz(a,h)anthracene	ND	420	340	660	ND	ND	ND	ND	14.3
Dibenzofuran	ND	3,600	2,700	3,100	ND	ND	ND	980	6,200
Fluoranthene	2,000	11,000	7,700	12,000	690	ND	480	4,700	50,000
Fluorene	ND	5,600	4,800	4,900	210	ND	ND	1,700	50,000
Indeno(1,2,3-cd)pyrene	280	700	530	1,200	ND	ND	ND	570	3,200
Naphthalene	ND	1,100	1,700	7,600	2,100	ND	ND	2,000	13,000
Phenanthrene	1,200	13,000	11,000	13,000	850	ND	240	5,800	50,000
Di-n-butylphthalate	ND	ND	ND	ND	ND	ND	ND	ND	8,100
bis-(2-Ethylhexyl)phthalate	ND	ND	ND	ND	67	ND	ND	ND	50,000
Pyrene	1,800	8,800	6,500	9,200	570	ND	360	4,400	50,000
Total SVOCs	11,500	80,120	59,260	89,620	8,407	0	2,856	39,650	500,000
Total cPAHs	5,940	24,520	13,770	23,760	1,740	ND	1,720	15,270	NL
Total cPAH SVOCs as BAP Toxicity Equivalent	1,361	6,367	3,672	6,066	358	ND	344	4,245	NL

Concentrations shown in ug/kg or parts per billion (ppb).

cPAH = carcinogenic polycyclic aromatic hydrocarbons (Benzo(a)pyrene, Dibenzo(a,h)anthracene, Benzo(a)anthracene, Benzo(b)fluoranthene, Indeno(1,2,3-cd)pyrene, Benzo(k)fluoranthene, chrysene).

BAP = Benzo(a)pyrene.

(1) = Recommended soil cleanup objective (RSCO) as referenced in NYSDEC TAGM 4046 dated January 24, 1994 as amended by the NYSDEC's supplemental Tables dated August 22, 2001.

1,500 = Exceeds RSCO.

ND = Not Detected at concentration above reported analytical laboratory detection limit.

NL = Not Listed in TAGM 4046.

TABLE 2  
PAGE 2 of 2

1 WEST MAIN STREET  
BEACON, NEW YORK

SEMI-VOLATILE ORGANIC COMPOUND (SVOC) TEST RESULTS: SOIL SAMPLES

DETECTED SVOCs	SAMPLE AND LOCATION							NYSDEC TAGM 4046 RSCO <sup>(1)</sup> (PPB)
	TB-117 (8.0')	TB-118 (4.0')	TB-120 (8.0')	TB-124 (4.0')	TB-126 (10.0')	TB-127 (8.0')	TB-129 (8.0')	
2-Methylnaphthalene	210,000	ND	ND	350,000	340	390	540	36,400
Acenaphthene	ND	ND	370	41,000	ND	180	320	50,000
Acenaphthylene	190,000	ND	ND	83,000	ND	ND	ND	50,000
Anthracene	200,000	ND	550	160,000	ND	260	ND	50,000
Benzo(a)anthracene	140,000	100	1,500	110,000	ND	190	ND	224
Benzo(a)pyrene	86,000	72	1,100	7,800	ND	ND	ND	61
Benzo(b)fluoranthene	59,000	63	750	62,000	ND	ND	ND	220
Benzo(g,h,i)perylene	ND	ND	690	ND	ND	ND	ND	50,000
Benzo(k)fluoranthene	88,000	91	1,200	90,000	ND	ND	ND	220
Chrysene	110,000	100	1,800	89,000	ND	180	ND	400
Dibenz(a,h)anthracene	ND	ND	380	ND	ND	ND	ND	14.3
Dibenzofuran	130,000	ND	4,500	130,000	ND	ND	ND	6,200
Fluoranthene	370,000	170	ND	220,000	340	410	430	50,000
Fluorene	190,000	ND	ND	180,000	ND	250	290	50,000
Indeno(1,2,3-cd)pyrene	ND	ND	560	17,000	ND	ND	ND	3,200
Naphthalene	780,000	ND	440	690,000	260	910	400	13,000
Phenanthrene	530,000	110	5,100	400,000	340	740	630	50,000
Di-n-butylphthalate	ND	ND	ND	ND	260	180	ND	8,100
bis-(2-Ethylhexyl)phthalate	ND	ND	ND	ND	ND	ND	ND	50,000
Pyrene	280,000	160	4,100	170,000	330	330	390	50,000
<b>Total SVOCs</b>	<b>3,363,000</b>	<b>866</b>	<b>23,040</b>	<b>2,799,800</b>	<b>1,870</b>	<b>4,020</b>	<b>3,000</b>	<b>500,000</b>
<b>Total cPAHs</b>	<b>483,000</b>	<b>335</b>	<b>7,290</b>	<b>375,800</b>	<b>ND</b>	<b>370</b>	<b>ND</b>	<b>NL</b>
<b>Total cPAH SVOCs as BAP Toxicity Equivalent</b>	<b>107,880</b>	<b>90</b>	<b>1,791</b>	<b>28,490</b>	<b>ND</b>	<b>21</b>	<b>ND</b>	<b>NL</b>

Concentrations shown in ug/kg or parts per billion (ppb)

cPAH = carcinogenic polycyclic aromatic hydrocarbons (Benzo(a)pyrene, Dibenz(a,h)anthracene, Benzo(a)anthracene, Benzo(b)fluoranthene, Indeno(1,2,3-cd)pyrene, Benzo(k)fluoranthene, chrysene)

BAP = Benzo(a)pyrene

(1) = Recommended soil cleanup objective (RSCO) as referenced in NYSDEC TAGM 4046 dated January 24, 1994 as amended by the NYSDEC's supplemental Tables dated August 22, 2001.

210,000 = Exceeds RSCO

ND = Not Detected at concentration above reported analytical laboratory detection limit

NL = Not Listed in TAGM 4046

TABLE 3

1 WEST MAIN STREET  
BEACON, NEW YORK

## METALS TEST RESULTS: SOIL SAMPLES

DETECTED ANALYTE	SAMPLE AND LOCATION				Recommended Soil Cleanup Objective (1)	Typical Background Range (2)
	TB-107 (8.0')	TB-111 (12.0')	TB-115A (4.0')	TB-118 (4.0')		
Antimony	ND	ND	ND	ND	SB	NL
Arsenic	7.53	1.14	4.68	392	70r SB	312
Beryllium	0.76	ND	0.23	0.31	0.16 or SB	0-1.5
Cadmium	ND	ND	ND	ND	1 or SB(10)	0.1-1
Chromium	7	8.1	13.8	13.4	10 or SB(6)	1.540
Copper	21.6	13	75.2	55.4	25r SB	1-6
Lead	154	11.4	45	99.7	SB	200-60*
Mercury	ND	ND	ND	ND	0.1	0.001-0.2
Nickel	1.81	11.9	20	12.8	13r SB	0.625
Selenium	ND	ND	ND	1.02	2 or SB	0.1-39
Silver	ND	ND	ND	ND	SB	NL
Thallium	ND	ND	ND	ND	SB	NL
Zn	30.3	37.3	97.3	49.5	20 or SB	9-6

Concentrations shown in mg/kg or parts per million (ppm).

SB = Site background.

1) = Recommended soil cleanup objective (RSCO) as referenced in NYSDEC TAGM 4046 dated January 24, 1994.

- Cadmium results also compared to RSCO of 10 ppm listed in the 1995 proposed TAGM 4046.
- Chromium results also compared to RSCO of 6 ppm listed in the 1995 proposed TAGM 4046.

2) = Typical background range as referenced in NYSDEC TAGM 4046 dated January 24, 1994.

97.3 = Exceeds typical background range referenced in TAGM 4046.

49.5 = Exceeds RSCO referenced in TAGM 4046.

ND = Not Detected at concentration above reported analytical laboratory detection limit.

NL = Not Listed in TAGM 4046.

TABLE 4

1 WEST MAIN STREET  
BEACON, NEW YORK

PCBS TEST RESULTS: SOIL SAMPLES

Detected Compound	SAMPLE AND LOCATION				Recommended Soil Cleanup Objective <sup>(1)</sup> (PPM)
	TB-107 (8.0')	TB-111 (12.0')	TB-115A (4.0')	TB-118 (4.0')	
PCB 260	ND	ND	ND	ND	10

Concentrations shown in mg/kg or parts per million (ppm).

(1) = Recommended soil cleanup objective (RSCO) as referenced in NYSDEC TAGM 4046 dated January 24, 1994 as amended by the NYSDEC's supplemental Tables dated August 22, 2001.

TABLE 5

**1 WEST MAIN STREET  
BEACON, NEW YORK**

**CYANIDE, pH, IGNITABILITY AND REACTIVITY TEST RESULTS: SOIL SAMPLES**

Parameter	SAMPLE AND LOCATION							NYSDEC TAGM 4046 RSCO <sup>(1)</sup> (PPM)
	TB-101 (4.0')	TB-110 (8.0')	TB-121 (8.0')	TB-124 (4.0')	TB-127 (8.0')	TB-126 (10.0')	TB-129 (8.0')	
Total Cyanide	ND	ND	ND	ND	ND	ND	1.24	NL
pH	-	-	9.86	-	-	-	9.89	NL
Ignitability	-	-	ND	-	-	-	-	NL
Reactivity	-	-	29	-	-	-	-	NL

Cyanide concentrations shown in mg/kg or parts per million (ppm).

(1) = Recommended soil cleanup objective (RSCO) as referenced in NYSDEC TAGM 4046 dated January 24, 1994 as amended by the NYSDEC's supplemental Tables dated August 22, 2001.

ND = Cyanide not detected at concentration above reported analytical laboratory detection limit / Sample did not ignite.

NL = Not Listed in TAGM 4046.

- = Not Tested as part of Laboratory Program.

TABLE 6

1 WEST MAIN STREET  
BEACON, NEW YORK

## VOLATILE ORGANIC COMPOUND (VOC), NAPHTHALENE, pH AND TOTAL CYANIDE TEST RESULTS: GROUNDWATER SAMPLES

DETECTED VOCs	SAMPLE AND LOCATION						NYSDEC TOGS 1.1.1 Groundwater Standard or Guidance Value <sup>(1)</sup> (PPB)
	MW-101*	MW-102*	MW-103	MW-103	MW-104*	MW-105*	
Total Xylene	ND	ND	29	59	ND	ND	5
1,2,4-Trimethylbenzene	ND	ND	58	12	ND	ND	5
Benzene	ND	ND	60	9	ND	ND	1
Ethylbenzene	ND	ND	ND	3	ND	ND	5
Toluene	1	ND	50	71	ND	ND	5
n-Butylbenzene	ND	ND	ND	ND	ND	ND	5
n-Propylbenzene	ND	ND	ND	ND	ND	ND	5
Isopropylbenzene	ND	ND	ND	ND	ND	ND	5
Naphthalene	ND	ND	290	9	ND	ND	10
1,3,5-Trimethylbenzene	ND	ND	ND	5	ND	ND	5
sec-Butylbenzene	ND	ND	ND	ND	ND	ND	5
1,2-Dichloroethane	ND	ND	ND	3	ND	ND	0.6
Tetrachloroethene	ND	ND	ND	ND	ND	ND	5
p-Isopropyltoluene	ND	ND	ND	ND	ND	ND	5
pH	-	-	-	6.86	7.92	7.48	NL
Total Cyanide	-	-	-	0.02	ND	ND	400

(1) = Groundwater standard or guidance value as referenced in NYSDEC TOGS 1.1.1 dated June 1998  
as amended by the NYSDEC's supplemental table dated April 2000.

Concentrations shown in ug/L or parts per billion (ppb).

29 = Exceeds groundwater standard or guidance value.

ND = Not detected at concentrations above reported analytical laboratory detection limits.

- = Not Tested as part of Laboratory Program.

NL = Not listed in TOGS 1.1.1.

\* = Sample collected on November 17, 2005.

\*\* = Sample collected on December 1, 2005.

TABLE 7

**1 WEST MAIN STREET  
BEACON, NEW YORK**

**SEMI-VOLATILE ORGANIC COMPOUND (SVOC) TEST RESULTS: GROUNDWATER SAMPLES**

DETECTED SVOCs	SAMPLE AND LOCATION						NYSDEC TOGS 1.1.1 Groundwater Standard or Guidance Value <sup>(1)</sup> (PPB)
	MW-101*	MW-102*	MW-103*	MW-103**	MW-104**	MW-105**	
2-Methylnaphthalene	ND	ND	140	ND	ND	ND	NL
Acenaphthene	ND	ND	83	ND	ND	ND	20
Acenaphthylene	ND	ND	92	ND	ND	ND	NL
Dibenzofuran	ND	ND	58	ND	ND	ND	NL
Fluoranthene	ND	ND	58	ND	ND	ND	50
Fluorene	ND	ND	87	ND	ND	ND	50
Naphthalene	ND	ND	1,300	84	ND	ND	10
Phenanthrene	ND	ND	130	ND	ND	ND	50
Pyrene	ND	ND	51	ND	ND	ND	50

(1) = Groundwater standard or guidance value as referenced in NYSDEC TOGS 1.1.1 dated June 1998 as amended by the NYSDEC's supplemental table dated April 2000.

Concentrations shown in ug/L or parts per billion (ppb).

**83** = Exceeds groundwater standard or guidance value.

ND = Not detected at concentrations above reported analytical laboratory detection limits.

NA = Not Listed in TOGS 1.1.1.

\* = Sample collected on November 17, 2005.

\*\* = Sample collected on December 1, 2005.

TABLE 8

1 WEST MAIN STREET  
BEACON, NEW YORK

## METALS TEST RESULTS: GROUNDWATER SAMPLES

Detected Analyte	SAMPLE AND LOCATION			NYSDEC TOS 1.1.1 Groundwater Standard or Guidance Value (1) (PPB)
	MW-101*	MW-102*	MW-103*	
Antimony	ND	ND	ND	6
Arsenic	ND	ND	14	50
Beryllium	0.30	0.10	ND	3
Cadmium	ND	ND	ND	10
Chromium	16	8	8	100
Copper	117	94	11	1,000
Lead	390	90	35	50
Mercury	5.5	0.30	ND	1.4
Nickel	9	ND	ND	200
Selenium	11	ND	16	20
Silver	ND	ND	46	100
Thallium	ND	ND	ND	0.5
Zinc	187	95	ND	5,000

(1) = Groundwater standard or guidance value as referenced in NYSDEC TOGS 1.1.1 dated June 1998 as amended by the NYSDEC's supplemental table dated April 2000.

Concentrations shown in mg/kg or parts per million (ppm).

390 = Exceeds groundwater standard or guidance value.

ND = Not detected at concentrations above reported analytical laboratory detection limits.

\* = Sample collected on November 17, 2005.

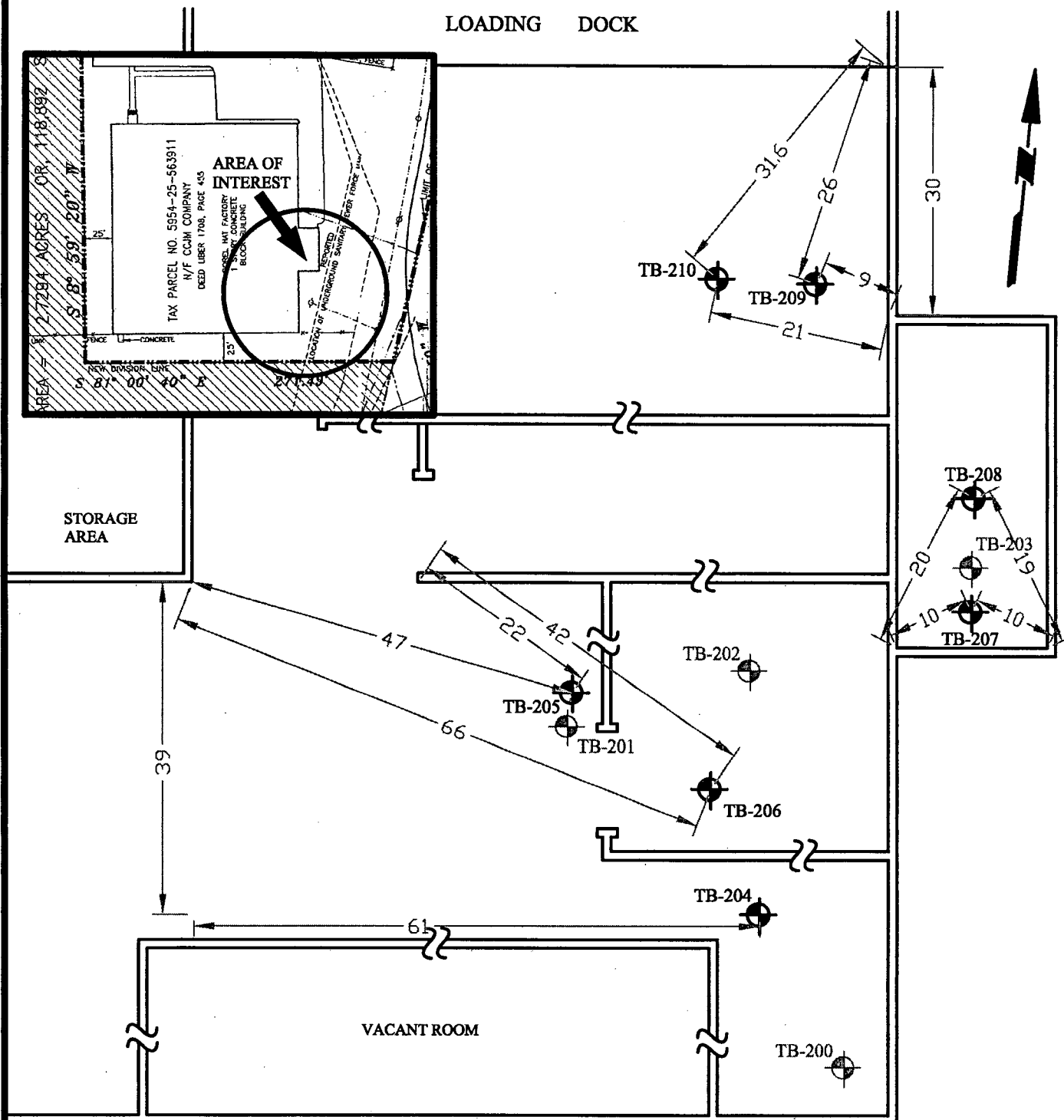
# Supplemental Phase II Investigation

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LOADING DOCK



**NOTE:**

1. ALL DIMENSIONS IN FEET  
2. ALL DIMENSIONS SHOWN ARE APPROXIMATE AND  
BASED ON FIELD MEASUREMENTS.

**LEGEND:**

- |   |               |  |
|---|---------------|--|
|  | <b>TB-205</b> | <b>BORING DRILLED ON MAY 18, 2006</b>  |
|  | <b>TB-200</b> | <b>BORING DRILLED ON MAY 16, 2006, REFUSAL ENCOUNTERED BEFORE THE DESIGN DEPTH</b> |

**YU & Associates, Inc.**  
Geotechnical, Environmental and Civil Engineering

**611 River Drive  
Elmwood Park, NJ 07407**

***Tel: (201) 791-0075***  
***Fax: (201) 791-4533***

**Certificate of Authorization #24GA27976700**

**BORING LOCATION PLAN  
METRO NORTH - DORAL HAT  
1 WEST MAIN STREET**

## BEACON

## DUTCHESS

NEW YORK

**JOB NO.: 0507501**

**SCALE: N. T. S.**

**DATE:** 06/14/06

FIG.

PROJECT NAME: Metro North Beacon, Dorel Hat

LOCATION: Beacon, NY

BOUND ELEVATION:

NORTHING

EASTING

RIG TYPE: NA

DRILLING METHOD: Core Drill & Jack Hammer

CASING NA

CORING NA

STARTED: 05/16/06

COMPLETED: 05/16/06

CONTRACTOR: Miller Environmental

DRILLER: Chris Myers / Tony

INSPECTOR: A. Garg

Boring No. TB-200

BOREHOLE EUID LEVEL	
DATE	DEPTH (FEET)
05/16/06	NA

DEPTH (feet)	USC System	DESCRIPTION  (based on Burmister system)	Recovery (In/In)	PID (ppm)	SAMPLE	
					Env. Sample	Depth (feet)
1	FILL	6.5" Thick Concrete Floor	12/18	0.0 (throughout)	TB200-4 (Soil)	4-5
2		Brown c-f SAND, little Silt, little m-f Gravel, dry				
3		Same as above ± 2'	18/24			
4		Grayish Black c-f SAND, little Silt, frequent ash and cinder fragments ± 3'				
5		Same as above ± 4'	12/12			
	Same as above ± 5'					
		END OF BORING @ 5 FEET				

REMARKS: Refusal encountered at 5 ft

Yu & Associates, Inc.

PROJECT NAME: Metro North Beacon, Dorel Hat

LOCATION: Beacon, NY

BOUND ELEVATION:

NORTHING EASTING

RIG TYPE: NA

DRILLING METHOD: Core Drill & Jack Hammer

CASING NA

CORING NA

STARTED: 05/16/06

COMPLETED: 05/16/06

CONTRACTOR: Miller Environmental

DRILLER: Chris Myers / Tony

INSPECTOR: A. Garg

Boring No. TB-201

BOREHOLE EVIDENCE	
DATE	DEPTH (FEET)
05/16/06	NA

DEPTH (feet)	USC System	DESCRIPTION  (based on Burmister system)	Recovery (In/In)	PID (ppm)	SAMPLE	
					Env. Sample	Depth (feet)
1	FILL	8" Thick Concrete Floor	4/12	0.0 (throughout)	TB201-4 (Soil)	4-5
2		Brown c-f SAND, little Clayey Silt, trace m-f Gravel, moist ± 2'				
3		Brown c-f SAND, little Silt, trace m-f Gravel, dry	12/24			
4		± 4'	12/24			
5		Same as above				
6		Dark Brown to Black c-f SAND, little m-f Gravel, ash and cinder fragments ± 5'				
7		± 6.5'	0/6			
		END OF BORING @ 6.5 FEET				

REMARKS: Refusal encountered at 6.5 ft

Yu & Associates, Inc.

PROJECT NAME: Metro North Beacon, Dorel Hat  
 LOCATION: Beacon, NY  
 BOUND ELEVATION: NORTHING EASTING  
 RIG TYPE: NA CONTRACTOR: Miller Environmental  
 DRILLING METHOD: Core Drill & Jack Hammer  
 CASING NA DRILLER: Chris Myers / Tony  
 CORING NA INSPECTOR: A. Garg

Boring No. TB-202

BOREHOLE EUID LEVEL	
DATE	DEPTH (FEET)
05/16/06	6.5

DEPTH (feet)	USC System	DESCRIPTION (based on Burmister system)	Recovery (In/In)	PID (ppm)	SAMPLE	
					Env. Sample	Depth (feet)
1	FILL	6.5" Thick Concrete Floor		0.0 (throughout)	TB202-5.5 (Soil)	5.5-6.5
2		Brown c-f SAND, little m-f Gravel, little Silt, dry	22/24			
3		± 2.5'				
4		Same as above	9/24			
5		± 4'				
6		Dark Brown c-f SAND, little m-f Gravel, trace Silt, moist				
		Same as above				
		Brown m-f SAND, some Silt, trace f Gravel, moist	18/24			
		Brown m-f SAND, some Clayey Silt, wet				
		Dark Brown/Black c-f SAND, and f Gravel, wet ± 6.5'				
		END OF BORING @ 6.5 FEET				

REMARKS: Refusal encountered at 6.5 ft

Yu & Associates, Inc.

PROJECT NAME: Metro North Beacon, Dorel Hat

LOCATION: Beacon, NY

GROUND ELEVATION:

NORTHING

EASTING

RIG TYPE: NA

DRILLING METHOD: Core Drill & Jack Hammer

CASING NA

CORING NA

STARTED: 05/16/06

COMPLETED: 05/16/06

CONTRACTOR: Miller Environmental

DRILLER: Chris Myers / Tony

INSPECTOR: A. Garg

Boring No. TB-203

BOREHOLE EUID LEVEL	
DATE	DEPTH (FEET)
05/16/06	NA

DEPTH (feet)	USC System	DESCRIPTION  (based on Burmister system)	Recovery (In/In)	PID (ppm)	SAMPLE	
					Env. Sample	Depth (feet)
1	FILL	4.5" Thick Concrete Floor Note: Cored drilled to 1 ft due to refusal ± 1'		0.0  (throughout)	TB203-3 (Soil)	3-4
2		Dark Gray / Black c-f GRAVEL, some c-f Sand, ash and cinders, moist ± 2'	4/12			
3		Grayish Brown c-f SAND, some c-f Gravel, trace Silt, moist, ash and cinders ± 3'	16/24			
4		Dark Gray/ Black c-f SAND, some m-f Gravel, moist, ash and coal fragments ± 4'				
		END OF BORING @ 4 FEET				

REMARKS: Refusal encountered at 4 ft

Yu & Associates, Inc.

**PROJECT NAME:** Metro North Beacon, Dorel Hat  
**LOCATION:** Beacon, NY  
**BOUND ELEVATION:**  
**NORTHING** EASTING  
**RIG TYPE:** NA  
**DRILLING METHOD:** Truck Mounted Geoprobe  
**CASING** NA  
**CORING** NA

**STARTED:** 05/18/06  
**COMPLETED:** 05/18/06  
**CONTRACTOR:** Miller Environmental  
**DRILLER:** Chris Myers / Tony  
**INSPECTOR:** A. Garg

Boring No. TB-204

BOREHOLE EUID LEVEL	
DATE	DEPTH (FEET)
05/18/06	6

DEPTH (feet)	USC System	DESCRIPTION  (baad on Burmiser system)	Recovery (In/In)	PID (ppm)	SAMPLE	
					Env. Sample	Depth (feet)
1	FILL	6.5" Thick Concrete Floor	24/48	0.0	TB204-8.5 (Soil)	8.5-9.5
2		Brown c-f SAND, little c-f Gravel, trace Silt, moist				
3						
4		± 4'				
5		Dark Brown/Black c-f SAND, some Silt, little 1 Gravel, dry, with ash, cinders and coal fragments	35/48	0.0		
6		Brown c-f SAND, little c-f Gravel, trace Silt, moist				
7		Brown/Dark Brown c-f Gravel, little c-f Sand, trace Silt, wet Note: Dark Gray / Black color @ bottom 1" of sample				
8		± 8'				
9		Dark Gray / Black c-f GRAVEL, little c-f Sand, trace Silt, wet, free product (coal tar) observed, strong petroleum odor	14/48	> 100 ppm		
10						
11						
12		± 12'				
13	SM	Same as above ± 12.5'	13/48	0.0		
14		Dark Gray v. f. SAND, trace Silt, wet				
15						
16		± 16'				
		END OF BORING @ 16 FEET				

REMARKS:

Yu & Associates, Inc.

PROJECT NAME: Metro North Beacon, Dorel Hat

LOCATION: Beacon, NY

BOUND ELEVATION:

NORTHING

EASTING

RIG TYPE: NA

DRILLING METHOD: Truck Mounted Geoprobe

CASING NA

CORING NA

STARTED: 05/18/06

COMPLETED: 05/18/06

CONTRACTOR: Miller Environmental

DRILLER: Chris Myers / Tony

INSPECTOR: A. Garg

Boring No. TB-205

BOREHOLE EUID LEVEL	
DATE	DEPTH (FEET)
05/18/06	8

DEPTH (feet)	USC System	DESCRIPTION (based on Burmister system)	Recovery (In/In)	PID (ppm)	SAMPLE	
					Env. Sample	Depth (feet)
1	FILL	8" Thick Concrete Floor	23/40	0.0 (throughout)	TB205-6.5 (Soil)	6.5-7.5
2		Brown c-f SAND, little Silt, trace m-f Gravel, dry				
3						
4		± 4'				
5		Same as above	36/48			
6		Dark Brown c-f SAND, some Silt, little m-f Gravel, moist				
7		Dark Brown /Black c-f GRAVEL, some c-f Sand, little Silt, moist, with ash and cinder fragments				
8		Dark Brown SILT & CLAY, moist				
9		± 8'	12/48		TB205-8 (Soil)	8-9
10		Brown c-f GRAVEL, little c-f Sand, trace Silt, wet Note: Cobble stuck at tip of the sampler				
11						
12		± 12'				
13	SM	Brown c-f GRAVEL, little c-f Sand, trace Silt moist ± 12.5'	8/48			
14		Dark Brown/Gray f SAND, little Clayey Silt, moist				
15						
16		± 16'				
		END OF BORING @ 16 FEET				

REMARKS:

Yu &amp; Associates, Inc.

PROJECT NAME: Metro North Beacon, Dorel Hat

LOCATION: Beacon, NY

GROUND ELEVATION:

NORTHING

EASTING

RIG TYPE: NA

STARTED: 05/18/06

COMPLETED: 05/18/06

DRILLING METHOD: Truck Mounted Geoprobe

CASING NA

CORING NA

CONTRACTOR: Miller Environmental

DRILLER: Chris Myers / Tony

INSPECTOR: A. Garg

Boring No. TB-206

BOREABLE EUID LEVEL	
DATE	DEPTH (FEET)
05/18/06	6.5

DEPTH (feet)	USC System	DESCRIPTION  (based on Burmister system)	Recovery (In/In)	PID (ppm)	SAMPLE	
					Env. Sample	Depth (feet)
1	FILL	6.5" Thick Concrete Floor	18/41.5	0.0 (throughout)	TB206-9 (Soil)	9-10
2		Brown c-f SAND, little f Gravel, trace Silt, dry				
3		Dark Brown c-f SAND, little m-f Gravel, dry				
4		Dark Brown/Black c-f SAND, little c-f Gravel, little Silt, moist				
5		Brown c-f SAND, little f Gravel, trace Silt, moist	28/48			
6		Dark Gray to Black c-f GRAVEL, little c-f Sand, wet, septic odor				
7		Dark Gray/Black c-f GRAVEL, little c-f Sand, trace Silt, wet, coal tar odor observed				
8		Dark Gray/Black Silty CLAY, coal tar odor observed				
9	CL	END OF BORING @ 12 FEET	23/48			
10						
11						
12						

REMARKS:

Yu & Associates, Inc.

PROJECT NAME: Metro North Beacon, Dorel Hat  
 LOCATION: Beacon, NY  
 BOUND ELEVATION:  
 NORTHING EASTING  
 RIG TYPE: NA  
 DRILLING METHOD: Truck Mounted Geoprobe  
 CASING NA  
 CORING NA  
 STARTED: 05/18/06  
 COMPLETED: 05/18/06  
 CONTRACTOR: Miller Environmental  
 DRILLER: Chris Myers / Tony  
 INSPECTOR: A. Garg

Boring No. TB-207

BOREHOLE EUID LEVEL	
DATE	DEPTH (FEET)
05/18/06	6.5

DEPTH (feet)	USC System	DESCRIPTION  (based on Burmister system)	Recovery (In/In)	PID (ppm)	SAMPLE	
					Env. Sample	Depth (feet)
1	FILL	6" Thick Concrete Floor		0.0 (throughout)	TB207-9.5 (Soil)	9.5-10.5
2		Brown / Dark Brown c-f GRAVEL, and c-f Sand, trace Silt, moist				
3		Dark Gray/Black c-f SAND, some Silt, some c-f Gravel, with ash and cinder fragments	30/42			
4		Dark Brown/Brown c-f SAND, little c-f Gravel trace Silt, moist, with ash and cinder fragments				
5		Brown c-f GRAVEL, some c-f Sand, trace Silt, moist	36/48			
6		Dark Gray/Black c-f GRAVEL, trace c-f Sand, wet, with ash and ciner fragments				
7		Brown/Dark Brown c-f SAND, and c-f Gravel, wet				
8		Dark Gray/Black c-f GRAVEL, trace c-f Sand, wet, free product (coal tar) observed				
9		Dark Gray Silty CLAY, wet, coal tar observed	28/48			
10		END OF BORING @ 12 FEET				
11	CL					
12						

REMARKS:

Yu & Associates, Inc.

PROJECT NAME: Metro North Beacon, Dorel Hat

LOCATION: Beacon, NY

BOUND ELEVATION:

NORTHING

EASTING

RIG TYPE: NA

DRILLING METHOD: Truck Mounted Geoprobe

CASING NA

CORING NA

STARTED: 05/18/06

COMPLETED: 05/18/06

CONTRACTOR: Miller Environmental

DRILLER: Chris Myers / Tony

INSPECTOR: A. Garg

Boring No. TB-208

BOREHOLE EUID LEVEL

DATE	DEPTH (FEET)
05/18/06	6

DEPTH (feet)	USC System	DESCRIPTION  (based on Burmister system)	Recovery (In/In)	PID (ppm)	SAMPLE	
					Env. Sample	Depth (feet)
1	FILL	6" Thick Concrete Floor				
		Dark Brown c-f SAND, some c-f Gravel, trace Silt, dry, with coal and slag fragments				
2		Brown/Dark Brown c-f SAND, and Clayey Silt				
		trace c-f Gravel, moist ± 2'	24/42			
3		Black c-f SAND, some Silt, little c-f Gravel, dry with ash and cinder fragments				
4		± 4'				
5		Same as above		0.0 (throughout)		
		Dark Brown/Brown c-f GRAVEL, some c-f Sand				
6	CL	little Silt, moist ± 5.5'	24/42			
		Dark Gray/Black c-f GRAVEL, little c-f Sand, trace Silt, wet				
7						
8		± 8'				
9		Dark Gray/Black c-f GRAVEL, some c-f Sand, trace Silt, wet, coal tar observed at bottom of layer ± 9'			TB208-9 (Soil)	9-10
10		Dark Gray Silty CLAY, wet	15/48			
11						
12		± 12'				
		END OF BORING @ 12 FEET				

REMARKS:

Yu &amp; Associates, Inc.

PROJECT NAME: Metro North Beacon, Dorel Hat

LOCATION: Beacon, NY

BOUND ELEVATION:

NORTHING EASTING

RIG TYPE: NA

DRILLING METHOD: Truck Mounted Geoprobe

CASING NA

CORING NA

STARTED: 05/18/06

COMPLETED: 05/18/06

CONTRACTOR: Miller Environmental

DRILLER: Chris Myers / Tony

INSPECTOR: A. Garg

Boring No. TB-209

BOREHOLE EUID LEVEL	
DATE	DEPTH (FEET)
05/18/06	6

DEPTH (feet)	USC System	DESCRIPTION (based on Burmister system)	Recovery (In/In)	PID (ppm)	SAMPLE	
					Env. Sample	Depth (feet)
1	FILL	6" Thick Concrete Floor				
2		Brown c-f SAND, little c-f Gravel, little Silt, dry				
3			21/42			
4		± 4'				
5		Same as above		0.0 (throughout)		
6		Dark Brown/Black c-f SAND, with ash and cinders				
7		± 6'				
8		Yellowish Brown c-f SAND, some Silt, little c-f Gravel, moist	40/48			
9	ML	Dark Brown/Black c-f SAND, little m-f Gravel, moist				
10		Grayish Black c-f GRAVEL, little c-f Sand, trace Silt, wet, septic odor observed				
11		± 8'				
12		Same as above				
13	SM	Dark Gray / Black c-f GRAVEL, little c-f Sand, moist, observed coal tar, no odor				
14		± 9.5'				
15		Dark Gray Clayey SILT, moist, septic odor	19/48		TB209-9 (Soil)	9-10
16		± 12'				
		Same as above				
		Dark Gray v f SAND, little Silt, moist	23/48			
		± 16'				
		END OF BORING @ 16 FEET				

REMARKS:

Yu & Associates, Inc.

PROJECT NAME: Metro North Beacon, Dorel Hat

LOCATION: Beacon, NY

BOUND ELEVATION:

NORTHING EASTING

RIG TYPE: NA

DRILLING METHOD: Truck Mounted Geoprobe

CASING NA

CORING NA

STARTED: 05/18/06

COMPLETED: 05/18/06

CONTRACTOR: Miller Environmental

DRILLER: Chris Myers / Tony

INSPECTOR: A. Garg

Boring No. TB-210

BOREHOLE EUID LEVEL	
DATE	DEPTH (FEET)
05/18/06	6

DEPTH (feet)	USC System	DESCRIPTION (based on Burmister system)	Recovery (In/In)	PID (ppm)	SAMPLE	
					Env. Sample	Depth (feet)
1	FILL	6" Thick Concrete Floor				
2		Brown c-f SAND, little Silt, little f Gravel, dry, with ash and cinder fragments				
3			24/42			
4		± 4'				
5		Same as above		0.0 (throughout)		
6		Dark Brown/Black c-f SAND, trace Silt, dry, with ash and cinder fragments ± 5.5'				
7		Brown f SAND, little c-f Gravel, little Silt, wet ± 6.5'	33/48			
8		Dark Gray c-f GRAVEL, little c-f Sand, wet, septic odor observed ± 8'				
9		Dark Gray m-f GRAVEL, little c-f Sand, wet, with ash and cinder fragments, septic odor ± 9'				
10		Gray CLAY & SILT, trace c Gravel, moist ± 10'	29/48			
11	CL	Dark Gray m-f GRAVEL, little c-f Sand, wet, with ash and cinder fragments, septic odor ± 10'				
12		Gray Silty CLAY, moist, Black in color at top and gray at bottom ± 12'				
		END OF BORING @ 12 FEET				

REMARKS:

Yu & Associates, Inc.

**Table 1**  
**Sampling Summary Table**  
**Dorel Hat- Supplemental Phase II Investigation**  
**Beacon, NY**  
**Project No. 0507501**

Date Sampled	Sample Number	Depth (ft)	Medium	Analytical parameters	Sampling method
<b>Soil Sampling (Through Borings TB200 to TB210)</b>					
5/16/2006	TB200-4*	4.0-5.0	Solid	STARS VOCs, TCL SVOCs, TOTAL CYANIDES	Trowel
5/16/2006	TB201-4*	4.0-5.0	Solid	STARS VOCs, TCL SVOCs, TOTAL CYANIDES	Trowel
5/16/2006	TB202-5.5*	5.5-6.5	Solid	STARS VOCs, TCL SVOCs, TOTAL CYANIDES	Trowel
5/16/2006	TB203-3*	3.0-4.0	Solid	STARS VOCs, TCL SVOCs, TOTAL CYANIDES	Trowel
5/18/2006	TB204-8.5	8.5-9.5	Solid	STARS VOCs, TCLP VOCs, TCL SVOCs, TCLP SVOCs, TOTAL CYANIDES, pH, REACTIVITY, IGNITABILITY	Trowel
5/18/2006	TB205-6.5	6.5-7.5	Solid	STARS VOCs, TCL SVOCs, TOTAL CYANIDES	Trowel
5/18/2006	TB205-8*	8.0-9.0	Solid	STARS VOCs, TCL SVOCs, TOTAL CYANIDES	Trowel
5/18/2006	TB206-9	9.0-10.0	Solid	STARS VOCs, TCLP VOCs, TCL SVOCs, TCLP SVOCs, TOTAL CYANIDES, pH, REACTIVITY, IGNITABILITY	Trowel
5/18/2006	TB207-9.5	9.5-10.5	Solid	STARS VOCs, TCLP VOCs, TCL SVOCs, TCLP SVOCs, TOTAL CYANIDES, pH, REACTIVITY, IGNITABILITY	Trowel
5/18/2006	TB208-9	9.0-10.0	Solid	STARS VOCs, TCLP VOCs, TCL SVOCs, TCLP SVOCs, TOTAL CYANIDES, pH, REACTIVITY, IGNITABILITY	Trowel
5/18/2006	TB209-9	9.0-10.0	Solid	STARS VOCs, TCLP VOCs, TCL SVOCs, TCLP SVOCs, TOTAL CYANIDES, pH, REACTIVITY, IGNITABILITY	Trowel
5/18/2006	TB210-9	9.0-10.0	Solid	STARS VOCs, TCLP VOCs, TCL SVOCs, TCLP SVOCs, TOTAL CYANIDES, pH, REACTIVITY, IGNITABILITY	Trowel
<b>Groundwater Sampling</b>					
5/18/2005	MW103		Aqueous	STARS VOCs, TCL VOCs, STARS SVOCs, TCL SVOCs	Bailer

\* - Not Analyzed

**Qualifiers :**

STARS VOCs - Spill Technology and Remediation Series - Volatile Organic compounds

STARS SVOCs - Spill Technology and Remediation Series - Semi-Volatile Organic compounds

TCL VOCs - Target Compound List - Volatile Organic Compounds

TCL SVOCs - Target Compound List - Semi-Volatile Organic Compounds

TCLP VOCs - Toxicity Characteristic Leaching Procedure - Volatile Organic Compounds

TCLP SVOCs - Toxicity Characteristic Leaching Procedure - Semi-Volatile Organic Compounds

Table 2  
Soil Volatile Organic Analytical Results Summary  
Dorel Hat- Supplemental Phase II Investigation  
Beacon, NY  
Project No. 0507501

Sample ID	TB204-8.5	TB204-8.5DL	TB205-6.5	TB206-9	TB206-9DL	TB207-9.5	TB207-9.5DL	TB208-9	TB208-9DL	TB209-9	TB210-9	NYSDEC	NYSDEC
Lab Sample ID	E0658-05C	E0658-05C	E0658-06B	E0658-08C	E0658-08CDL	E0658-09C	E0658-09CDL	E0658-10C	E0658-10CDL	E0658-11C	E0658-12A	Rec. Soil	Soil cleanup
Sampling Date	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	Cleanup	objectives
Sample Depth (ft)	8.5-9.5	8.5-9.5	6.5-7.5	9-10	9-10	9.5-10.5	9.5-10.5	9-10	9-10	9-10	9-10	Objective	to protect
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil		GW quality
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dilution Factor	1	50	1	1	50	1	100	1	20	1	1		ug/Kg
VOCs													
Benzene	640 E	ND	ND	1800 E	ND	10000 E	22000 DJ	150	ND	ND	ND	60	60
Toluene	2000 E	ND	ND	3000 E	5900 DJ	13000 E	78000 D	370	ND	ND	ND	1500	1500
Ethylbenzene	1300 E	ND	ND	3600 E	ND	23000 E	ND	60	ND	ND	ND	5500	5500
m,p-Xylene	5200 E	22000 DJ	ND	7800 E	13000 DJ	48000 E	140000 D	680	ND	ND	ND	1200	1200
o-Xylene	2800 E	ND	ND	5500 E	ND	35000 E	53000 DJ	260	ND	ND	ND	1200	1200
Xylene (Total)	8100 E	22000 DJ	ND	13000 E	13000 DJ	83000 E	190000 D	940	ND	ND	ND	1200	1200
Isopropylbenzene	110	ND	ND	610	ND	1500 E	ND	8 J	ND	ND	ND	NA	NA
n-Propylbenzene	51	ND	ND	140	ND	2800 E	ND	6 J	ND	ND	ND	NA	NA
1,3,5-Trimethylbenzene	1600 E	ND	ND	3100 E	ND	25000 E	36000 DJ	170	ND	ND	ND	NA	NA
1,2,4-Trimethylbenzene	2400 E	22000 DJ	ND	4100 E	10000 DJ	32000 E	80000 D	400	ND	ND	ND	NA	NA
4-Isopropyltoluene	50	ND	ND	220	ND	1600 E	ND	5 J	ND	ND	ND	NA	NA
Naphthalene	12000 EB	22000 D	4 J	18000 EB	360000 D	85000 EB	260000 D	5300 EB	54000 D	27	5 J	13000	13000

Note: This table lists only the detected compounds. Please refer to Appendix C - Laboratory Results for a complete list of compounds for which samples were analyzed

Qualifiers

- E - Concentration exceeds the calibration range
- B - Detected in associated method blank
- D - Concentration obtained from diluted analysis
- J - Analyte detected Below quantitation limits
- ND - Not Detected at the method detection limit
- NA - Not Available
- 55 - Concentration of compounds that are detected are listed and identified in bold type.
- 55 - Concentration of compounds that exceed the NYSDEC Soil Cleanup Criteria are listed and identified in bold and boxed.
- Use professional Judgement based on data use

Note:

The data presented herein is based on the Preliminary Results of Volatile Organics analyses

Table 3  
Soil Semi-Volatile Organic Analytical Results Summary  
Dorel Hat- Supplemental Phase II Investigation  
Beacon, NY  
Project No. 0507501

Sample ID	TB204-8.5	TB204-8.5DL	TB205-6.5	TB206-9	TB206-9DL	TB207-9.5	TB207-9.5DL	TB208-9	TB208-9DL	TB209-9	TB210-9	NYSDEC	NYSDEC											
Lab Sample ID	E0658-05A	E0658-05ADL	E0658-06B	E0658-08A		E0658-09A	E0658-09ADL	E0658-10A	E0658-10ADL	E0658-11C	E0658-12A	Rec. Soil	Soil cleanup											
Sampling Date	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	Cleanup	objectives											
Sample Depth (ft)	8.5-9.5	8.5-9.5	6.5-7.5	9-10	9-10	9.5-10.5	9.5-10.5	9-10	9-10	9-10	9-10	Objective	to protect											
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil		GW quality											
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg											
Dilution Factor	1	10	1	1	25	1	5	1	10	1	1													
SVOCs																								
Phenol	77	J	ND	ND	ND	260	J	ND	ND	ND	ND	30	30											
4-Methylphenol	90	J	ND	ND	2600	J	370	J	810	J	ND	900	900											
2,4-Dimethylphenol	100	J	ND	ND	2800	J	1900	DJ	6400	DJ	ND	NA	NA											
Naphthalene	21000	E	40000	D	140	J	1300000	E	200000	D	370000	E	670000	D	620	J	85	J	13000	13000				
2-Methylnaphthalene	10000	E	18000	D	ND		490000	E	72000	D	17000	E	26000	D	150000	E	240000	D	85	J	ND	36400	36400	
Acenaphthylene	11000	E	19000	D	ND		410000	E	58000	D	15000	E	24000	D	120000	E	200000	D	43	J	ND	41000	41000	
Acenaphthene	4900		6400	D	ND		320000		40000	D	5600		7200	D	52000		70000	D	240	J	570	50000	90000	
Dibenzofuran	10000	E	17000	D	ND		430000	E	59000	D	14000	E	21000	D	100000	E	170000	D	140	J	80	J	6200	6200
Fluorene	12000	E	22000	D	ND		500000	E	72000	D	16000	E	26000	D	120000	E	220000	D	190	J	150	J	50000	350000
Phenanthrene	36000	E	49000	D	110	J	1200000	E	150000	D	39000	E	48000	D	310000	E	500000	D	780		1000	50000	220000	
Anthracene	36000	E	31000	D	47	J	480000	E	65000	D	18000	E	31000	D	94000	E	190000	D	290	J	300	J	50000	700000
Carbazole	9600	E	12000	D	ND		240000		28000	D	14000	E	17000	D	64000		82000	D	200	J	130	J	NA	NA
Fluoranthene	21000	E	37000	D	200	J	770000	E	120000	D	22000	E	36000	D	190000	E	380000	D	750		1000	50000	1900000	
Pyrene	23000	E	33000	D	160	J	840000	E	99000	D	27000	E	32000	D	240000	E	290000	D	620		870	50000	665000	
Benzo(a)anthracene	15000	E	16000	D	110	J	540000	E	59000	D	15000	E	19000	D	150000	E	160000	D	240	J	490		224	3000
Chrysene	17000	E	19000	D	150	J	510000	E	58000	D	17000	E	18000	D	140000	E	150000	D	290	J	680		400	400
Benzo(b)fluoranthene	12000	E	14000	D	110	J	480000	E	46000	D	13000	E	15000	D	120000	E	130000	D	200	J	450	J	1100	1100
Benzo(k)fluoranthene	6800		8000	D	47	J	200000		28000	D	5200		6300	D	60000		66000	D	88	J	220	J	1100	1100
Benzo(a)pyrene	11000	E	11000	D	90	J	390000		41000	D	10000		12000	D	100000	E	110000	D	170	J	350	J	61	11000
Indeno(1,2,3-cd)pyrene	4500		4600	DJ	55	J	160000		16000	D	4400		4000	D	43000		40000	DJ	78	J	150	J	3200	3200
Dibenzo(a,h)anthracene	1800		1800	DJ	ND		65000		6500	DJ	1800		1800	DJ	18000		16000	DJ	ND		75	J	14.3	» 10 <sup>8</sup>
Benzo(g,h,i)perylene	4100		3900	DJ	64	J	150000		14000	D	4100		3700	D	42000		36000	DJ	83	J	150	J	50000	800000

Note: This table lists only the detected compounds. Please refer to Appendix C - Laboratory Results for a complete list of compounds for which samples were analyzed

Qualifiers

E - Concentration exceeds the calibration range

D - Concentration obtained from diluted analysis

J - Analyte detected Below quantitation limits

ND - Not Detected at the method detection limit

NA - Not Available

55 - Concentration of compounds that are detected are listed and identified in bold type.

55 - Concentration of compounds that exceed the NYSDEC Soil Cleanup Criteria are listed and identified in bold and boxed.

Use professional Judgement based on data use

Note:

The data presented herein is based on the Preliminary Results

**Table 4**  
**Soil TCLP Volatile Organic Analytical Results Summary**  
**Dorel Hat- Supplemental Phase II Investigation**  
**Beacon, NY**  
**Project No. 0507501**

Sample ID	TB204-8.5	TB206-9	TB207-9.5	TB208-9	TB209-9	TB210-9	Hazardous Waste
Lab Sample ID	E0658-05C	E0658-08C	E0658-09C	E0658-10C	E0658-11C	E0658-12C	Regulatory Levels
Sampling Date	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	for Toxicity
Sample Depth (ft)	8.5-9.5	9-10	9.5-10.5	9-10	9-10	9-10	Characteristics
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dilution Factor	1	1	1	1	1	1	
TCLP VOCs							
Benzene	<b>3</b> J	<b>160</b>	<b>88</b>	<b>6</b>	ND	ND	500
Trichloroethene	<b>2</b> J	ND	ND	ND	ND	ND	500
Tetrachloroethene	<b>3</b> J	ND	ND	ND	ND	ND	700

Note: This table lists only the detected compounds. Please refer to Appendix C - Laboratory Results for a complete list of compounds for which samples were analyzed

**Qualifiers**

TCLP - Toxicity Characteristic Leaching Procedure

J - Analyte detected Below quantitation limits

ND - Not Detected at the method detection limit

NA - Not Available

**55** - Concentration of compounds that are detected are listed and identified in bold type.

Use professional Judgement based on data use

**Note:**

The data presented herein is based on the Preliminary Results

**Table 5**  
**Soil TCLP Semi-Volatile Organic Analytical Results Summary**  
**Dorel Hat- Supplemental Phase II Investigation**  
**Beacon, NY**  
**Project No. 0507501**

Sample ID	TB204-8.5	TB206-9	TB207-9.5	TB208-9	TB209-9	TB210-9	Hazardous Waste
Lab Sample ID	E0658-05A	E0658-08A	E0658-09A	E0658-10A	E0658-11A	E0658-12A	Regulatory Levels
Sampling Date	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	for Toxicity
Sample Depth (ft)	8.5-9.5	9-10	9.5-10.5	9-10	9-10	9-10	Characteristics
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	
Units	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Dilution Factor	1	1	1	1	1	1	
TCLP SVOCs							
2-Methylphenol	ND	<b>4</b> J	<b>6</b> J	<b>8</b> J	ND	ND	NA
4-Methylphenol	<b>3</b> J	<b>7</b> J	<b>10</b> J	<b>12</b> J	ND	ND	NA

Note: This table lists only the detected compounds. Please refer to Appendix C - Laboratory Results for a complete list of compounds for which samples were analyzed

**Qualifiers**

TCLP - Toxicity Characteristic Leaching Procedure

J - Analyte detected Below quantitation limits

ND - Not Detected at the method detection limit

NA - Not Available

**55** - Concentration of compounds that are detected are listed and identified in bold type.

Use professional Judgement based on data use

**Note:**

The data presented herein is based on the Preliminary Results

**Table 6**  
**Soil Cyanide Analytical Results Summary**  
**Dorel Hat- Supplemental Phase II Investigation**  
**Beacon, NY**  
**Project No. 0507501**

Sample ID	TB204-8.5	TB205-6.5	TB206-9	TB207-9.5	TB208-9	TB209-9	TB210-9	TB210-9DUP	NYSDEC	NYSDEC
Lab Sample ID	E0658-05A	E0658-06A	E0658-08A	E0658-09A	E0658-10A	E0658-11A	E0658-12A	E0658-12A	Rec. Soil	Soil cleanup
Sampling Date	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	5/18/2006	Cleanup	objectives
Sample Depth (ft)	8.5-9.5	6.5-7.5	9-10	9.5-10.5	9-10	9-10	9-10	9-10	Objective	to protect
Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil		GW quality
Units	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Dilution Factor	1	1	1	1	1	1	1	1		
<b>Cyanides</b>										
Cyanide	3.2 N	ND	2.5 N	0.54 BN	4.7 N	2.2 N	ND	0.161 B	NA	NA

**Qualifiers**

N - Matrix Spike Recovery falls outside the control limit

B - Detected in associated method blank

ND - Not Detected at the method detection limit

NA - Not Available

55 - Concentration of compounds that are detected are listed and identified in bold type.

Use professional Judgement based on data use

**Note:**

The data presented herein is based on the Preliminary Results

**Table 7**  
**Groundwater Volatile Organic Analytical Results Summary**  
**Dorel Hat- Supplemental Phase II Investigation**  
**Beacon, NY**  
**Project No. 0507501**

Sample ID Lab Sample ID Sampling Date Matrix Units Dilution Factor	MW103 E0658-13A 5/18/2006 Water ug/Kg 1	MW103DL E0658-13ADL 5/18/2006 Water ug/Kg 8	NYSDEC Ambient Water Quality Standards & Guidance Values ug/l
<b>VOCs</b>			
Acetone	6	ND	50
Carbon Disulfide	5	ND	50
Benzene	<b>360</b> E	<b>400</b> D	1
Toluene	<b>240</b> E	<b>190</b> D	5
Ethylbenzene	<b>10</b>	ND	5
m,p-Xylene	<b>120</b>	<b>82</b> D	5
o-Xylene	<b>55</b>	<b>39</b> DJ	5
Xylene (Total)	<b>170</b>	<b>120</b> D	5
Styrene	<b>17</b>	<b>11</b> DJ	5
1,3,5-Trimethylbenzene	<b>12</b>	ND	5
1,2,4-Trimethylbenzene	<b>29</b>	<b>19</b> DJ	5
Naphthalene	<b>410</b> E	<b>1100</b> D	10

Note: This table lists only the detected compounds. Please refer to Appendix C - Laboratory Results for a complete list of compounds for which the sample was analyzed

**Qualifiers**

- E - Concentration exceeds the calibration range
- J - Analyte detected Below quantitation limits
- D - Concentration obtained from diluted analysis
- ND - Not Detected at the method detection limit
- NA - Not Available
- 55** - Concentration of compounds that are detected are listed and identified in bold type.
- 55** - Concentration of compounds that exceed the NYSDEC Ambient Water Quality Standards & Guidance Values are listed and identified in bold and boxed.
- Use professional Judgement based on data use

**Note:**

The data presented herein is based on the Preliminary Results

**Table 8**  
**Groundwater Semi-Volatile Organic Analytical Results Summary**  
**Dorel Hat- Supplemental Phase II Investigation**  
**Beacon, NY**  
**Project No. 0507501**

Sample ID	MW103		MW103DL		NYSDEC
Lab Sample ID	E0658-13B		E0658-13BDL		Ambient Water
Sampling Date	5/18/2006		5/18/2006		Quality Standards
Matrix	Water		Water		& Guidance Values
Units	ug/Kg		ug/Kg		ug/l
Dilution Factor	1		10		
<b>SVOCs</b>					
Phenol	<b>240</b>	E	<b>270</b>	D	1
2-Methylphenol	<b>360</b>	E	<b>480</b>	D	NA
4-Methylphenol	<b>540</b>	E	<b>740</b>	D	NA
2,4-Dimethylphenol	ND		<b>1000</b>	D	50
Naphthalene	<b>730</b>	E	<b>1300</b>	D	10
2-Methylnaphthalene	<b>100</b>		<b>110</b>	D	4.2
Acenaphthylene	<b>72</b>		<b>77</b>	DJ	NA
Acenaphthene	<b>70</b>		<b>80</b>	DJ	20
Dibenzofuran	<b>31</b>		<b>32</b>	DJ	NA
Fluorene	<b>26</b>		<b>26</b>	DJ	50
Phenanthrene	<b>48</b>		<b>55</b>	DJ	50
Anthracene	<b>9</b>	J	ND		50
Carbazole	<b>29</b>		<b>28</b>	DJ	NA
Fluoranthene	<b>10</b>		ND		50
Pyrene	<b>9</b>	J	ND		50
Benzo(a)anthracene	<b>2</b>	J	ND		NA
Chrysene	<b>3</b>	J	ND		0.002
Benzo(b)fluoranthene	<b>2</b>	J	ND		0.002
Benzo(k)fluoranthene	<b>1</b>	J	ND		0.002
Benzo(a)pyrene	<b>2</b>	J	ND		0.002
Indeno(1,2,3-cd)pyrene	<b>1</b>	J	ND		0.002
Benzo(g,h,i)perylene	<b>1</b>	J	ND		NA

Note: This table lists only the detected compounds. Please refer to Appendix C - Laboratory Results for a complete list of compounds for which the sample was analyzed

**Qualifiers**

- E - Concentration exceeds the calibration range
- D - Concentration obtained from diluted analysis
- J - Analyte detected Below quantitation limits
- ND - Not Detected at the method detection limit
- NA - Not Available
- 55** - Concentration of compounds that are detected are listed and identified in bold type.
- 55** - Concentration of compounds that exceed the NYSDEC Ambient Water Quality Standards & Guidance Values are listed and identified in bold and boxed.
- Use professional Judgement based on data use

**Note:**

The data presented herein is based on the Preliminary Results

***Attachment 2***

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**Previous Investigation Reports  
(provided on CD)**

***Attachment 3***

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**NYSDOH Generic  
Community Air Monitoring Plan**

## New York State Department of Health Generic Community Air Monitoring Plan

A Community Air Monitoring Plan (CAMP) requires real-time monitoring for volatile organic compounds (VOCs) and particulates (i.e., dust) at the downwind perimeter of each designated work area when certain activities are in progress at contaminated sites. The CAMP is not intended for use in establishing action levels for worker respiratory protection. Rather, its intent is to provide a measure of protection for the downwind community (i.e., off-site receptors including residences and businesses and on-site workers not directly involved with the subject work activities) from potential airborne contaminant releases as a direct result of investigative and remedial work activities. The action levels specified herein require increased monitoring, corrective actions to abate emissions, and/or work shutdown. Additionally, the CAMP helps to confirm that work activities did not spread contamination off-site through the air.

The generic CAMP presented below will be sufficient to cover many, if not most, sites. Specific requirements should be reviewed for each situation in consultation with NYSDOH to ensure proper applicability. In some cases, a separate site-specific CAMP or supplement may be required. Depending upon the nature of contamination, chemical-specific monitoring with appropriately-sensitive methods may be required. Depending upon the proximity of potentially exposed individuals, more stringent monitoring or response levels than those presented below may be required. Special requirements will be necessary for work within 20 feet of potentially exposed individuals or structures and for indoor work with co-located residences or facilities. These requirements should be determined in consultation with NYSDOH.

Reliance on the CAMP should not preclude simple, common-sense measures to keep VOCs, dust, and odors at a minimum around the work areas.

### Community Air Monitoring Plan

Depending upon the nature of known or potential contaminants at each site, real-time air monitoring for volatile organic compounds (VOCs) and/or particulate levels at the perimeter of the exclusion zone or work area will be necessary. Most sites will involve VOC and particulate monitoring; sites known to be contaminated with heavy metals alone may only require particulate monitoring. If radiological contamination is a concern, additional monitoring requirements may be necessary per consultation with appropriate NYSDEC/NYSDOH staff.

**Continuous monitoring will be required for all ground intrusive activities and during the demolition of contaminated or potentially contaminated structures.** Ground intrusive activities include, but are not limited to, soil/waste excavation and handling, test pitting or trenching, and the installation of soil borings or monitoring wells.

**Periodic monitoring** for VOCs will be required during non-intrusive activities such as the collection of soil and sediment samples or the collection of groundwater samples from existing monitoring wells. "Periodic" monitoring during sample collection might reasonably consist of taking a reading upon arrival at a sample location, monitoring while opening a well cap or overturning soil, monitoring during well baling/purging, and taking a reading prior to leaving a sample location. In some instances, depending upon the proximity of potentially exposed individuals, continuous monitoring may be required during sampling activities. Examples of such situations include groundwater sampling at wells on the curb of a busy urban street, in the midst of a public park, or adjacent to a school or residence.

#### VOC Monitoring, Response Levels, and Actions

Volatile organic compounds (VOCs) must be monitored at the downwind perimeter of the immediate work area (i.e., the exclusion zone) on a **continuous** basis or as otherwise specified. Upwind concentrations should be measured at the start of each workday and periodically thereafter to establish background conditions. The monitoring work should be performed using equipment appropriate to measure the types of contaminants known or suspected to be present. The equipment should be calibrated at least daily for the contaminant(s) of concern or for an appropriate surrogate. The equipment should be capable of calculating 15-minute running average concentrations, which will be compared to the levels specified below.

- If the ambient air concentration of total organic vapors at the downwind perimeter of the work area or exclusion zone exceeds 5 parts per million (ppm) above background for the 15-minute average, work activities must be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities can resume with continued monitoring.
- If total organic vapor levels at the downwind perimeter of the work area or exclusion zone persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities must be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps, work activities can resume provided that the total organic vapor level 200 feet downwind of the exclusion zone or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less - but in no case less than 20 feet, is below 5 ppm over background for the 15-minute average.
- If the organic vapor level is above 25 ppm at the perimeter of the work area, activities must be shutdown.

All 15-minute readings must be recorded and be available for State (DEC and DOH) personnel to review. Instantaneous readings, if any, used for decision purposes should also be recorded.

### Particulate Monitoring, Response Levels, and Actions

Particulate concentrations should be monitored **continuously** at the upwind and downwind perimeters of the exclusion zone at temporary particulate monitoring stations. The particulate monitoring should be performed using real-time monitoring equipment capable of measuring particulate matter less than 10 micrometers in size (PM-10) and capable of integrating over a period of 15 minutes (or less) for comparison to the airborne particulate action level. The equipment must be equipped with an audible alarm to indicate exceedance of the action level. In addition, fugitive dust migration should be visually assessed during all work activities.

- If the downwind PM-10 particulate level is 100 micrograms per cubic meter ( $\text{mcg}/\text{m}^3$ ) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques must be employed. Work may continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed  $150 \text{ mcg}/\text{m}^3$  above the upwind level and provided that no visible dust is migrating from the work area.
- If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than  $150 \text{ mcg}/\text{m}^3$  above the upwind level, work must be stopped and a re-evaluation of activities initiated. Work can resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within  $150 \text{ mcg}/\text{m}^3$  of the upwind level and in preventing visible dust migration.

All readings must be recorded and be available for State (DEC and DOH) personnel to review.

June 20, 2000

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