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April 15, 2009

Project No. 99768

Chris DeRoberts
Environmental Coordinator
Division of Environmental Affairs
Central Hudson Gas & Electric Corporation
284 South Avenue
Poughkeepsie, NY 12601

Subject: Eltings Corners RCRA Facility Investigation
Town of Lloyd
Ulster County, New York

Dear Mr. DeRoberts:

Enclosed are two copies of the RCRA Facility Investigation Report (RFI) for the above-referenced property. We trust the information presented in this report meets your needs at this time.

We appreciate the opportunity to provide these services for Central Hudson. Should you require additional information, have any questions regarding this report, or wish to discuss the recommendations provided, please contact us at (845) 567-6530.

Respectfully submitted,
Kleinfelder East, Inc.

Julia G. Craner
Project Manager

David B. Tompkins, CWB, PWS
Vice President
Regional Environmental Practice Lead

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RCRA FACILITY INVESTIGATION
CENTRAL HUDSON GAS & ELECTRIC
ELTINGS CORNERS FACILITY
TOWN OF LLOYD
ULSTER COUNTY, NEW YORK

April 15, 2009

RCRA FACILITY INVESTIGATION
CENTRAL HUDSON GAS & ELECTRIC
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QUALITY ASSURANCE/QUALITY CONTROL

The following personnel have reviewed this report for accuracy, content, and quality of presentation:

Julia G. Craner
Project Manager

April 15, 2009
Date

David B. Tompkins
Vice President
Regional Environmental Practice Lead

April 15, 2009
Date

TABLE OF CONTENTS

TABLES

FIGURES

APPENDICES

EXECUTIVE SUMMARY

The purpose of this report is to describe and document the results of a Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) conducted between December 2008 and February 2009 at the Central Hudson Gas and Electric Corporation (CHGE) Eltings Corners facility, located in the Town of Lloyd, Ulster County, New York (Subject Site/Subject Property).

SITE BACKGROUND

According to historical information provided to Kleinfelder, the Site has operated as a vehicle and equipment storage and repair facility since the 1950's. Both current and historic site activities included: storage of electrical equipment, transformer storage and repair, vehicle maintenance and storage, and administrative offices. These activities occur on the eastern portion (east side of South Street) of the facility. Black Creek is located immediately adjacent to the eastern property boundary. The western portion of the facility on the west side of South Street is undeveloped and includes wetlands and a dirt parking area for CHGE.

SCOPE OF WORK

RFI activities were completed in accordance with the New York State Department of Environmental Conservation (NYSDEC) approved RCRA Facility Investigation Work Plan prepared by The Chazen Companies (TCC), dated November 2008. The NYSDEC approved the work plan with minor modifications in its letter dated November 18, 2008.

The investigation consisted of the advancement of six soil borings, four of which were converted to monitoring wells, to investigate previously identified areas of concern AOC-1 and AOC-2. Three hand borings were also advanced at the stormwater system Outfall for the collection of six sediment samples. The Outfall is located in the northeast corner on the western portion of the facility. Surface water and sediment

samples were also collected from the storm water catch basin located upstream from the Outfall. A total of two soil samples from the AOCs, six sediment samples from the stormwater Outfall, one surface water sample and one sediment sample from the catch basin were collected during this investigation.

INVESTIGATION RESULTS

Groundwater analytical results were compared to New York State Department of Environmental Conservation (NYSDEC) Technical Guidance Series (TOGS) 1.1.1 groundwater quality standards. Results from the monitoring wells installed at AOC 1 detected no VOCs, SVOCs, TPH-DRO, or PCBs, except for two isolated estimated (J) concentrations of PCB-1248 and PCB-1260 at CH-MW7. Chloroethane and 1,1-dichloroethane, found in exceedance in soil boring CH-SB39 installed during the previous TCC work, were not detected during the RFI. The PCBs detected in CH-MW7 were present at concentrations (0.11 ug/l) slightly above the TOGS 1.1.1 standard of 0.09 ug/l. RCRA 8 metal concentrations were also below TOGS 1.1.1 standards, except for iron and manganese. Iron and manganese concentrations exceeded the TOGS 1.1.1 standard in each well sampled suggesting that the exceedances may be related to the regional groundwater quality.

Groundwater contours indicated a northerly groundwater flow direction. Thus, CH-MW6 through CH-MW9 were located in cross-gradient positions from CH-SB39. Due to its close proximity to CH-SB39 (less than 10 ft.), the lack of VOCs in CH-MW6 suggests that the extent of previously found chloroethane and 1,1-dichloroethane contamination is very limited. It is recommended to let natural attenuation degrade this isolated de minimus contaminated area since there are no human receptors and no remaining source.

Soil analytical results were compared to Title 6 New York Code of Rules and Regulations (NYCRR) Part 375-6, Remedial Program Soil Cleanup Objectives for Unrestricted Use. At AOC 1, the soil sample collected from CH-SB52/MW6 yielded no detectable concentrations. No impacts were observed in the field during the installation of CH-SB53. Therefore, no soil samples were collected for analysis from CH-SB53, and no apparent impacts were caused by the drywell in this location. No further action is warranted.

A soil sample was also collected from CH-SB51 at AOC 2. Analytical results indicated a residual concentration of 21 parts per million (ppm) TPH-DRO. Although there is no NYSDEC cleanup objective for TPH-DRO, the concentration is minimal and not considered an environmental concern. Therefore, although staining and an oily odor were observed at CH-SB36 during the previous investigation, no SVOC or PCB exceedances were reported for CH-SB36 and no impacts were observed at CH-SB51. No further remedial action is warranted for AOC 2.

Surface water results from the Catch Basin indicate that there were no detections of VOCs, SVOCs, and PCBs. Metal concentrations were below TOGS 1.1.1 standards for human and wildlife protection.

The Catch Basin sediment sample contained PCBs, calcium, and magnesium in exceedance of NYSDEC sediment screening criteria. The Outfall sediment samples contained SVOCs, PCBs, calcium, magnesium, and zinc in exceedance of the NYSDEC sediment screening criteria. Calcium and magnesium concentrations may be attributed to deicing materials used at the subject site or elsewhere on adjacent roads, etc. The SVOCs present were polyaromatic hydrocarbons (PAHs). During the site visit, it was noted that two offsite water bodies contribute to the CHGE stormwater management system. Therefore, it is recommended that these two offsite water bodies be investigated for the presence of SVOCs, PCBs, and metals to determine if offsite sources are contributing to contaminant concentrations found at the Outfall. It is likely that additional horizontal and vertical delineation of contamination at the Outfall will eventually be required after offsite contributing water bodies are investigated.

Based on the data obtained during the RFI, only limited, isolated contaminants were detected at sampling locations in the subsurface environment at the site. Due to their presence in the subsurface combined with the commercial nature and the restrictive access to the property, there is no potential for human health or environmental risk from this limited subsurface contamination. Natural attenuation will allow for the decomposition of these remnant, isolated concerns.

The majority of the environmental risk (and contamination) identified during the RFI comes from the contaminated sediments at the Outfall location. Since full delineation of the distribution of the contamination has not been conducted, additional sampling in the adjacent wetland will be required. Without this additional data, it is difficult to

quantify the potential risk to the wetland environment. However, due to the unaccessible nature of the wetland and lack of human receptors, the risk to human health via direct contact mechanisms is minimal.

Some wildlife species could be exposed to risk due to the presence of PCBs. Specific species groups potentially affected by a release to the wetland could include birds, mammals, reptiles, amphibians, and possibly fish, if present. Based on the current data, additional investigation in the Outfall area as well as the source of the contamination is warranted.

1 INTRODUCTION

Central Hudson Gas and Electric Corporation's (CHGE's) Eltings Corners facility is located on a 33.7-acre site along NY Route 299 and South Street in the Town of Lloyd in Ulster County, New York (Figure 1). The portion of the facility on the eastern side of South Street is utilized by CHGE for storage of electrical equipment (including transformers), vehicle maintenance and storage, transformer repair, and administrative offices. The western portion (west side of South Street) of the site is undeveloped and is predominantly wetland with an unpaved parking area in the southeast corner. For the purposes of this report the "subject site/property" shall refer to the eastern portion (east side of South Street) of the CHGE facility. A site plan showing the areas of investigation is included as Figure 2.

This Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) Report has been prepared on behalf of CHGE in order to comply with the requirements of CHGE's RCRA Part 373 Permit.

1.1. PROJECT OBJECTIVES

This report documents the results of the RFI conducted from December 2008 to February 2009 at the subject property.

The objective of the RFI was to conduct sampling activities at the site as outlined in the November 2008 RFI Workplan prepared by The Chazen Companies (TCC) and approved by the New York State Department of Environmental Conservation (NYSDEC) on November 18, 2008. The data provided by these sampling activities will be used to determine the extent of contamination (if any) at the Areas of Concern (AOCs); determine whether the stormwater system is carrying contaminants offsite (i.e., to the Outfall; address any data gaps that exist at the Site; assist in the development of a site conceptual model; and assist in identifying potential remedial alternatives, if needed.

1.2. SITE BACKGROUND

The Eltings Corners facility has been occupied by CHGE since the 1950s. Site use includes: vehicle maintenance and storage, transformer and equipment storage and maintenance, office work, and vehicle refueling activities. The line garage, transformer shop, office building, and warehouse were constructed between 1951 and 1958. The smaller steel garages were built between the late 1950s and 1969. The current maintenance garage was added in 1983.

Previous site investigations include:

- October 2007 Limited Phase II Environmental Site Assessment, The Chazen Companies.
- May 2008 Supplemental Phase II Investigation, The Chazen Companies.

1.3. REPORT ORGANIZATION

This report has been organized into sections based on investigations associated with the three RFI AOCs.

Section 1 contains an introduction and includes a discussion on subject site background and the organization of this report.

Section 2 includes a description of the completed scope of work. This includes the quality assurance and quality control (QA/QC) program, the database management program, and a summary of the field methods used during the investigations.

Section 3 includes a discussion of the physical characteristics of the Site. These include climate, surface water hydrology, geology, and groundwater hydrology.

Sections 4 through 6 include descriptions of each area investigated, the scope of the work completed, and the results of the investigations in these areas.

Section 7 consists of an exposure assessment.

Section 8 contains conclusions and recommendations.

Section 9 contains limitations.

Section 10 includes references.

Tables, Figures, Appendices, and a Statement of Qualifications are attached.

2 SCOPE OF WORK

2.1. INTRODUCTION

The purpose of this section is to describe and document the methods used during the field investigation implemented by Kleinfelder. The field work and reporting associated with the RFI were performed in general accordance with the approved workplan. Some necessary changes to the workplan were made and approved by CHGE and NYSDEC during the course of field activities and are described in Section 2.2 and Sections 4 through 7.

2.2. SUMMARY OF WORK SCOPE

This section presents an overview of the field work conducted for this RFI investigation. Three areas of concern (AOCs) were addressed:

- AOC 1 – Steel Garage Floor Drain Area;
- AOC 2 – Maintenance Garage Hydraulic Spill Area;
- Stormwater System.

The extents of AOC 1 and AOC 2 are shown in Figure 3. The extent of the Stormwater System investigation area is shown in Figures 2 and 5. The specific scope of work conducted at each AOC is described in the Sections 4, 5, and 6 of this report.

Proposed soil boring, monitoring well, and outfall sediment sampling locations were presented in the November 2008 RFI Workplan. A total of six soil borings were advanced as part of this investigation; four of which were converted to monitoring wells. Following well development, one round of groundwater samples were collected from the newly installed monitoring wells. Additionally, six sediment samples were collected from the stormwater system Outfall, and a sediment sample and surface water sample were collected from the catch basin located upstream from the Outfall (Figure 5). An

exposure assessment was also conducted as part of this investigation to evaluate potential receptors and transport pathways.

2.3. PRE-DRILLING ACTIVITIES

Prior to initiation of field work, one-call services were contacted by CHGE to mark out underground utilities. CHGE also retained a private mark out company to identify onsite buried utilities in the vicinity of the proposed boring and monitoring well locations.

Field activities were initiated on December 8, 2008. Representatives from Kleinfelder, CHGE, and the NYSDEC were onsite to observe activities and to verify sampling locations, and overall scope of work. Soil boring locations CH-MW8 and CH-MW9 were not accessible due to the presence of stored CHGE equipment. Therefore, alternate locations were identified and approved in the field by representatives from CHGE and the NYSDEC. Additionally, with concurrence from CHGE and the NYSDEC, the location of CH-SB51 was also moved due to access issues (Figure 4).

During the identification of alternate locations for CH-MW8 and CH-MW9, an unmarked underground utility was identified. CHGE recontacted the mark out firm for an emergency mark out, and the underground line was marked out. No drilling was performed in this area until the emergency mark out was completed.

2.4. QA/QC PROGRAM

2.4.1. Field Duplicate and MS/MSD Samples

Field duplicate and matrix spike/matrix spike duplicate (MS/MSD) samples were collected to evaluate the reproducibility of the sampling and laboratory analysis methods. Field duplicates were submitted at a rate of 1 field duplicate for every 20 samples collected. MS/MSD samples were analyzed at a rate of 1 MS/MSD for every 20 samples per matrix collected. The field duplicate and MS/MSD samples were

analyzed for the same list of parameters as the corresponding field samples in the sample delivery group.

2.4.2. Equipment Blanks

Equipment blank samples were prepared by pouring laboratory-supplied analyte-free water over decontaminated sampling equipment. The equipment blanks were collected to ensure that decontamination procedures used during the field investigation were successful at removing the chemical constituents from the sampling equipment. Equipment blank samples were collected at a rate of 1 equipment blank for every 20 samples collected or a minimum of 1 equipment blank sample per day. Equipment blanks were analyzed for the same list of parameters as the corresponding samples.

2.4.3. Trip Blanks

Trip blanks consisted of 40-milliliter (ml) aliquots of laboratory-supplied analyte-free water and empty sample bottles supplied by the laboratory. The trip blanks were kept with the empty sample bottles. Trip blanks were submitted at a rate of one trip blank for each shipment of water samples for volatile organic compound (VOC) analysis.

2.4.4. Sample Custody and Custody Seals

Sample Chain-of-Custody (COC) logs and custody seals were used for all sample shipments. These logs and custody seals were used to ensure that sample integrity was not compromised during shipment. Shipment particulars, such as samples submitted, analyses requested, and sampling responsibility, were recorded on the COCs. Field personnel retained on copy of the COC; the laboratory received the remaining two copies for internal use.

2.4.5. Laboratory Analyses

The analyses were conducted using NYSDEC Analytical Services Protocol (ASP) dated September 1989 with revisions. The analytical work was performed by a laboratory approved by the New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP) for the categories of solid and hazardous waste. Any chemical and physical analyses not covered by ASP procedures were conducted

using procedures specified in the NYSDEC approved November 2008 Quality Assurance Project Plan (QAPP). Sample custody, laboratory procedure, and other QA/QC requirements were performed in accordance with the specifications in the QAPP.

2.4.6. Data Validation

The samples were collected by Kleinfelder personnel and analyzed by TestAmerica, Inc. of Shelton, CT, following procedures outlined in the QAPP. The analytical results submitted by the laboratory have been reviewed and validated following the guidelines outlined in the QAPP and November 2008 Data Management Plan (DMP). Where problems were noted, corrective action was taken, if needed, and described as appropriate in Section 4.0. No third party data validation review was performed on the data.

2.5. SELECTION OF SCREENING CRITERIA

Based on guidance from the NYSDEC, soil analytical results were compared to Unrestricted Use Cleanup Objectives in Title 6 New York Code of Rules & Regulations (NYCRR) Part 375-6.

Groundwater analytical results were compared to the NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations for fresh groundwater (Class GA). TOGS 1.1.1 was most recently issued in June 1998 with addendums in April 2000 and June 2004.

Surface water samples were compared to the TOGS 1.1.1: Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations for fresh surface water classes (Class A, A-S, AA, AA-S, B, C, D) suitable for wildlife protection (Type W).

Sediment samples were compared to Sediment Criteria provided in the NYSDEC Division of Fish, Wildlife, and Marine Resources Technical Guidance for Screening

Contaminated Sediments (NYSDEC, 1999) Sediment Criteria for Benthic Aquatic Chronic Toxicity Protection Levels and Wildlife Bioaccumulation Protection Levels. These protection levels were appropriate for the sampling location (wetland).

2.6. INVESTIGATION METHODS

2.6.1. Soil Borings

Six soil borings were completed during the RFI. Soil borings were advanced by Aquifer Drilling & Testing, Inc. (ADT) of Albany, New York using hollow-stem augers. Drilling activities were overseen by a Kleinfelder field geologist. Soil borings were completed to depths ranging from 15 to 25 feet below ground surface (ft. bgs). Continuous split spoon samples were collected during boring activities in two-foot increments. Split-spoon sampling techniques were performed in general accordance with ASTM Standard 1586-99. Soil boring and monitoring well locations are shown on Figure 4.

The drill rig was decontaminated via steam cleaning before the start of drilling activities. As per the RFI Workplan, drilling equipment that came in contact with soils and/or groundwater was steam cleaned between boring locations. Steam cleaning was performed on a temporary on-site decon pad, which was constructed for the purpose of the RFI. Also, applicable drilling tools and sampling equipment were decontaminated with a four-part wash between samples at individual drilling locations as per the workplan. All wastewater was drummed for later disposal by CHGE.

Soil recovered from split spoons were inspected for visual staining and hydrocarbon odors. A photoionization detector (PID) was also used to detect VOC vapors. This information and lithologic data were logged in the field by a Kleinfelder geologist. Copies of soil boring logs are included in Appendix A.

Based on the RFI Workplan, soil samples were selected for analysis based on elevated (above background) PID readings, their location in the soil column (e.g., distance from saturated zone), and the presence of lithologic materials conducive to contaminant

transport or confinement. Soil samples were collected and stored on ice for shipment to the laboratory. The soil samples were analyzed in accordance with the QAPP for:

- Spill Technology and Remediation Series (STARS) VOCs by USEPA Method 8260B;
- STARS semivolatile organic compounds (SVOCs) by USEPA Method 8270C;
- Total petroleum hydrocarbons-Diesel range organics (TPH-DRO) via USEPA Method 8015B;
- PCBs by USEPA Method 8082;
- Total RCRA 8 Metals by USEPA Method 6010/7471;
- Cyanide via USEPA Method 9010/9012.

Four soil boring locations were completed as flush-mounted monitoring wells (CH-MW6 through CH-MW9) (see Section 2.6.2). At soil boring locations CH-SB51 and CH-SB53, excess soil cuttings were used to backfill the bore hole. The bore hole was then finished with cold patch asphalt or concrete to match existing surface conditions. Excess soil cuttings were drummed for off-site disposal by CHGE.

2.6.2. Monitoring Well Installation

As previously stated, CH-SB52/MW6, CH-MW7, CH-MW8, and CH-MW9 were converted to two-inch inner diameter (ID) monitoring wells by ADT with oversight by a Kleinfelder geologist. Monitoring wells locations are depicted in Figure 4.

Monitoring wells were constructed of two-inch ID, flush-joint, Schedule 40 PVC well screen and riser. Wells consisted of a 10-foot section of 0.010-inch slotted PVC screen, which straddled the water table to account for seasonal fluctuations, and PVC riser to the ground surface. PVC risers were capped with a locking watertight cap. Quartz sand packs compatible with the screen size were placed via tremie method into the annulus between the well and the auger. The sand pack was extended to approximately two feet above the top of the screen. Bentonite pellets were then placed above the sand pack and hydrated to form a minimum two-foot thick seal. The bentonite seal was followed by a cement/bentonite grout to ground surface. Wells were

completed as flush mount installations with a steel road box emplaced in a concrete pad.

Upon completion, each monitoring well was developed by pumping until turbidity cleared (visual) or 10 well volumes were extracted. All purge water generated during the investigation was drummed for later disposal by CHGE. Equipment used for well development was steam cleaned prior to use.

Each monitoring well was surveyed for horizontal and vertical control by Brooks and Brooks Surveying of Highland, New York, a New York licensed surveyor. Surveyed measurements of the ground surface, the outer casing (road box), and a marked reference point on the inner casing (PVC) were obtained. Vertical control was determined to within 0.01± feet. Horizontal coordinates are based on New York State Plane Coordinate System. Vertical elevations are based on the North American Vertical Datum of 1988.

2.6.3. Groundwater Sampling

Approximately one week following well development, the monitoring wells were sampled in accordance with the RFI Workplan. Prior to sampling, water levels were measured in each well with an electronic interface probe to the reference point marked on the PVC riser.

Wells were purged prior to sampling via a low flow purge method using a peristaltic pump and disposable tubing. Low flow purge and sampling methods minimize stress to the groundwater system by minimizing drawdown. Wells were purged until temperature, pH, oxidation reduction potential (ORP), specific conductivity, and turbidity stabilized. A Horiba U-22 meter was used to measure field parameters. Purge water was drummed for later disposal by CHGE. Copies of groundwater sampling records are included in Appendix B.

Following purging, the wells were sampled using new disposable polyethylene bailers. Groundwater samples were collected in lab-provided bottleware and stored on ice for shipment to the laboratory. Groundwater samples were analyzed in accordance with the QAPP for:

- STARS VOCs via USEPA Method 8260B;
- STARS SVOCs using USEPA Method 8270C;
- DRO using USEPA Method 8015B;
- PCBs via USEPA Method 8082;
- TAL Metals via USEPA Method 6010/7471;
- Cyanide via USEPA Method 9010/9012.

2.6.4. Catch Basin Sampling

A surface water and sediment sample were obtained from the catch basin which was located directly upstream from the stormwater outfall from the site. The surface water sample was obtained using a disposable polyethylene bailer to collect surface water. The surface water sample was then transferred to lab-supplied bottleware and stored on ice for shipment to the laboratory. The surface water sample was analyzed for:

- STARS VOCs via USEPA Method 8260B;
- STARS SVOCs using USEPA Method 8270C;
- PCBs via USEPA Method 8082;
- TAL Metals via USEPA Method 6010/7471;
- Cyanide via USEPA Method 9010/9012.

The catch basin sediment sample was obtained using a pre-cleaned sampling device to scoop sediment from the bottom of the catch basin. Sediment was then transferred to lab-supplied bottleware and stored on ice for shipment to the laboratory. The sediment sample was analyzed for:

- STARS VOCs via USEPA Method 8260B;
- STARS SVOCs using USEPA Method 8270C;
- PCBs via USEPA Method 8082;

- TAL Metals via USEPA Method 6010/7471;
- Cyanide using USEPA Method 9010/9012.

2.6.5. Outfall Sediment Sampling

Sediment samples were collected from the base of the stream at the stormwater outfall location at 10 feet, 20 feet, and 30 feet downstream from the outfall. At each sampling location, a stainless steel hand auger was used to collect sediment samples from intervals of 0 to 0.5 feet and 1 to 1.5 feet below the stream bed. Sediment was then transferred to lab-supplied bottleware and stored on ice for shipment to the laboratory. The sediment samples were analyzed for:

- STARS VOCs via USEPA Method 8260B;
- STARS SVOCs using USEPA Method 8270C;
- PCBs via USEPA Method 8082;
- TAL Metals via USEPA Method 6010/7471;
- Cyanide using USEPA Method 9010/9012.

2.6.6. Exposure Assessment

A Kleinfelder biologist conducted the exposure assessment by researching online databases to obtain pertinent site information and conducting a field review of site conditions and potential exposure pathways.

3 PHYSICAL CHARACTERISITCS OF STUDY AREA

3.1. SURFACE FEATURES

The subject site is a 33.7-acre parcel located in the Town of Lloyd, Ulster County, New York. The area surrounding the site is rural with a mix of commercial and residential uses (Figure 1). Commercial uses are primarily located along Route 299, which abuts the north side of the property.

The property is bounded to the west by South Street, with an emergent/forested wetland complex on the west side of South Street. CHGE owns a portion of the wetland complex, but other than the Outfall, this portion was not included in the RFI. The subject site is bounded to the east by a former railroad track. Black Creek, a Class A(t) stream, is located on the east side of the railroad track directly adjacent to the eastern border of the subject property beyond which is undeveloped wooded land. A Class A(t) stream is described as a stream with water quality suitable for: a source of water supply for drinking, culinary or food processing purposes; primary or secondary contact recreation; fishing; and fish propagation and survival. The "(t)" indicates that Black Creek is a trout stream. Agricultural fields and private residences are located to the south of the subject site. As stated above, the property abuts Route 299 to the north. A Lowe's Home Improvement Center is located further north.

The subject site includes a number of buildings, vehicle parking areas, and equipment storage areas. The facility contains CHGE offices, storage warehouses, a vehicle maintenance garage, line truck storage garages, a transformer repair shop, exterior equipment storage areas, and a transformer storage yard.

The facility is serviced by two onsite potable water wells (one in the office building at the southwest corner of the site and one outside the northwest corner of the northernmost building), two septic systems for sanitary wastes (located along the southern boundary in the southeast corner of the property and located in the northeastern corner of the

property), and a stormwater sewer system that discharges to the wetland complex on the west side of South Street. Stormwater discharges to the wetland complex under a State Pollution Discharge Elimination System (SPDES) permit. Electricity is provided by CHGE via aboveground and below ground utility lines. On-site buildings are heated with natural gas.

Security features at the subject site include a chain link fence and security lighting. Access to the subject property is provided through security gates.

3.2. CLIMATE AND METEOROLOGY

The subject site is located in the eastern part of New York State in the mid-Hudson Valley. The climate in the region consists of moderately cold, snowy winters and warm, humid summers. During July, the highest average daily mean temperature is 75° Fahrenheit (F). During the winter, the temperatures average approximately 26°F. Temperatures of 90°F or higher occur from 8 to 12 days per year between early June and late August (USGS 1980).

Normal annual precipitation is 51.06 inches for New Paltz, New York, which is located approximately 1 mile west of the subject site. The mean annual evapotranspiration is 20 inches. Snowfall typically occurs between mid-December and mid-March. The mid-Hudson Valley receives annual snowfall ranging from of 40 to 60 inches. Snow cover persists from mid-December through early March with maximum depths recorded in February of most years. Winds are predominantly from the west.

3.3. SURFACE WATER HYDROLOGY

The dominant surface water feature in the vicinity of the subject site is NYSDEC Wetland CD-6 associated with the Swarte Kill located to the west of South Street. The Swarte Kill flows in a northern direction and is located approximately 1,500 ft. west of the subject site. The Swarte Kill is a Class B stream and is a tributary of the Wallkill River. A Class B stream is defined as suitable for primary and secondary contact

recreation and fishing as well as fish propagation and survival. Swarte Kill flows into the Wallkill River approximately eight miles downstream from the subject site.

NYSDEC wetland CD-6 is a large mixed emergent and red maple forested wetland complex that is approximately 1,546 acres in size. Wetland CD-6 is a Class I wetland that may contain federal and/or state listed plants and/or animal species. Dominant vegetation within the wetland closest to the Outfall includes red osier dogwood (*Cornus sercea*), cattail (*Typha* spp), reed canary grass (*Phalaris arundinacea*), and purple loosestrife (*Lythrum salicaria*).

Black Creek is located on the east side of the railroad tracks, which are adjacent to the east side of the property. Black Creek is a perennial Class A(t) stream that flows in a north-northeast direction and is a tributary to the Hudson River. A small portion of Black Creek's flow is diverted into a culvert under the railroad tracks and westward into the facility's stormwater management system.

The general flow pattern on the Eltings Corners facility is east to west from Black Creek into an on-site fire suppression pond, into the stormwater collection system to the Outfall. Water discharging from the Outfall disperses in the wetland complex. Figure 7 depicts the stormwater system layout of the facility.

A small surface water body/wetland area is located between the northern border of the subject property and Route 299. This pond discharges into the CHGE stormwater system.

Based on mapping provided by the Federal Emergency Management Agency (FEMA), the eastern border of the property is located within the 100-year Flood Zone. The remainder of the site in not located in a flood zone. According to CHGE, there has been no known flooding at the site.

3.4. GEOLOGY

The subject site is located in the Hudson-Mohawk Lowlands Physiographic Province of New York State. Elevations in the area extend from 340 ft. above mean sea level (msl) in the wetland complex to the north of the subject property to 780 ft. msl in the hills to the southwest of the subject property. Elevations at the site are around 350 ft. msl. This physiographic province is characterized by rolling hills defined by sedimentary rock overlain by glacial deposits.

Bedrock in the area of the subject site is mapped as shale, argillite, and siltstone of the Normanskill Formation (mid-Ordovician) according to the Geologic Map of New York (Lower Hudson Sheet, 1970). Based on the US Department of Agriculture Soil Conservation Service's Soil Survey of Ulster County, New York (1977), bedrock occurs at a depth greater than 60 inches. Bedrock was not encountered at the subject site to a depth 25 feet (CH-MW6).

Unconsolidated deposits in the vicinity of the subject site consist of glacial till and some recent deposits based on the Surficial Geologic Map of New York (Lower Hudson Sheet, 1989). Soil borings at the site indicate that unconsolidated deposits are primarily silts with some clay. Based on the Soil Survey, soils at the site are composed primarily of Canandaigua silt loam (Cc) with some Chenango gravelly silt loam, 0-3 percent slopes (CaN) at the southwest corner of the subject site. Canandaigua silt loam is described as deep, nearly level, poorly drained and very poorly drained soil formed in lacustrine deposits of silt, very fine sand, and clay. CaN soils are described as deep, well drained to somewhat excessively well drained, nearly level, soil formed in glacial outwash deposits.

3.5. SURFICIAL HYDROGEOLOGY

The RFI was limited to the shallow unconfined aquifer. The shallow unconfined aquifer consists of unconsolidated glacial deposits. At the subject property, groundwater has been previously encountered at depths of approximately 5 ft. bgs. During the RFI,

groundwater was encountered between 1.0 and 2.5 ft. bgs during groundwater sampling.

The direction of groundwater flow is typically affected by surface topography, geology, hydrology, and characteristics of the soil and nearby wells. Based on nearby topography and hydrology, the property may sit a groundwater divide where flow in the eastern portions of the subject property may flow to the east toward Black Creek and flow in the western portions of the subject property may flow to the west toward the wetland complex and the Swarte Kill. The 2008 Supplemental Phase II Investigation by TCC found that groundwater flow was to the northeast in the vicinity of the former gasoline pump (south of AOC 2 and west of AOC 1). The placement of well locations for the RFI Workplan was based on this information.

3.6. ECOLOGY

The subject property has been developed as a maintenance and storage facility for CHGE. There is minimal landscaping on the subject site. Thus the eastern portion of the facility has minimal wildlife habitat. Some gravel surfaces are present, which could be used by ground nesting birds such as killdeer (*Charadrius vociferous*). Killdeer typically build nests in gravelly substrate.

The western portion of the Eltings Corners facility (west side of South Street) is mostly undeveloped wetlands. The western portion of the facility also contains a small unpaved parking area for overflow parking of CHGE vehicles. Thus, the western portion of the facility contains wildlife habitat suitable for a variety of wetland species (both aquatic and terrestrial).

The surrounding area to the east of the subject site (east of railroad tracks) provides additional undisturbed wildlife habitat due to its wooded, undeveloped nature.

4 AOC 1: SOUTHERN STEEL GARAGE – FLOOR DRAIN AREA

4.1. INTRODUCTION

AOC 1 includes the southern steel garage building located on the eastern side of the subject site. There are three closed floor drains within this building. The 2008 Supplemental Phase II Investigation identified concentrations of chloroethane (170 ug/l) and 1,1-dichloroethane (21 ug/l) in groundwater from soil boring CH-SB39 near the southern-most floor drain that are in exceedance of groundwater standards. Additionally, an unknown oily substance was noted on groundwater sampling tubing from CH-SB39 during the 2008 Supplemental Phase II ESA. Analytical results from soil samples collected from CH-SB39 in 2008 indicated that no VOCs, SVOCs, or metals above NYSDEC Part 375.6 Soil Cleanup Criteria (NYSDEC SCOs).

4.2. SCOPE OF WORK

As part of this RFI, four soil borings were advanced at AOC 1 and converted to monitoring wells (CH-MW6 through CH-MW9) to characterize the nature and extent of the groundwater impacts previously identified in the vicinity of CH-SB39. CH-MW6 was located inside the building to the east of CH-SB39. CH-MW7 through CH-MW9 were located outside the steel garage in presumed upgradient and downgradient locations. Soil boring and monitoring well locations are shown in Figure 4. As per the QAPP, two equipment blanks and a duplicate soil sample (CH-SB52/MW6 5-6) were collected.

Soil boring locations were advanced using a 4.25-inch inside diameter hollow-stem auger drill rig. Soils were logged for geologic classification. Because previous soil samples from AOC 1 indicated no VOCs, SVOCs, PCBs, or elevated levels of metals, only one soil sample was collected for laboratory analysis. This soil sample was collected from CH-MW6 and analyzed for total petroleum hydrocarbons-diesel range organics (TPH-DRO) with petroleum ID via USEPA Method 8015B.

Monitoring wells were completed as two-inch inner diameter, flush-mounted wells. Wells were screened according to the RFI Workplan: CH-MW6 from 15 to 25 ft. bgs and CH-MW7 through CH-MW9 from 5 to15 ft. bgs. Approximately one week following

well development, groundwater samples were collected from each well. The monitoring wells were purged and sampled using low flow purge techniques. Well purging occurred until field parameters, including temperature, pH, specific conductivity, oxidation-reduction potential, and turbidity, stabilized. The monitoring wells were sampled for STARS VOCs using USEPA Method 8260B, STARS SVOCs using USEPA Method 8270C, PCBs via USEPA Method 8082, Total RCRA metals using USEPA Method 6010/7471, and Cyanide via USEPA Method 9010/9012. CH-MW6 was also analyzed for TPH-DRO via USEPA Method 8015B. Filtered samples for metal analysis were required to be collected only if turbidity did not stabilize prior to sampling. However, groundwater was not turbid; therefore, no filtered groundwater samples were collected. Additionally, an equipment (field) blank, trip blank, and duplicate sample (from CH-MW7) were collected.

A single soil boring (CH-SB53) was also advanced at AOC 1 to a depth of 10 ft. bgs in the location of the southernmost tentatively identified drywell (Figure 4). The boring was advanced to confirm the presence of a drywell at this location based on a geophysical anomaly found during previous investigations. Based on the RFI Workplan, if physical evidence of contamination was encountered, a sample was to be collected from the most impacted area and analyzed for VOCs, SVOCs, PCBs, and Total RCRA metals. However, no physical evidence of contamination was observed during drilling activities. Therefore, no soil sample was collected for analysis.

Soil sample CH-SB52/MW6 (5-6) arrived at the lab above acceptable temperature levels. However, since this soil sample was only being analyzed for TPH-DRO, it was determined by Kleinfelder that concentrations of TPH-DRO would not be affected by the slight temperature exceedance.

4.3. SOIL SAMPLING RESULTS

Soil analytical results are summarized in Table 1. Soil analytical results were compared to Title 6 NYCRR Part 375.6 Soil Cleanup Criteria for Unrestricted Use. TPH-DRO was not detected in CH-SB52/MW6. The laboratory analytical data package is included as Appendix 3.

During the advancement of CH-SB53, no indications of subsurface impacts were observed based on visual, olfactory, and PID screening. Therefore, as per the RFI Workplan, no soil sample was collected for analysis.

4.4. GROUNDWATER SAMPLING RESULTS

Groundwater analytical results were compared to the NYSDEC TOGS 1.1.1 and are summarized in Table 2. As stated above, only unfiltered groundwater samples were collected since groundwater was not turbid during sampling activities. The laboratory analytical data package is included as Appendix 3.

Analytical results from CH-MW6 indicated no detections of VOCs, SVOCs, TPH-DRO, or PCBs. Although chloroethane and 1,1-dichloroethane were present as exceedances in nearby CH-SB39 during previous work (TCC, 2008), these compounds were not detected in CH-MW6. The majority of RCRA metals were nondetect or below TOGS 1.1.1 standards. Only iron (5,300 ug/l) and manganese (710 ug/l) were detected at concentrations exceeding their respective groundwater standard.

Analytical results from CH-MW7, CH-MW8, and CH-MW9 indicate no detections of VOCs except for three compounds with estimated (J) concentrations, which were well below the TOGS 1.1.1 groundwater standards. Chloroethane and 1,1-dichloroethane were not detected in any of the monitoring wells. SVOC and TPH-DRO not detected in the water samples collected from CH-MW7 through CH-MW9. PCBs were not detected in any well, except for an estimated (J) concentration of 0.11 ug/l of PCB-1248 in CH-MW7. However, the duplicate sample of CH-MW7 did not detect PCB-1248. The TOGS 1.1.1 groundwater quality standard for PCBs is 0.09 ug/l; however, the minimum detection limit of PCBs for USEPA Method 8082 was 0.5 ug/l. Therefore, based on the analytical results, there is no evidence, except for the estimated value in CH-MW7, that PCBs were present in groundwater at AOC 1.

Arsenic and lead, which were detected above TOGS 1.1.1 groundwater standards during the 2008 Supplemental Phase II, were not detected in groundwater samples

from CH-MW6 through CH-MW9. Therefore, arsenic and lead exceedances, if still present, may be limited in horizontal extent around CH-SB39.

Iron and manganese concentrations were above TOGS 1.1.1 groundwater standards in each well sampled. CH-MW6 had the lowest concentrations of iron and manganese of the wells sampled by Kleinfelder. Iron concentrations ranged from 5,300 ug/l in CH-MW6 to 15,500 ug/l in CH-MW7 (duplicate), while manganese concentrations ranged from 710 ug/l in CH-MW6 to 2,400 ug/l in CH-MW8. Please note that iron and manganese were not analyzed during the 2008 Supplemental Phase II ESA. Iron and manganese may be a regional groundwater artifact of the chemical content of naturally occurring glacial sediments.

4.5. GROUNDWATER FLOW DIRECTION

Groundwater levels were recorded during the December 23, 2008 groundwater sampling event (Table 3). Groundwater elevations were used to estimate groundwater flow direction. Based on the collected data, groundwater flow at AOC 1 is to the north (Figure 6). Therefore, CH-MW6 is located in a side-gradient position from CH-SB39. Please note that groundwater flow direction was previously thought to be to the northeast based on previous investigations by TCC, which caused the selection of locations CH-MW6 through CH-MW9.

5 AOC 2: MAINTENANCE GARAGE – HYDRAULIC SPILL AREA

5.1. INTRODUCTION

AOC 2 is defined as a hydraulic spill area in the maintenance garage. Staining and an unusual odor in soil were observed during the advancement of soil boring CH-SB36 during the 2008 Supplemental Phase II ESA. AOC 2 is identified on Figure 3. An oily substance was also noted on the sampling tubing from CH-SB36 during the collection of a groundwater sample. Analytical results associated with soil and groundwater samples from soil boring CH-SB36, analyzed during the 2008 Supplemental Phase II Investigation, detected no SVOCs or PCBs.

5.2. SCOPE OF WORK

In an attempt to determine the nature of the oily substance previously identified at soil boring CH-SB36, one soil boring (CH-SB51) was advanced to the north of CH-SB36 and one soil sample was collected from the boring and analyzed for STARS VOCs using USEPA Method 8260B and TPH-DRO with petroleum ID using USEPA Method 8015B.

5.3. SOIL SAMPLING RESULTS

Soil sample CH-SB51 was collected from 2 to 4 ft. bgs. Soil analytical results are summarized in Table 1. Analytical results revealed that no VOCs were detected. TPH-DRO was detected at a concentration of 21,000 ug/kg (21 parts per million (ppm)), which is fairly low. There is currently no NYSDEC soil standard for TPH-DRO. Based upon the sample results, Kleinfelder does not recommend further investigation in relation to this AOC.

6 STORMWATER SYSTEM INVESTIGATION

6.1. INTRODUCTION

The Eltings Corners facility utilizes a stormwater management system that discharges to an outfall located on the west side of South Street. The stormwater management system consists of a number of stormwater catch basins located across the site. The following upstream offsite surface water bodies also contribute stormwater to the CHGE management system: Black Creek on the east side of the site contributes a small portion of its flow to the CHGE stormwater system, and a surface water body/wetland area pond along Route 299 to the north of the subject property. Figure 7 shows the layout of the stormwater management system at the subject site.

6.2. SCOPE OF WORK

The stormwater system investigation was conducted to determine if any historical releases of hazardous materials may have occurred via the subject site's stormwater system. A series of three shallow borings were advanced on December 10, 2008 by hand auger in the centerline of the stream leading from the outfall at distances of 10 feet, 20 feet, and 30 feet downstream from the outfall itself (Figure 5). At each hand auger location, 2 sediment samples were collected: one from a depth of 0 to 0.5 ft. bgs and one from a depth of 1.0 to1.5 ft. bgs. Sediment samples collected were analyzed for STARS VOCs using USEPA Method 8260B, STARS SVOCs using USEPA Method 8270C, PCBs via USEPA Method 8082, Total RCRA Metals via USEPA Method 6010/7471, and Cyanide using USEPA Method 9010/9012. During sampling, a sheen was observed rising to the surface of the stream as sediment was disturbed. Absorbent booms were observed stretching across the stream within 10 feet of the outfall. Another boom was observed approximately 25 feet downstream from the outfall. CHGE maintains absorbent booms at the Outfall as a precautionary measure in the event of a spill on the property that may enter the stormwater system.

Following the obtainment of sediment samples, it was realized that Total Organic Carbon (TOC) concentrations were also needed to calculate site specific sediment screening criteria for relevant compounds. Following discussions between Kleinfelder, CHGE, and the NYSDEC, it was decided that the locations would be resampled for TOC. Kleinfelder resampled the outfall locations on February 26, 2009 to collect sediment samples for TOC analysis.

TOC data are presented in Table 4. As per the NYSDEC Technical Guidance for Screening Contaminated Sediments, TOC concentrations were used to calculate site specific sediment screening criteria using the formula: $SC = SC_{oc} * f_{oc}$
Where:

SC = Site specific sediment screening criteria

SC_{oc} = Normalized sediment screening criteria

f_{oc} = total organic carbon concentration

Sediment screening criteria calculations are also included as Table 4.

A surface water sample and a sediment sample were also collected on December 10, 2008 from the stormwater catch basin located directly upstream from the outfall (Figure 5). These samples were analyzed for STARS VOCs using USEPA Method 8260B, STARS SVOCs using USEPA Method 8270C, PCBs via USEPA Method 8082, Total RCRA Metals via USEPA Method 6010/7471, and Cyanide using USEPA Method 9010/9012. The original catch basin sediment sample arrived at the lab above acceptable temperatures. Therefore, the catch basin sediment was resampled on February 26, 2009.

6.3. SEDIMENT SAMPLING RESULTS

TOC data were used to calculate site specific sediment criteria for the Wildlife Bioaccumulation Protection Level and the Benthic Aquatic Life Chronic Toxicity Protection Level (Table 4). These protection levels were chosen since the outfall discharges to a wetland and were confirmed as the applicable protection levels during

conversations with the NYSDEC Division of Fish Wildlife and Marine Resources (DFWMR). These conversions are also summarized on Table 4. As per the NYSDEC DFWMR, the most restrictive site specific screening criteria protection level was used when evaluating data. Additionally, the NYSDEC DFWMR indicated that contaminated sediment screening guidance was being revised and that, under the proposed new guidance, a criterion for total PAHs (as opposed to individual PAH criteria) was being established. As per the NYSDEC DFWMR, sediment with less than 4,000 ug/kg total PAH were considered to be non-toxic, sediment with 4,000 to 10,000 ug/kg total PAH were considered to be reasonable for organisms and wildlife, and sediment with total PAHs greater than 10,000 ug/kg were considered to be toxic with remediation needed.

Analytical results of sediment samples are summarized in Table 5. Except for estimated (J) values of toluene in Outfall+30(0-0.5) and o-xylene in Catch Basin, no VOCs were detected in sediment samples.

SVOC compounds were compared to the range of site specific screening criteria calculated for that specific compound from the six TOC samples. No site specific screening criteria was calculated for chrysene, benzo(b)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene, indeno(1,2,3-cd)pyrene, dibenz(a,h)anthracene, or benzo(g,h,i)perylene because normalized screening criteria (SC_{OC}) were not available in the NYSDEC guidance document. However, total PAHs were calculated and compared to the proposed NYSDEC Total PAH screening criterion. Results indicate that exceedances of SVOCs above the Benthic Aquatic Life Chronic Toxicity Level of Protection and above the proposed Total PAH level of 10,000 ug/kg exist at each of the Outfall sample locations. Total PAH concentrations in the sediment samples collected ranged from 23,110 to 122,800 ug/kg. Outfall+20(0-0.5) and Outfall+20(1-1.5) contained the highest concentrations of SVOCs. No exceedances of SVOCs were detected in the Catch Basin sediment sample.

SVOC concentrations in shallow samples (0 to 0.5 ft. bgs) were compared to deep samples (1.0 to 1.5 ft. bgs) to determine if there were any general trends. Analytical SVOC data from the Outfall sediments showed higher concentrations at a greater depth

at Outfall+20 and to a lesser extent at Outfall+30. Concentrations decreased slightly with depth at Outfall+10.

PCBs results for sediment samples were compared to the range of site specific screening criteria calculated for the subject site from the six TOC samples using the Wildlife Bioaccumulation Level of Protection, which was more restrictive than the Benthic Aquatic Life Chronic Toxicity Protection Level (Table 4). Analytical results show that PCB-1248 and PCB-1260 exceeded the Wildlife Bioaccumulation Level of Protection in each of the Outfall sample locations. PCB-1248 concentrations ranged from 480 to 3,500 ug/kg at the Outfall sample locations. The site specific screening criteria ranged from 15.4 to 57.4 ug/kg. An estimated (J) value of 22 ug/kg of PCB-1248 was detected in Catch Basin Resampled, which is within the calculated range of screening criteria. PCB-1260 was present at concentrations ranging from 1,400 to 31,000 ug/kg in the Outfall sample locations. The highest concentration was detected at Outfall+30(1-1.5). PCB-1260 was also present in the Catch Basin at a concentration of 190 ug/kg, which is above the screening criteria.

PCB concentrations in shallow samples (0 to 0.5 ft. bgs) were also compared to deep samples (1.0 to 1.5 ft. bgs) to determine if there were any correlations of concentration versus sample depth versus distance from the discharge point. Based on the analytical PCB data from the Outfall sediments, no general correlation was apparent.

Metal concentrations were compared to Table 2 (Sediment Criteria for Metals) in the Technical Guidance for Screening Contaminated Sediments. Table 2 in the Guidance document contains a Lowest Effect level and a Severe Effect level for certain metals. In cases where there were no effect level criteria for a specific metal, concentrations were compared to Eastern US Background Soil levels (Table 5). Analytical results indicate that only zinc at Outfall+10(0-0.5) exceeded a severe effect level. At all other Outfall locations zinc was below the Severe Effect level, but above the Lowest Effect level. Additionally, arsenic, and iron were above the Lowest Effect level, but below the Severe Effect level at all Outfall locations. Lead was detected at several locations above the Lowest Effect level, but below the Severe Effect level. Magnesium was

detected at all Outfall locations above the Eastern US Background Soil levels. Calcium exceeded Eastern US Background Soil levels at four of the six Outfall locations. Other metals detected above the Lowest Effect level, but below the Severe Effect level at one location each include: cadmium, chromium, copper, and nickel.

Metal concentrations were compared against distance from the Outfall and against depth (shallow vs. deep) to determine if there were any general correlations of concentration versus sample depth versus distance from the discharge point. Based on the analytical metals data from the Outfall sediments, no general correlation was apparent in distance from the Outfall. However, metal concentrations generally decreased with depth.

For the Catch Basin sample, copper (16.3 mg/kg) slightly exceeded the Lowest Effect level of 16 mg/kg. Additionally, calcium and magnesium were above the Eastern US Background Soil levels in the Catch Basin sediment sample.

Based on the analytical results, Outfall sediments show exceedances of SVOCs, PCBs, arsenic, lead, calcium, magnesium, iron, and zinc with localized (i.e., one location) exceedances of cadmium, chromium, copper, and nickel. The Catch Basin sediment also shows exceedances of PCBs, copper, calcium, and magnesium. Calcium and magnesium exceedances observed may be related to deicing substances used by CHGE and/or the local highway department. Based on the laboratory data, it appears that impacts have occurred to the onsite stream sediments. Based on the presence of PCB exceedances in sediment samples at the Outfall, it appears that CHGE's stormwater system may be contributing contamination to the Outfall location. However, potential upstream/offsite sources need to be investigated.

6.4. SURFACE WATER SAMPLING RESULTS

Surface water results are summarized in Table 6 and were compared to TOGS 1.1.1 Surface Water Standards and Guidance Values for Wildlife Protection based on the ecological habitat provided by the wetland that the stormwater system discharges to.

Based on the analytical results, no VOCs, SVOCs, or PCBs were detected in the Catch Basin surface water sample. Naturally occurring metals (aluminum, barium, calcium, iron, potassium, magnesium, manganese, and sodium) were present in the Catch Basin water sample. However there are no standards or guidance values for Wildlife Protection for metals, except dissolved mercury (0.0026 ug/l). The Catch Basin sample was analyzed for total mercury. Mercury was not detected in the Catch Basin surface water sample. Therefore, at the time of sampling, there were no detected impacts to surface water in the stormwater system at the subject site.

7 EXPOSURE ASSESSMENT

The subject site is located on the southeast corner of State Route 299 and South Street. There are a number of on-site buildings used for offices, maintenance repair, storage, and warehouses, located primarily in the southern and eastern portions of the property. The site is primarily used for storage and maintenance of vehicles, equipment, and supplies. A transformer storage area covers the west central and northwest corners of the site on the east side of South Street. Aboveground storage tanks (ASTs), and fuel dispensers are also present on-site. The majority of the Site is unpaved. The transformer storage yard and equipment storage areas have a pervious surface comprising mostly of compacted crushed stone. Areas around buildings are covered with impervious surfaces of paved parking and roofs. The subject site is surrounded with a chain link fence limiting access to human and wildlife and minimizing the potential for direct contact with any potential contaminants.

The western portion of the property (on the west side of South Street) is an undeveloped wetland that is part of NYSDEC wetland CD-6. NYSDEC wetland CD-6 measures approximately 1,546 acres and expands on the north and south side of State Route 299, northwest and west of the Site, respectively. The area in the vicinity of the subject site generally slopes from east to west toward the wetland.

The surrounding area contains low density commercial and light industrial properties consisting of Lowe's Home Center, several office buildings, and a hotel located on the north side of State Route 299. Light residential development is located south of the subject site along South Street, in a presumed up-gradient location relative to groundwater flow.

The subject property contains a stormwater drainage system that conveys stormwater runoff from throughout the property to a single discharge point (aka Outfall) on the northwest side of the subject property, on the west side of South Street (Figure 7). The

Outfall is permitted by the NYSDEC under permit no. NY0148849 and discharges stormwater into NYSDEC wetland CD-6. Two direct sources of water enter the site according the as-built plan: a surface water body/wetland area located between the northern site boundary and Route 299, and a small quantity of flow from Black Creek along the eastern boundary. The drainage system connects to one large culvert that runs east to west, bisecting the northern half of the subject site. This culvert also diverts a small quantity of water from Black Creek. However, the majority of water in Black Creek continues to the northeast along the creek's path toward the Hudson River.

Catch basins are located throughout the property along the drainage system. The catch basins contain most of the runoff that occurs within the paved sections of the Site. Catch basins located in the central and northern sections of the property are located in areas that contain the compacted crush stone. These catch basins collect runoff from medium to hard rain and/or snow melt events.

Based on the analytical data collected from the surface water, no exceedance were found above state or national human health or wildlife exposures limits. Slight exceedances of iron and magnesium were found within the groundwater samples, but these compounds are not anticipated to pose any health risks to humans or wildlife and are likely related to naturally occurring concentrations in glacial sediments.

Several SVOCs, PCBs, and metals exceeded the minimal (and in some cases maximum) accumulation levels within sediment collected from the Outfall locations and Catch Basin. Most of the exceedances were found in the Outfall samples. Concentration levels from the Outfall samples varied depending on the compound (most likely due to the weight of the compound). Outfall+20 sediment samples contained the highest concentrations of SVOCs. The highest concentration of PCBs was found in Outfall+30(1.0-1.5) followed by the Outfall+20 sediment samples. Metal concentrations exhibited no concentration versus distance/depth trends.

Sediment within the Catch Basin is constantly being washed out and replaced by new sediment due to the constant flow of water through the culvert. Therefore,

accumulation of contaminant-laden sediment in the Catch Basin is not likely. The sediment within the Catch Basin eventually discharges to the Outfall and settles within the adjacent wetland. The Outfall enters the wetland complex near the center of its length and is approximately 1,500 feet from the Swarte Kill.

The elevated levels of SVOCs, PCBs, and metals identified within the Outfall samples are the accumulation of run-off from the subject property, runoff from South Street, stormwater from the Route 299 surface water body/wetland area (including Route 299 runoff), and any compounds that may be carried by Black Creek from offsite sources. NYSDEC wetland CD-6 is a very large wetland complex, approximately 1,546 acres in size. The wetland (especially portions closest to the site) is comprised mostly of herbaceous vegetation dominated by cattails along with sedges, rushes, and numerous other wetland species that are inducive to breaking down complex nutrients, thus reducing the pollution load. Sediment accumulation and assimilation is a known function of wetland communities.

Because there is only one discharge point from the subject site, it is possible that the exceedances of SVOCs, PCBs, and metals are limited to a small area of the wetland complex extending from the Outfall. Based on visual observation during Outfall sediment sample collection, the flow of water that extends beyond the Outfall slows significantly, which would indicate that sediment drops out quickly. Since there are no potable wells located within the general vicinity along with no other direct human contact associated with this portion of the wetland. Therefore, human exposure risk is likely very limited.

The potential for ecological exposure is high within the immediate area of contamination. Impacted macro-invertebrate populations and plants are most likely found within this area. Invasive plant species, such as reed canary grass (*Phalaris arundinacea*) and purple loosestrife (*Lythrum salicaria*), which are more tolerant to pollution, were observed around the Outfall sampling locations. This area may also be subject to visitation by aquatic waterfowl, wading birds, and amphibians/reptiles during warmer

months. Direct contact with contaminated sediment, as well as ingestion of contaminated sediment and contaminated biota, is possible in this area.

8 CONCLUSIONS

8.1. AOC 1

Although exceedances of chloroethane and 1,1-dichloroethane were reported for a groundwater sample collected by TCC from CH-SB39, neither of these two compounds were detected in CH-MW6, located immediately adjacent to CH-SB39. In addition, neither chloroethane nor 1,1-dichloroethane was detected in CH-MW7 through CH-MW9.

Based on the 2008 Supplemental Phase II Investigation by TCC groundwater flow was to the northeast. Wells CH-MW6 through CH-MW9 locations were chosen based on this flow direction to be in upgradient and downgradient locations from CH-SB39. However, based on water level data collected during the RFI, groundwater flow direction was determined to be northward. Thus, CH-MW6 is located in a side-gradient position from CH-SB39 rather than downgradient; and there is not a true upgradient or downgradient well. Based on its location (within 10 feet of CH-SB39), CH-MW6 would be expected to have certain concentrations of chloroethane and 1,1-dichloroethane due to chemical dispersion if the contaminant plume were widespread. Therefore, the extent of these two compounds is likely limited. Based on the lack of receptors and the lack of a continuing source, remediation by natural attenuation is recommended for the VOC exceedances at CH-SB39 due to the limited extent of contamination.

Iron and manganese were present in CH-MW6 through CH-MW9 in exceedance of the groundwater quality standards. These exceedances may be caused by naturally occurring minerals in glacial deposits. No further action is recommended due to the lack of receptors.

Based on field observations during drilling activities, there was no evidence of impacts from the former drywell at boring location CH-SB53. Therefore, no additional investigation regarding this drywell is warranted.

8.2. AOC 2

Analytical results from the soil sample collected at CH-SB51 indicated no detections of VOCs and a residual concentration of TPH-DRO (21 ppm). Although there is no NYSDEC soil standard for TPH-DRO, the concentration present is minimal and not an environmental concern. Therefore, although staining and an oily odor were observed at CH-SB36, no exceedances were reported for CH-SB36 and no impacts were observed at CH-SB51. No further remedial action is warranted for AOC 2.

8.3. STORMWATER SYSTEM INVESTIGATION

Surface water results from the Catch Basin indicate that there were no detections of VOCs, SVOCs, and PCBs. Metal concentrations were below TOGS 1.1.1 standards for human and wildlife protection. Therefore, at the time of sampling, there were no impacts to surface water runoff at the subject site.

The Catch Basin sediment sample contained PCBs, calcium, and magnesium in exceedance of sediment screening criteria.

The Outfall sediment samples contained SVOCs, PCBs, calcium, magnesium, and zinc in exceedance of the sediment screening criteria. Calcium and magnesium concentrations may be attributed to deicing materials used at the subject site or road runoff from adjacent highways. The SVOCs present were polyaromatic hydrocarbons (PAHs). Although the subject property may be the source of contamination, two offsite water bodies also contribute to the CHGE stormwater management system: the surface water body/wetland area along Route 299, and the wetland/stream complex associated with Black Creek, which contains a rail line. Therefore, it is recommended that these two offsite areas be investigated for the presence of SVOCs, PCBs, and metals to determine if offsite sources are contributing to contaminant concentrations found at the Outfall. It is likely that additional horizontal and vertical delineation of contamination at the Outfall will be required after offsite sources are investigated.

8.4. EXPOSURE RISK

Based on the data obtained during the RFI, only limited, random impacts were detected at sampling locations in the subsurface environment at the site. Due to their presence

in the subsurface combined with the commercial nature and the restrictive access to the property, there is limited potential for human health or environmental risk from this limited subsurface contamination. Natural attenuation will allow for the decomposition of these remnant, isolated concerns.

The majority of the environmental risk (and contamination) identified during the RFI comes from the contaminated sediments at the Outfall location. Since full delineation of the distribution of the contamination has not been conducted, additional sampling in the adjacent wetland will be required. Without this additional data, it is difficult to quantify the potential risk to the wetland environment. However, due to the unaccessible nature of the wetland and lack of human receptors, the risk to human health via direct contact mechanisms is minimal.

Based on the current data, additional investigation in the Outfall area as well as the source of the contamination is warranted.

9 LIMITATIONS

This work was performed in a manner consistent with that level of care and skill ordinarily exercised by other members of Kleinfelder's profession practicing in the same locality, under similar conditions and at the date the services are provided. Our conclusions, opinions and recommendations are based on a limited number of observations and data. It is possible that conditions could vary between or beyond the data evaluated. Kleinfelder makes no other representation, guarantee or warranty, express or implied, regarding the services, communication (oral or written), report, opinion, or instrument of service provided.

This report may be used only by the Client and the registered design professional in responsible charge and only for the purposes stated for this specific engagement within a reasonable time from its issuance, but in no event later than two years from the date of the report.

Kleinfelder offers various levels of investigative and engineering services to suit the varying needs of different clients. It should be recognized that definition and evaluation of geologic and environmental conditions are a difficult and inexact science. Judgments leading to conclusions and recommendations are generally made with incomplete knowledge of the subsurface conditions present due to the limitations of data from field studies. Although risk can never be eliminated, more-detailed and extensive studies yield more information, which may help understand and manage the level of risk.

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TABLES

Table 1
Soil Analytical Data
RCRA Facility Investigation
Central Hudson Gas Electric
Eltings Corners Facility,
Highland, NY

		AOC 1 (Southern Steel Garage)						AOC 2 (Maintenance Garage)		
Sample ID	**375.6 Cleanup Unrestricted Use**	**CH-SB-52/MW-6 (5-6)[1]**	**CH-SB-52/MW-6 (5-6) Field Duplicate**	**CH-SB-52/MW-6 (5-6) Equipment Blank**	**CH-SB-53 (6-8) Equipment Blank**	**CH-SB38 (0-4)**	**CH-SB39 (0-4)**	**CH-SB-51 (2-4)**	**CH-SB36 (4-8)**	**CH-SB37 (4-8)**
Lab Sample Number		**220-7448-1**	**220-7448-2**	**220-7448-3**	**220-7494-2**			**220-7507-8**		
Sampling Date		**12/8/2008 4:00:00 PM**	**12/8/2008 4:00:00 PM**	**12/8/2008 4:00:00 PM**	**12/10/2008 11:45:00 AM**	1/2/2008	1/2/2008	**12/10/2008 1:15:00 PM**	1/2/2008	1/2/2008
Matrix		**Solid**	**Solid**	**Water**	**Water**			**Solid**		
Dilution Factor		**1**	**1**	**1**	**1**			**1**		
		Low	**Low**	**Low**	**Low**			**Low**		
GC/MS VOC - 8260B										
Units	**ug/kg**	**ug/kg**	**ug/kg**	**ug/l**	**ug/l**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**
Methyl tert-butyl ether	930				0.50 U	ND	ND	6.0 U		
Benzene	60				0.50 U	ND	ND	6.0 U		
Toluene	700				0.20 J	ND	ND	6.0 U *		
Ethylbenzene	1,000				0.50 U	ND	ND	6.0 U		
m&p-Xylene	260				1.00 U	ND	ND	6.0 U		
o-Xylene	260				0.50 U	ND	ND	6.0 U		
Isopropylbenzene	2,300 (TAGM)				0.50 U	ND	ND	6.0 U		
N-Propylbenzene	3,900				0.50 U	ND	ND	6.0 U		
1,3,5-Trimethylbenzene	8,400				0.50 U	ND	ND	6.0 U		
tert-Butylbenzene	5,900				0.50 U	ND	ND	6.0 U		
1,2,4-Trimethylbenzene	3,600				0.50 U	ND	ND	6.0 U		
sec-Butylbenzene	11,000				0.50 U	ND	ND	6.0 U		
4-Isopropyltoluene	--				0.50 U	ND	ND	6.0 U		
n-Butylbenzene	12,000				0.50 U	ND	ND	6.0 U		
Naphthalene	13,000 (TAGM)				0.50 U	ND	ND	6.0 U		
GC/MS SVOC - 8270C										
Units	**ug/kg**	**ug/kg**	**ug/kg**	**ug/l**	**ug/l**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**
Naphthalene	12,000				4.0 U	ND	ND		ND	ND
Acenaphthene	20,000				4.0 U	ND	ND		ND	ND
Fluorene	30,000				4.0 U	ND	ND		ND	ND
Phenanthrene	100,000				4.0 U	ND	ND		ND	ND
Anthracene	100,000				4.0 U	ND	ND		ND	ND
Pyrene	100,000				4.0 U	ND	ND		ND	ND
Benzo[a]anthracene	1,000				4.0 U	ND	ND		ND	ND
Chrysene	1,000				4.0 U	ND	ND		ND	ND
Benzo[b]fluoranthene	1,000				4.0 U	ND	ND		ND	ND
Benzo[k]fluoranthene	800				4.0 U	ND	ND		ND	ND
Benzo[a]pyrene	1,000				4.0 U	ND	ND		ND	ND
Indeno[1,2,3-cd]pyrene	500				4.0 U	ND	ND		ND	ND
Dibenz(a,h)anthracene	330				4.0 U	ND	ND		ND	ND
Benzo[g,h,i]perylene	100,000				4.0 U	ND	ND		ND	ND
Fluoranthene	100,000				4.0 U	ND	ND		ND	ND
GC TPH-DRO - 8015B										
Units	**ug/kg**	**ug/kg**	**ug/kg**	**ug/l**	**ug/l**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**
TPH-Diesel Range Organics [C10-C28]	--	20,000 U	21,000 U	540 UH				21,000		
GC PCBs - 8082										
Units	**ug/kg**	**ug/kg**	**ug/kg**	**ug/l**	**ug/l**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**	**ug/kg**
PCB-1016	100				0.50 U					
PCB-1221	100				1.0 U					
PCB-1232	100				0.50 U	ND	ND		ND	ND
PCB-1242	100				0.50 U	ND	ND		ND	ND
PCB-1248	100				0.50 U	ND	ND		ND	ND
PCB-1254	100				0.50 U	ND	ND		ND	ND
PCB-1260	100				0.50 U	ND	ND		ND	ND
PCB-1262	100				0.50 U					
PCB-1268	100				0.50 U					

See Page 2 of this table for Notes

Table 1
Soil Analytical Data
RCRA Facility Investigation
Central Hudson Gas Electric
Eltings Corners Facility,
Highland, NY

			AOC 1 (Southern Steel Garage)						AOC 2 (Maintenance Garage)		
Sample ID	**375.6 Cleanup Unrestricted Use**		**CH-SB-52/MW-6 (5-6)[1]**	**CH-SB-52/MW-6 (5-6) Field Duplicate**	**CH-SB-52/MW-6 (5-6) Equipment Blank**	**CH-SB-53 (6-8) Equipment Blank**	**CH-SB38 (0-4)**	**CH-SB39 (0-4)**	**CH-SB-51 (2-4)**	**CH-SB36 (4-8)**	**CH-SB37 (4-8)**
Lab Sample Number			**220-7448-1**	**220-7448-2**	**220-7448-3**	**220-7494-2**			**220-7507-8**		
Sampling Date			**12/8/2008 4:00:00 PM**	**12/8/2008 4:00:00 PM**	**12/8/2008 4:00:00 PM**	**12/10/2008 11:45:00 AM**	1/2/2008	1/2/2008	**12/10/2008 1:15:00 PM**	1/2/2008	1/2/2008
Matrix			**Solid**	**Solid**	**Water**	**Water**			**Solid**		
Dilution Factor			**1**	**1**	**1**	**1**			**1**		
			Low	**Low**	**Low**	**Low**			**Low**		
Metals											
	Eastern US Background	**375.6 Cleanup Unrestricted Use**									
Units	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/l**	**mg/l**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**
Silver	--	2				0.010 U					
Aluminum	33,000	SB (TAGM)				0.310 J					
Arsenic	3-12	13				0.020 U	4.85	3.95			
Barium	15-600	350				0.0038 J	121	65.4			
Beryllium	0-1.75	7.2				0.010 U					
Calcium	130-35,000	SB (TAGM)				0.310 J					
Cadmium	0.1-1.0	2.5				0.010 U					
Cobalt	2.5-60	30 or SB				0.010 U					
Chromium**	1.5-40	30*				0.010 U	18.6	15.2			
Copper	1-50	50				0.0020 J					
Iron	2,000-550,000	2,000 or SB (TAGM)				0.750					
Potassium	8,500-43,000	SB (TAGM)				0.500 U					
Magnesium	100-5,000	SB (TAGM)				0.120 J					
Manganese	50-5,000	1600				0.012 J					
Sodium	6,000-8,000	SB (TAGM)				0.096 J					
Nickel	.5-25	30				0.010 U					
Lead	4-61	63				0.010 U	15	9.55			
Antimony	--	SB (TAGM)				0.040 U					
Selenium	0.1-3.9	3.9				0.030 U					
Thallium	--	SB (TAGM)				0.030 U					
Vanadium	1-300	150 or SB (TAGM)				0.010 U					
Zinc	9-50	109				0.050 U					
Mercury	0.001-0.02	0.18				0.00020 U					
General Chemistry											
Units		**mg/kg**	**mg/kg**	**mg/kg**	**mg/l**	**mg/l**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**	**mg/kg**
Cyanide, Total - mg/Kg	--	27				10 U					

Notes

1 CH-SB52/MW-6 (5-6) arrived at the lab with a temperature exceedance. Because the analysis were not for VOCs, it was determined by Kleinfelder that the sample data was still usable.

(TAGM) = No cleanup standard cited by Part 375.6; Standard used is from TAGM.

U = Analyzed for but not detected.

J = Indicates an estimated value.

H = Sample was prepped or analyzed beyond the specified holding time.

* = LCS or LCSD exceeds the control limits

** = Total Chromium, trivalent

ND = Not Detected

See Page 2 of this table for Notes

Table 2
Groundwater Analytical Data
RCRA Facility Investigation
Central Hudson Gas Electric
Eltings Corners Facility,
Highland, NY

Sample ID	Groundwater Standards and Guidance Values (GV)	CH-MW6		CH-MW7		CH-MW7 DUPLICATE		CH-MW8		CH-MW9		EQUIPMENT BLANK		TRIP BLANK		CH-SB36		CH-SB39
Lab Sample Number	(Based on TOGS 1.1.1)	220-7659-1		220-7659-2		220-7659-3		220-7659-4		220-7659-5		220-7659-6		220-7659-7		1/2/2008		1/2/2008
Sampling Date		12/23/2008 12:00:00 AM		12/23/2008 4:07:00 PM		12/23/2008 4:23:00 PM		12/23/2008 7:13:00 PM		12/23/2008 6:10:00 PM		12/23/2008 2:05:00 PM		12/23/2008 12:00:00 AM				
Matrix		Water		Water		Water		Water		Water		Water		Water				
Dilution Factor		1		1		1		1		1		1		1				
VOCs - 8260B (ug/l)																		
Methyl tert-butyl ether	10 GV	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ND		ND
Benzene	1	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ND		ND
Toluene	5	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.18	J	0.50	U	ND		ND
Ethylbenzene	5	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ND		ND
m&p-Xylene	5	1.0	U	1.0	U	1.0	U	1.0	U	0.14	J	1.0	U	1.0	U	ND		ND
o-Xylene	5	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ND		ND
Isopropylbenzene	5	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ND		ND
N-Propylbenzene	5	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ND		ND
1,3,5-Trimethylbenzene	5	0.50	U	0.50	U	0.50	U	0.50	U	0.16	J	0.50	U	0.50	U	ND		ND
tert-Butylbenzene	5	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ND		ND
1,2,4-Trimethylbenzene	5	0.50	U	0.50	U	0.50	U	0.50	U	0.47	J	0.50	U	0.50	U	ND		ND
sec-Butylbenzene	5	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ND		ND
4-Isopropyltoluene	5	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ND		ND
n-Butylbenzene	5	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ND		ND
Naphthalene	10 GV	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	ND		ND
Chloroethane	5	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U			**170**
1,1-Dichloroethane	5	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U			**21**
Semi VOCs - 8270C (ug/l)																		
Naphthalene	10 GV	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U			ND		ND
Acenaphthene	20 GV	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U			ND		ND
Fluorene	50 GV	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U			ND		ND
Phenanthrene	50 GV	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U			ND		ND
Anthracene	50 GV	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U			ND		ND
Pyrene	50 GV	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U			ND		ND
Benzo[a]anthracene	0.002 GV	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U			ND		ND
Chrysene	0.002 GV	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U			ND		ND
Benzo[b]fluoranthene	0.002 GV	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U			ND		ND
Benzo[k]fluoranthene	0.002 GV	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U			ND		ND
Benzo[a]pyrene	ND	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U			ND		ND
Indeno[1,2,3-cd]pyrene	0.002 GV	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U			ND		ND
Dibenz(a,h)anthracene	5	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U			ND		ND
Benzo[g,h,i]perylene	--	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U			ND		ND
Fluoranthene	50 GV	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U			ND		ND
TPH-Diesel Range Organics - 8015B (ug/l)																		
TPH-Diesel Range Organics [C10-C28]		500	U	500	U	500	U	500	U	500	U	500	U					
PCBs - 8082 (ug/l)																		
PCB-1016	0.09	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U			ND		ND
PCB-1221	0.09	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U	1.0	U			ND		ND
PCB-1232	0.09	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U			ND		ND
PCB-1242	0.09	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U			ND		ND
PCB-1248	0.09	0.50	U	**0.11**	J	0.50	U	0.50	U	0.50	U	0.090	J B			ND		ND
PCB-1254	0.09	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U			ND		ND
PCB-1260	0.09	0.50	U	0.50	U	0.50	U	0.50	U *	0.50	U *	0.50	U			ND		ND
PCB-1262	0.09	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U			ND		ND
PCB-1268	0.09	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U	0.50	U			ND		ND
Total PCBs	0.09		U	**0.11**	J		U		U		U	0.090	JB			ND		ND

See Page 2 of this table for Notes

Table 2
Groundwater Analytical Data
RCRA Facility Investigation
Central Hudson Gas Electric
Eltings Corners Facility,
Highland, NY

Sample ID	Groundwater Standards and Guidance Values (GV)	CH-MW6		CH-MW7		CH-MW7 DUPLICATE		CH-MW8		CH-MW9		EQUIPMENT BLANK		TRIP BLANK		CH-SB36		CH-SB39
Lab Sample Number	(Based on TOGS 1.1.1)	220-7659-1		220-7659-2		220-7659-3		220-7659-4		220-7659-5		220-7659-6		220-7659-7		1/2/2008		1/2/2008
Sampling Date		12/23/2008 12:00:00 AM		12/23/2008 4:07:00 PM		12/23/2008 4:23:00 PM		12/23/2008 7:13:00 PM		12/23/2008 6:10:00 PM		12/23/2008 2:05:00 PM		12/23/2008 12:00:00 AM				
Matrix		Water		Water		Water		Water		Water		Water		Water				
Dilution Factor		1		1		1		1		1		1		1				
Metals (ug/l)																		
Silver	50	10	U	10	U	10	U	10	U	10	U	10	U					ND
Aluminum	--	240	J	88	J	97	J	130	J	180	J	500	U					
Arsenic	25	20	U	20	U	20	U	20	U	20	U	20	U					**304**
Barium	1000	240		140		140		110		70		10	U					435
Beryllium	3 GV	10	U	10	U	10	U	10	U	10	U	10	U					
Calcium	--	76700		76500		78100		88600		81500		500	U					
Cadmium	5	10	U	10	U	10	U	10	U	10	U	10	U					ND
Cobalt	--	10	U	10	U	10	U	10	U	10	U	10	U					
Chromium	50	10	U	10	U	10	U	10	U	10	U	10	U					18
Copper	200	10	U	1.4	J	10	U	10	U	10	U	10	U					
Iron	300	**5300**		**15200**		**15500**		**15400**		**13600**		250	U					
Potassium	--	780		430	J	440	J	460	J	510		93	J					
Magnesium	35,000 GV	7500		7400		7500		9600		8100		500	U					
Manganese	300	**710**		**1700**		**1700**		**2400**		**2200**		15	U					
Sodium	20,000	9900		12200		12200		15000		14900		310	J					
Nickel	100	10	U	10	U	10	U	21		10	U	10	U					
Lead	25	10	U	10	U	10	U	10	U	10	U	10	U					**199**
Antimony	3	40	U	40	U	40	U	40	U	40	U	40	U					
Selenium	10	30	U	5.5	J	3.5	J	4.2	J	30	U	30	U					ND
Thallium	0.5 GV	30	U	30	U	30	U	30	U	30	U	30	U					
Vanadium	--	10	U	10	U	10	U	10	U	10	U	10	U					
Zinc	2000 GV	50	U	16	J	50	U	50	U	7.3	J	50	U					
Mercury	0.7	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U	0.20	U					ND
Metals (mg/l)																		
Cyanide, Amenable - mg/L	--	0.010	U	0.010	U	0.010	U	0.010	U	0.010	U	0.010	U					
Cyanide, Total - mg/L	0.200	0.010	U	0.010	U	0.010	U	0.010	U	0.010	U	0.010	U					

Notes:
Blank cell indicates compound was not analyzed.
Bold = exceedances of standard or guidance value
ND = Non Detected
* = LCS or LCSD exceeds the control limits
B = The analyte was found in an associated blank, as well as in the sample.
J = Indicates an estimated value.
U = Analyzed for but not detected.

See Page 2 of this table for Notes

Table 3
Monitoring Well Gauging Data
Dec. 23, 2008
RCRA Facility Investigation
Central Hudson Gas Electric
Eltings Corners Facility,
Highland, NY

Well ID	DTB	DTW	TOC Elevation	Water Table Elevation
MW-6	22.63	1.68	349.54	347.86
MW-7	15.61	1.66	349.50	347.84
MW-8	13.28	0.50	348.71	348.21
MW-9	14.89	1.39	349.23	347.84

Notes:

DTB - (Depth of monitoring well - feet below top of casing);

DTW - (Depth to groundwater - feet below top of casing);

TOC Elevation - Top of casing elevation relative to an arbitrary datum;

Water Table Elevation - (TOC Elevation - DTW);

Table 4
Sediment Total Organic Carbon Data
Site Specific Screening Criteria
RCRA Facility Investigation
Central Hudson Gas Electric
Eltings Corners Facility,
Highland, New York

Sample ID	OUTFALL +10 (0.0-0.5)	OUTFALL+10 (0.5-1.0)	OUTFALL+20 (0.0-0.5)	OUTFALL+20 (0.5-1.0)	OUTFALL+30 (0.0-0.5)	OUTFALL+30 (0.5-1.0)
Lab Sample Number	090227017-001	090227017-002	090227017-003	090227017-004	090227017-005	090227017-006
Sampling Date	2/26/2009	2/26/2009	2/26/2009	2/26/2009	2/26/2009	2/26/2009
Matrix	Solid	Solid	Solid	Solid	Solid	Solid
Dilution Factor	1	1	1	1	1	1
Total Organic Carbon (TOC)						
TOC = f_{oc} (g/kg)	41	21.2	11	15.3	28.5	25.5
Site Specific Sediment Screening Criteria (SC)						
PCB Site Specific Sediment Criteria (SC) (ug/kg) for Wildlife Bioaccumulation (SCoc = 1.4 ug/g)	57.4	29.68	15.4	21.42	39.9	35.7
PCB Site Specific Sediment Criteria (SC) (ug/kg) for Benthic Aquatic Life Chronic Toxicity (SCoc = 19.3 ug/g)	791.3	409.16	212.3	295.29	550.05	492.15
Naphthalene Site Specific Sediment Criteria (SC) (ug/kg) for Wildlife Bioaccumulation (SCoc = NA)	--	--	--	--	--	--
Naphthalene Site Specific Sediment Criteria (SC) (ug/kg) for Benthic Aquatic Life Chronic Toxicity (SCoc = 30 ug/g)	1230	636	330	459	855	765
Acenaphthene Site Specific Sediment Criteria (SC) (ug/kg) for Wildlife Bioaccumulation (SCoc = NA)	--	--	--	--	--	--
Acenaphthene Site Specific Sediment Criteria (SC) (ug/kg) for Benthic Aquatic Life Chronic Toxicity (SCoc = 140 ug/g)	5740	2968	1540	2142	3990	3570
Florene Site Specific Sediment Criteria (SC) (ug/kg) for Wildlife Bioaccumulation (SCoc = NA)	--	--	--	--	--	--
Florene Site Specific Sediment Criteria (SC) (ug/kg) for Benthic Aquatic Life Chronic Toxicity (SCoc = 8 ug/g)	328	169.6	88	122.4	228	204
Phenanthrene Site Specific Sediment Criteria (SC) (ug/kg) for Wildlife Bioaccumulation (SCoc = NA)	--	--	--	--	--	--
Phenanthrene Site Specific Sediment Criteria (SC) (ug/kg) for Benthic Aquatic Life Chronic Toxicity (SCoc = 120 ug/g)	4,920	2,544	1,320	1,836	3,420	3,060
Anthracene Site Specific Sediment Criteria (SC) (ug/kg) for Wildlife Bioaccumulation (SCoc = NA)	--	--	--	--	--	--
Anthracene Site Specific Sediment Criteria (SC) (ug/kg) for Benthic Aquatic Life Chronic Toxicity (SCoc = 107 ug/g)	4387	2268.4	1177	1637.1	3049.5	2728.5
Pyrene Site Specific Sediment Criteria (SC) (ug/kg) for Wildlife Bioaccumulation (SCoc = NA)	--	--	--	--	--	--
Pyrene Site Specific Sediment Criteria (SC) (ug/kg) for Benthic Aquatic Life Chronic Toxicity (SCoc = 961 ug/g)	39401	20373.2	10571	14703.3	27388.5	24505.5
Benzo(a)anthracene Site Specific Sediment Criteria (SC) (ug/kg) for Wildlife Bioaccumulation (SCoc = NA)	--	--	--	--	--	--
Benzo(a)anthracene Site Specific Sediment Criteria (SC) (ug/kg) for Benthic Aquatic Life Chronic Toxicity (SCoc = 12 ug/g)	492	254.4	132	183.6	342	306
Fluoranthene Site Specific Sediment Criteria (SC) (ug/kg) for Wildlife Bioaccumulation (SCoc = NA)	--	--	--	--	--	--
Fluoranthene Site Specific Sediment Criteria (SC) (ug/kg) for Benthic Aquatic Life Chronic Toxicity (SCoc = 1020 ug/g)	4182	2162.4	1122	1560.6	2907	2601

SC = SCoc * f_{oc}
SC = site specific sediment screening criteria
SCoc = normalized sediment screening criteria (Table 1 in NYSDEC Technical Guidance for Screening Contaminated Sediments)
f_{oc} = organic carbon content of soil

Table 5
Sediment Analytical Data
RCRA Facility Investigation
Central Hudson Gas Electric
Eltings Corner Facility,
Highland, New York

Sample ID	Sediment Criteria for Non-Polar Organic Contaminants (Wildlife Bioaccumulation)	OUTFALL +10 (0.0-0.5)		OUTFALL+10 (1.0-1.5)		OUTFALL+20 (0.0-0.5)		OUTFALL+20 (1.0-1.5)		OUTFALL+30 (0.0-0.5)		OUTFALL+30 (1.0-1.5)		OUTFALL+30 (0.0-0.5) DUPLICATE		CATCH BASIN[3]		CATCH BASIN RESAMPLED		FIELD BLANK	
Lab Sample Number		220-7507-1		220-7507-2		220-7507-3		220-7507-4		220-7507-5		220-7507-6		220-7507-7		220-7675-1		220-8204-1		220-8204-2	
Sampling Date		12/10/2008 1:35:00 PM		12/10/2008 1:45:00 PM		12/10/2008 1:15:00 PM		12/10/2008 1:25:00 PM		12/10/2008 12:55:00 PM		12/10/2008 12:50:00 PM		12/10/2008 12:55:00 PM		12/29/2008 11:15:00 AM		2/26/2009 3:15:00 PM		2/26/2009 3:05:00 PM	
Matrix		Solid		Solid		Solid		Solid		Solid		Solid		Solid		Solid		Solid		Water	
Dilution Factor		1		1		1		1		1		1		1		1		1		1	
		Low		Low		Low		Low		Low		Low		Low		Low		Low		Low	
GC/MS VOC - 8260B																					
Units	ug/kg	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/L	
Methyl tert-butyl ether	-	13	U	9.7	U	7.7	U	9.6	U	11	U	6.2	U	8.8	U	5.5	U	6.5	U	0.50	U
Benzene	-	13	U	9.7	U	7.7	U	9.6	U	11	U	6.2	U	8.8	U	5.5	U	6.5	U	0.50	U
Toluene	-	13	U *	9.7	U *	7.7	U *	9.6	U *	1.6	J *	6.2	U *	8.8	U *	5.5	U	6.5	U	0.50	U
Ethylbenzene	-	13	U	9.7	U	7.7	U	9.6	U	11	U	6.2	U	8.8	U	5.5	U	6.5	U	0.50	U
m&p-Xylene	-	13	U	9.7	U	7.7	U	9.6	U	11	U	6.2	U	8.8	U	5.5	U	6.5	U	0.97	J
o-Xylene	-	13	U	9.7	U	7.7	U	9.6	U	11	U	6.2	U	8.8	U	0.29	J	6.5	U	1.1	
Isopropylbenzene	-	13	U	9.7	U	7.7	U	9.6	U	11	U	6.2	U	8.8	U	5.5	U	6.5	U	0.50	U
N-Propylbenzene	-	13	U	9.7	U	7.7	U	9.6	U	11	U	6.2	U	8.8	U	5.5	U	6.5	U	1.1	
1,3,5-Trimethylbenzene	-	13	U	9.7	U	7.7	U	9.6	U	11	U	6.2	U	8.8	U	5.5	U	6.5	U	0.55	
tert-Butylbenzene	-	13	U	9.7	U	7.7	U	9.6	U	11	U	6.2	U	8.8	U	5.5	U	6.5	U	0.50	U
1,2,4-Trimethylbenzene	-	13	U	9.7	U	7.7	U	9.6	U	11	U	6.2	U	8.8	U	5.5	U	6.5	U	0.99	
sec-Butylbenzene	-	13	U	9.7	U	7.7	U	9.6	U	11	U	6.2	U	8.8	U	5.5	U	6.5	U	0.50	U
4-Isopropyltoluene	-	13	U	9.7	U	7.7	U	9.6	U	11	U	6.2	U	8.8	U	5.5	U	6.5	U	0.50	U
n-Butylbenzene	-	13	U	9.7	U	7.7	U	9.6	U	11	U	6.2	U	8.8	U	5.5	U	6.5	U	0.50	U
Naphthalene	-	13	U	9.7	U	7.7	U	9.6	U	11	U	6.2	U	8.8	U	5.5	U	6.5	U	1.6	
Chloroethane		13	U	9.7	U	7.7	U	9.6	U	11	U	6.2	U	8.8	U	5.5	U	6.5	U	1.0	U
1,1-Dichloroethane		13	U	9.7	U	7.7	U	9.6	U	11	U	6.2	U	8.8	U	5.5	U	6.5	U	0.5	U
GC/MS Semi VOC - 8270C																					
	Site Specific Sediment Criteria for Benthic Aquatic Life Chronic Toxicity (based on TOC)[1]																				
Units	ug/kg	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/L	
Naphthalene	330 - 1,230	670	U	520	U	350	J	1,000	J	550	U	120	J			300	U	340	U	4.0	U
Acenaphthene	1,540 - 5,740	310	J	340	J	780	J	1,800	J	170	J	320	J			300	U	340	U	4.0	U
Fluorene	88-328	310	J	370	J	720	J	2,000	J	160	J	320	J			300	U	340	U	4.0	U
Phenanthrene	1,320 - 4,920	3,600		3,000		6,500		16,000		1,900		3,400				300	U	340	U	4.0	U
Anthracene	1,177 - 4,387	840		910		1,600		4,300		460	J	650				300	U	340	U	4.0	U
Pyrene	10,571 - 39,401	5,200		4,300		6,300		15,000		3,100		4,400				130	J	120	J	4.0	U
Benzo[a]anthracene	132 - 492	3,200		2,900		4,100		9,500		2,000		2,400				300	U	340	U	4.0	U
Chrysene	-	3,800		3,500		4,200		11,000		2,200		2,700				300	U	340	U	4.0	U
Benzo[b]fluoranthene	-	3,800		3,500		4,700		11,000		2,400		2,500				300	U	340	U	4.0	U
Benzo[k]fluoranthene	-	1,400		1,300		1,600		4,100		830		1,000				300	U	340	U	4.0	U
Benzo[a]pyrene	-	3,200		2,800		3,900		9,100		1,900		2,100				300	U	340	U	4.0	U
Indeno[1,2,3-cd]pyrene	-	2,700		2,000		2,900		6,900		1,800		2,200				300	U	110	J	4.0	U
Dibenz(a,h)anthracene	-	1,100		830		1,200		3,000		790		730				300	U	340	U	4.0	U
Benzo[g,h,i]perylene	-	2,300		1,700		2,400		6,100		1,600		2,000				300	U	100	J	4.0	U
Fluoranthene	1,122 - 4,182	6,900		6,300		9,700		22,000		3,800		4,700				110	J	110	J	4.0	U
TOTAL PAHs[2]	4,000 - 10,000	38,660		33,750		50,950		122,800		23,110		29,540				240		440			
GC PCBs - 8082																					
	Site Specific Sediment Criteria for Wildlife Bioaccumulation (based on TOC)[1]																				
Units	ug/kg	ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/kg		ug/L	
PCB-1016	15.4 - 57.4	210	U	160	U	1,300	U	1,600	U	710	U	2,100	U			19	U	22	U	0.56	U
PCB-1221	15.4 - 57.4	410	U	310	U	2,500	U	3,100	U	1,400	U	4,100	U			36	U	22	U	0.56	U
PCB-1232	15.4 - 57.4	210	U	160	U	1,300	U	1,600	U	710	U	2,100	U			19	U	22	U	0.56	U
PCB-1242	15.4 - 57.4	210	U	160	U	1,300	U	1,600	U	710	U	2,100	U			19	U	22	U	0.56	U
PCB-1248	15.4 - 57.4	650		480		3,500		1,900		900		3,500				14	J	22	J	0.56	U
PCB-1254	15.4 - 57.4	210	U	160	U	1,300	U	1,600	U	710	U	2,100	U			19	U	22	U	0.56	U
PCB-1260	15.4 - 57.4	2,700		1,400		11,000		12,000		6,000		31,000				120		190		0.56	U
PCB-1262	15.4 - 57.4	210	U	160	U	1,300	U	1,600	U	710	U	2,100	U			19	U	22	U	0.56	U
PCB-1268	15.4 - 57.4	210	U	160	U	1,300	U	1,600	U	710	U	2,100	U			19	U	22	U	0.56	U

See Page 2 of this table for Notes

Table 5
Sediment Analytical Data
RCRA Facility Investigation
Central Hudson Gas Electric
Eltings Corner Facility,
Highland, New York

Sample ID			Sediment Criteria for Non-Polar Organic Contaminants (Wildlife Bioaccumulation)	OUTFALL +10 (0.0-0.5)		OUTFALL+10 (1.0-1.5)		OUTFALL+20 (0.0-0.5)		OUTFALL+20 (1.0-1.5)		OUTFALL+30 (0.0-0.5)		OUTFALL+30 (1.0-1.5)		OUTFALL+30 (0.0-0.5) DUPLICATE		CATCH BASIN[3]		CATCH BASIN RESAMPLED		FIELD BLANK	
Lab Sample Number				220-7507-1		220-7507-2		220-7507-3		220-7507-4		220-7507-5		220-7507-6		220-7507-7		220-7675-1		220-8204-1		220-8204-2	
Sampling Date				12/10/2008 1:35:00 PM		12/10/2008 1:45:00 PM		12/10/2008 1:15:00 PM		12/10/2008 1:25:00 PM		12/10/2008 12:55:00 PM		12/10/2008 12:50:00 PM		12/10/2008 12:55:00 PM		12/29/2008 11:15:00 AM		2/26/2009 3:15:00 PM		2/26/2009 3:05:00 PM	
Matrix				Solid		Solid		Solid		Solid		Solid		Solid		Solid		Solid		Solid		Water	
Dilution Factor				1		1		1		1		1		1		1		1		1		1	
				Low		Low		Low		Low		Low		Low		Low		Low		Low		Low	
Metals																							
	Eastern US Background Soil	Sediment Lowest Effect Level	Sediment Severe Effect Level																				
Units	mg/kg	mg/kg	mg/kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg				mg/Kg		mg/Kg		ug/L	
Silver		1.0	2.2	9.2	U	6.2	U	4.5	U	5.8	U	6.6	U	3.1	U			3.0	U	3.9	U	10	U
Aluminum	33,000	-	-	15,800		9,220		10,900		10,300		12,700		9,440				3,620		4,080		500	U
Arsenic		6.0	33.0	**10.5**	J	**11.6**		**6.8**	J	**11.4**		**8.3**	J	**6.2**				4.1	J	3.2	J	20	U
Barium	15-600	-	-	95.2		61.1		37.5		71.8		87.7		28.7				20.4		19.2		10	U
Beryllium	0-1.75	-	-	1.2	J	0.70	J	0.67	J	0.74	J	0.89	J	0.58	J			2.0	U	0.34	J	10	U
Calcium	130-35,000	-	-	17,200		24,200		42,400		**75,400**		**36,200**		**39,000**				**155,000**		**151,000**		500	U
Cadmium		0.6	9.0	15.4	U	10.3	U	7.4	U	9.7	U	11.0	U	**0.60**	J			5.0	U	6.6	U	10	U
Cobalt	2.5-60	-	-	13.0		9.3		9.5		9.0		10.9		8.7				3.6		4.9		10	U
Chromium**		26.0	110.0	**42.5**		19.3		17.6		19.1		22.6		15.4				5.4		7.4		10	U
Copper		16.0	110.0	**62.9**		36.6		27.7		38.4		38.4		26.4				10		**16.3**		2.2	J
Iron		2.0%	4.0%	**32,400 = 3.24%**		**21,100 = 2.11%**		**24,000 = 2.40%**		**24,000 = 2.40%**		**27,600 = 2.76%**		**23,600 = 2.36%**				10,200 = 1.02%		15,800 = 1.58%		250	U
Potassium	8,500-43,000	-	-	1650		904		964		1,090		1,110		829				747		826		500	U
Magnesium	100-5,000	-	-	**11,400**		**7,700**		**10,800**		**7,960**		**11,500**		**10,200**				**11,400**		**23,700**		500	U
Manganese		460.0	1,100.0	391		995		602		1,210		812		593				363		381		15	U
Sodium	6,000-8,000	-	-	518	J	331	J	317		541		506		227				188	J	245	J	2,300	
Nickel		16.0	50.0	**36.2**		21.6		24.2		21.5		27.5		22.4				9.1		12.5		10	U
Lead		31.0	110.0	**80.6**		**66.2**		**36.6**		**66.9**		**50.3**		28.7				8.4		9.6		30	U
Antimony		2.0	25.0	30.7	U	20.5	U	14.9	U	19.5	U	22.1	U	10.5	U			9.9	U	13.1	U	40	U
Selenium	0.1-3.9	-	-	**4.2**	**J**	20.5	U	14.9	U	2.6	J	22.1	U	0.98	J			9.9	U	13.1	U	30	U
Thallium	-	-	-	21.5	U	14.4	U	10.4	U	13.6	U	15.5	U	7.3	U			7.0	U	9.2	U	30	U
Vanadium	1-300	-	-	33.1		20.1		18.6		22.1		23.7		15.5				6.2		8.7		10	U
Zinc		120.0	270.0	**376**		**252**		**161**		**243**		**229**		**157**				47.4		88.9		50	U
Mercury		0.15	1.3	0.12	J	0.072	J	0.035	J	0.077	J	0.079	J	0.026	J			0.023	J	0.062	U	0.20	U
General Chemistry																							
Units	mg/kg	mg/kg	mg/kg	mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg		mg/Kg				mg/Kg		mg/Kg		mg/Kg	
Cyanide, Total - mg/Kg	--	--	--	1.5	U	1.3	U	0.13	U	1.5	U	1.0	U	0.66	U			0.55	U	0.65	U	0.010	U

Notes

1 Refer to Table 4 for Site Specific Screening Criteria calculations using TOC.

2 Based on information from the NYSDEC Division of Fish Wildlife and Marine Resources, the guidance for screening contaminated sediments is being revised; PAHs will be screened as Total PAHs.
Total PAH< 4,000 ug/kg = no impact.
Total PAH 4,000-10,000 ug/kg = impacted, but may or may not need remediation.
Total PAH > 10,000 ug/kg = impacted, remediation needed.

3 The Catch Basin Sediment sample arrived at the lab with a temperature exceedance. Since the sample was being analyzed for VOCs, it was resampled.

U = Analyzed for but not detected.

J = Estimated value.

* = LCS or LCSD exceeds the control limits

** = Total Chromium, trivalent

Blank cell indicates compound was not analyzed.

Bold indicates exceedance of screening criteria

Green indicates exceedance of Lowest Level, but not Highest Level

Yellow indicates exceedance of Lowest and Highest Levels

See Page 2 of this table for Notes

Table 6
Surface Water Analytical Data
RCRA Facility Investigation
Central Hudson Gas Electric
Eltings Corners Facility,
Highland, NY

Sample ID	Surface Water Standards and Guidance Values (GV) for Wildlife Protection Based on TOGS 1.1.1	CATCH BASIN		TRIP BLANK	
Lab Sample Number		**220-7494-1**		**220-7494-3**	
Sampling Date		**12/10/2008 2:10:00 PM**		**12/10/2008 12:00:00 AM**	
Matrix	**Water**	**Water**		**Water**	
Dilution Factor	**1**	**1**		**1**	
VOCs - 8260B (ug/l)					
Methyl tert-butyl ether	-	0.50	U	0.50	U
Benzene	-	0.50	U	0.50	U
Toluene	-	0.50	U	0.50	U
Ethylbenzene	-	0.50	U	0.50	U
m&p-Xylene	-	1.0	U	1.0	U
o-Xylene	-	0.50	U	0.50	U
Isopropylbenzene	-	0.50	U	0.50	U
N-Propylbenzene	-	0.50	U	0.50	U
1,3,5-Trimethylbenzene	-	0.50	U	0.50	U
tert-Butylbenzene	-	0.50	U	0.50	U
1,2,4-Trimethylbenzene	-	0.50	U	0.50	U
sec-Butylbenzene	-	0.50	U	0.50	U
4-Isopropyltoluene	-	0.50	U	0.50	U
n-Butylbenzene	-	0.50	U	0.50	U
Naphthalene	-	0.50	U	0.50	U
Chloroethane	5	1.0	U	1.0	U
1,1-Dichloroethane	5	0.50	U	0.50	U
SVOCs - 8270C (ug/l)					
Naphthalene	-	4.0	U		
Acenaphthene	-	4.0	U		
Fluorene	-	4.0	U		
Phenanthrene	-	4.0	U		
Anthracene	-	4.0	U		
Pyrene	-	4.0	U		
Benzo[a]anthracene	-	4.0	U		
Chrysene	-	4.0	U		
Benzo[b]fluoranthene	-	4.0	U		
Benzo[k]fluoranthene	-	4.0	U		
Benzo[a]pyrene	-	4.0	U		
Indeno[1,2,3-cd]pyrene	-	4.0	U		
Dibenz(a,h)anthracene	-	4.0	U		
Benzo[g,h,i]perylene	-	4.0	U		
Fluoranthene	-	4.0	U		
PCBs - 8082 (ug/l)					
PCB-1016	0.00012	0.50	U		
PCB-1221	0.00012	1.0	U		
PCB-1232	0.00012	0.50	U		
PCB-1242	0.00012	0.50	U		
PCB-1248	0.00012	0.50	U		
PCB-1254	0.00012	0.50	U		
PCB-1260	0.00012	0.50	U		
PCB-1262	0.00012	0.50	U		
PCB-1268	0.00012	0.50	U		
Total PCBs	0.00012		U		

See Page 2 of this table for Notes

Table 6
Surface Water Analytical Data
RCRA Facility Investigation
Central Hudson Gas Electric
Eltings Corners Facility,
Highland, NY

Sample ID	Surface Water Standards and Guidance Values (GV) for Wildlife Protection Based on TOGS 1.1.1	CATCH BASIN		TRIP BLANK	
Lab Sample Number		**220-7494-1**		**220-7494-3**	
Sampling Date		**12/10/2008 2:10:00 PM**		**12/10/2008 12:00:00 AM**	
Matrix	**Water**	**Water**		**Water**	
Dilution Factor	**1**	**1**		**1**	
Metals (ug/l)					
Silver	-	10	U		
Aluminum	-	1,400			
Arsenic	-	20	U		
Barium	-	15			
Beryllium	-	10	U		
Calcium	-	26,800			
Cadmium	-	10	U		
Cobalt	-	10	U		
Chromium	-	2.3	J		
Copper	-	4.0	J		
Iron	-	2,500			
Potassium	-	1,300			
Magnesium	-	3,600			
Manganese	-	220			
Sodium	-	14,500			
Nickel	-	3.0	J		
Lead	-	10	U		
Antimony	-	40	U		
Selenium	-	30	U		
Thallium	-	30	U		
Vanadium	-	2.1	J		
Zinc	-	21	J		
Mercury	0.0026*	0.20	U		
General Chemistry (ug/l)					
Cyanide, Total	-	10	U		

Notes:

Blank cell indicates compound was not analyzed.

Bold = exceedances of standard or guidance value

ND- Non Detected

* = Applies to dissolved form

B = The analyte was found in an associated blank, as well as in the sample.

J = Estimated value.

U = Analyzed for but not detected.

See Page 2 of this table for Notes

FIGURES

PLOTTED: 25 Mar 2009, 9:35am, JLubbers

CAD FILE: G:\CAD\Central Hudson\EltingsCorners\ LAYOUT: LOCATION

0 200 400 800

SCALE IN FEET

REFERENCES:
1. "2004 ORTHOPHOTO" NYS GIS CLEARINGHOUSE ORTHOIMAGERY PROGRAM

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NEWBURGH, NY

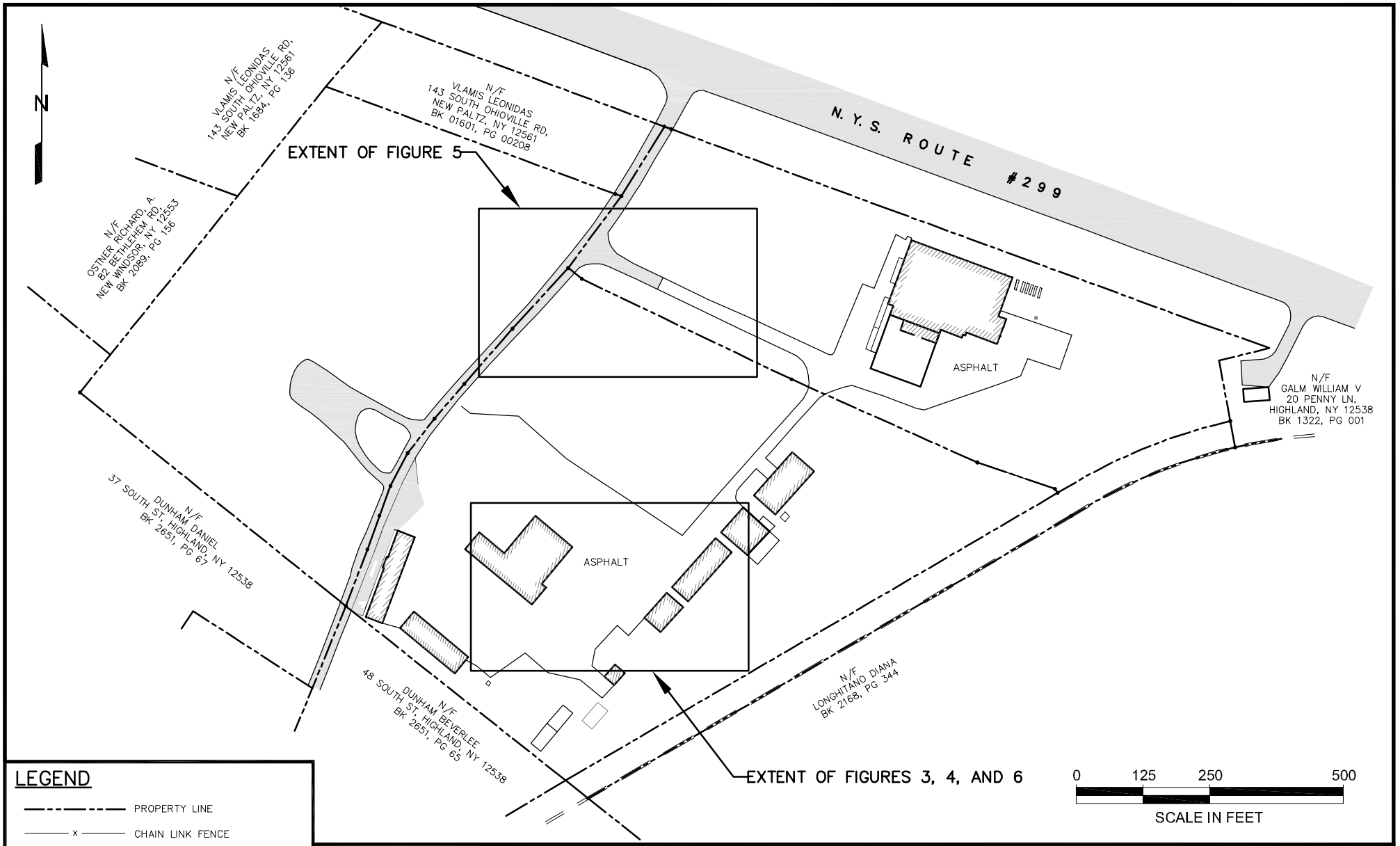
PROJECT NO.	99768
DRAWN:	03/19/2009
DRAWN BY:	JL
CHECKED BY:	JC
FILE NAME:	EltingsCorners.dwg

LOCATION MAP

C.H.G.E. CORP
ELTINGS CORNERS PROPERTY
SOUTH STREET
TOWN OF LLOYD, ULSTER COUNTY, NEW YORK

FIGURE
1

NEWBURGH, NY CAD FILE: G:\CAD\Central Hudson\EltingsCorners\ LAYOUT: SITE PLOTTED: 25 Mar 2009, 9:36am, JLubbers



LEGEND

PROPERTY LINE

CHAIN LINK FENCE

REFERENCES:

1. "MAP OF PROPERTY OF C.H.G.&E. CORP, ELTINGS CORNERS PROPERTY", PREPARED BY SPECTRA ENGINEERINGS, ARCHITECTURE AND SURVEYING P.C., DATED 5/29/07.

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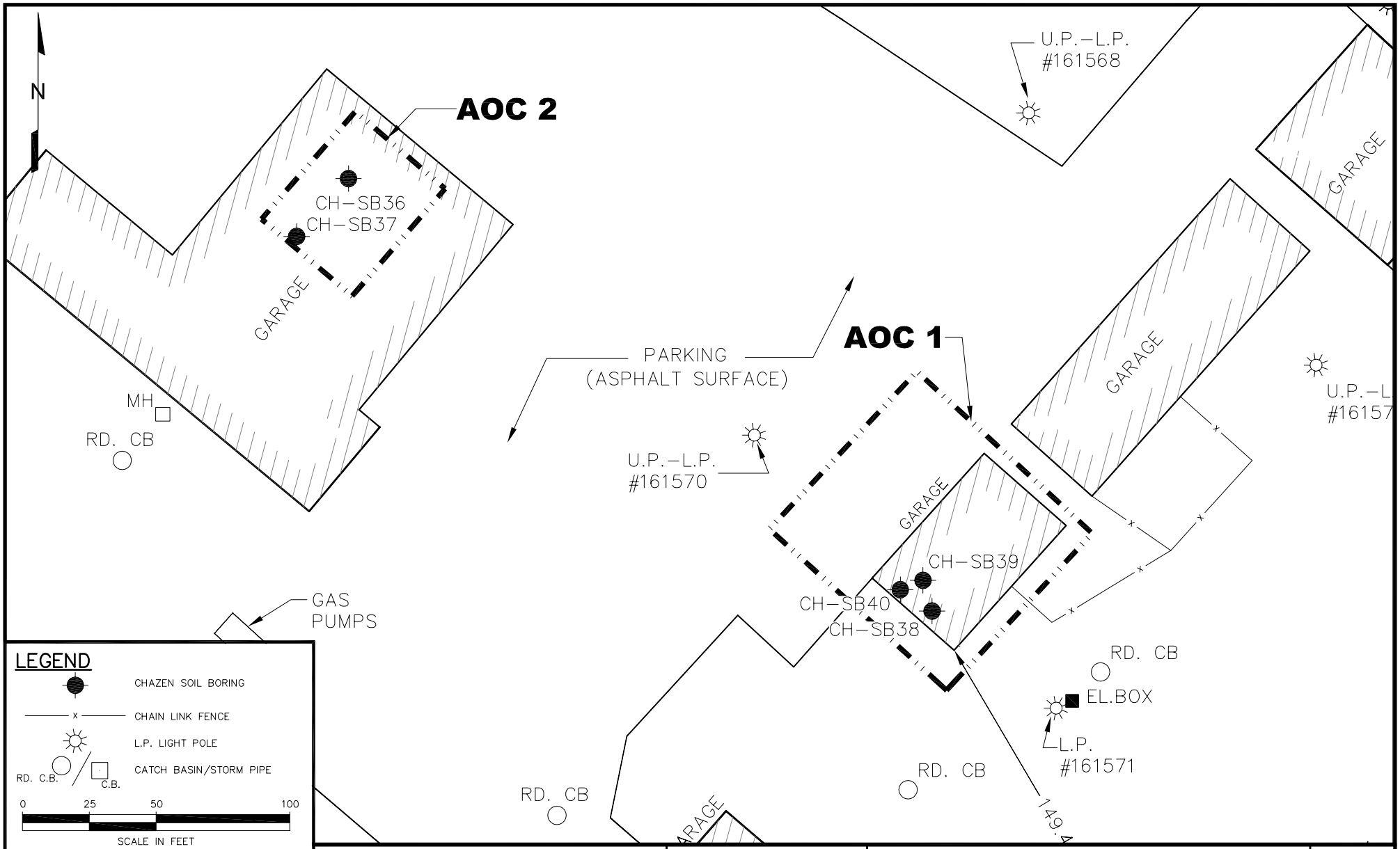
DRAWN:	03/19/2009
DRAWN BY:	JL
CHECKED BY:	JC
FILE NAME:	EltingsCorners.dwg

SITE PLAN

C.H.G.E. CORP
ELTINGS CORNERS PROPERTY
SOUTH STREET
TOWN OF LLOYD, ULSTER COUNTY, NEW YORK

FIGURE
2

NEWBURGH, NY CAD FILE: G:\CAD\Central Hudson\EltingsCorners\ LAYOUT: AOC PLOTTED: 25 Mar 2009, 9:37am, JLubbers



LEGEND

- CHAZEN SOIL BORING
- CHAIN LINK FENCE
- L.P. LIGHT POLE
- RD. C.B. / C.B. CATCH BASIN/STORM PIPE

0 25 50 100

SCALE IN FEET

REFERENCES:

1. "MAP OF PROPERTY OF C.H.G.&E. CORP, ELTINGS CORNERS PROPERTY", PREPARED BY SPECTRA ENGINEERINGS, ARCHITECTURE AND SURVEYING P.C., DATED 5/29/07.

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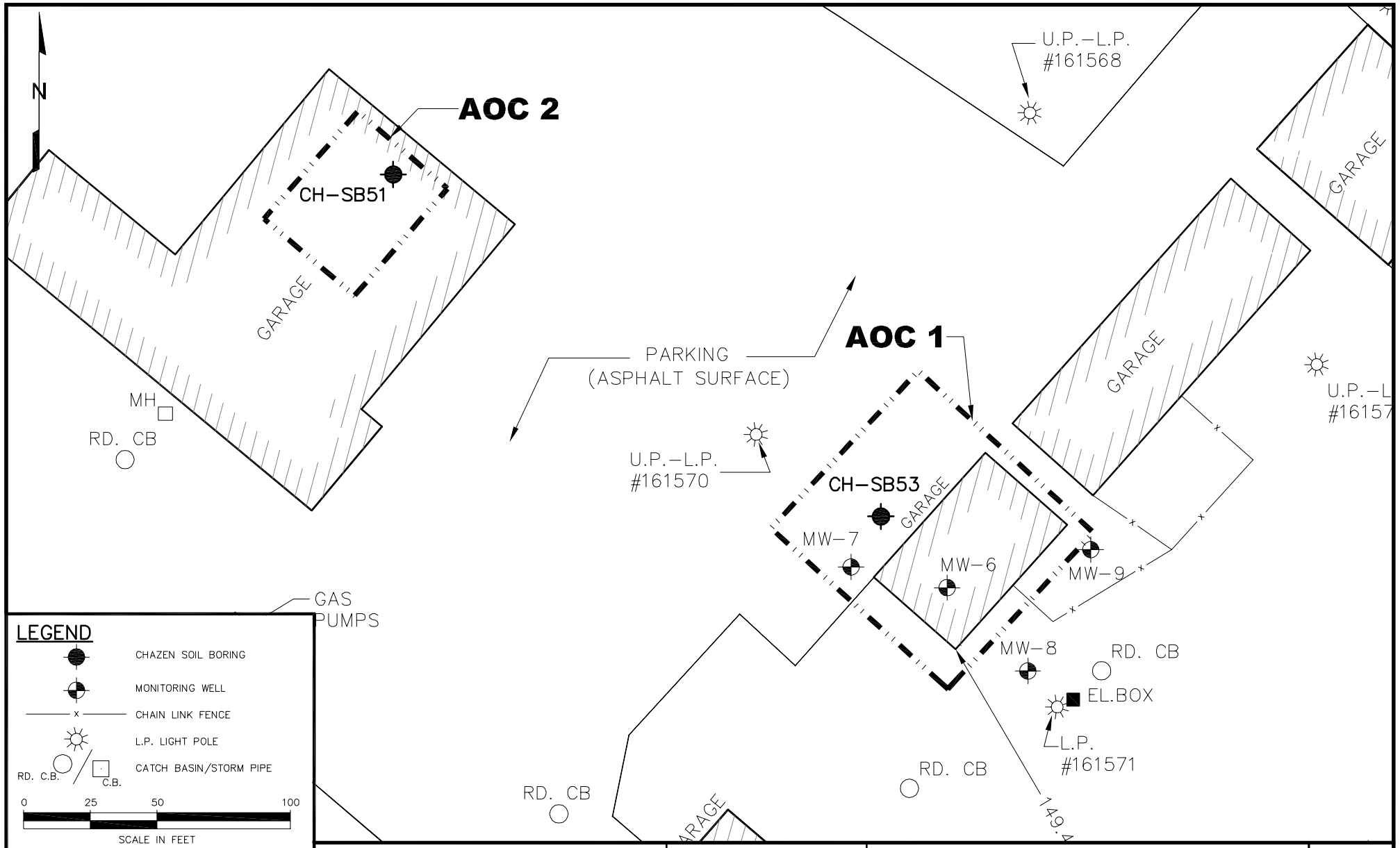
PROJECT NO.	99768
DRAWN:	03/19/2009
DRAWN BY:	JL
CHECKED BY:	JC
FILE NAME:	EltingsCorners.dwg

AOC LOCATION MAP

C.H.G.E. CORP
ELTINGS CORNERS PROPERTY
SOUTH STREET
TOWN OF LLOYD, ULSTER COUNTY, NEW YORK

FIGURE
3

NEWBURGH, NY CAD FILE: G:\CAD\Central Hudson\EltingsCorners\ LAYOUT: MWs PLOTTED: 25 Mar 2009, 9:38am, JLubbers



LEGEND

- CHAZEN SOIL BORING
- MONITORING WELL
- CHAIN LINK FENCE
- L.P. LIGHT POLE
- RD. C.B. / C.B. CATCH BASIN/STORM PIPE

0 25 50 100

SCALE IN FEET

REFERENCES:

1. "MAP OF PROPERTY OF C.H.G.&E. CORP, ELTINGS CORNERS PROPERTY", PREPARED BY SPECTRA ENGINEERINGS, ARCHITECTURE AND SURVEYING P.C., DATED 5/29/07.

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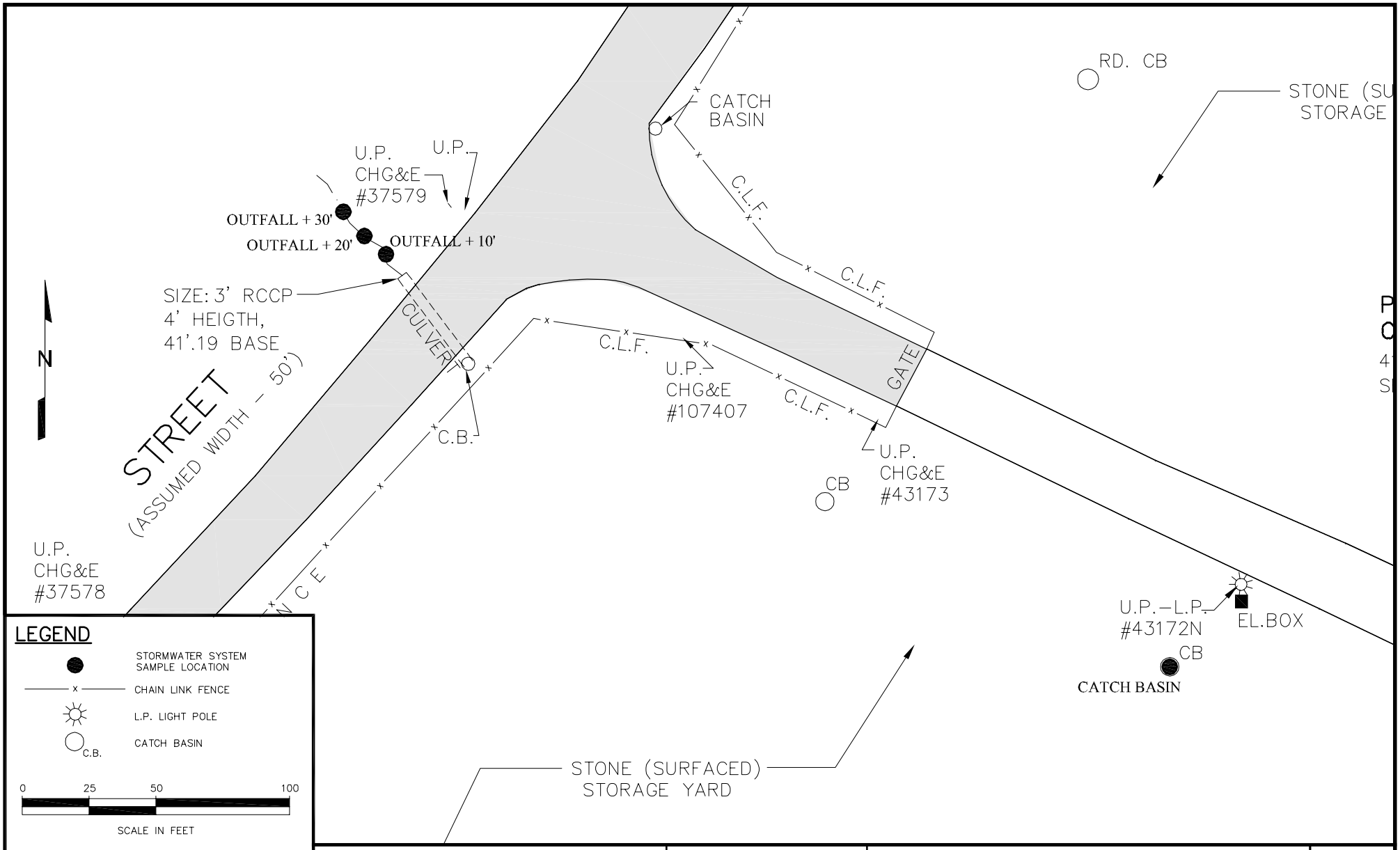
DRAWN:	03/19/2009
DRAWN BY:	JL
CHECKED BY:	JC
FILE NAME:	EltingsCorners.dwg

BORING AND WELL LOCATION MAP

C.H.G.E. CORP
ELTINGS CORNERS PROPERTY
SOUTH STREET
TOWN OF LLOYD, ULSTER COUNTY, NEW YORK

FIGURE
4

NEWBURGH, NY CAD FILE: G:\CAD\Central Hudson\EltingsCorners\ LAYOUT: Storm PLOTTED: 25 Mar 2009, 9:39am, JLubbers



LEGEND

- STORMWATER SYSTEM SAMPLE LOCATION
- CHAIN LINK FENCE
- L.P. LIGHT POLE
- CATCH BASIN (C.B.)

0 25 50 100

SCALE IN FEET

REFERENCES:

1. "MAP OF PROPERTY OF C.H.G.&E. CORP, ELTINGS CORNERS PROPERTY", PREPARED BY SPECTRA ENGINEERINGS, ARCHITECTURE AND SURVEYING P.C., DATED 5/29/07.

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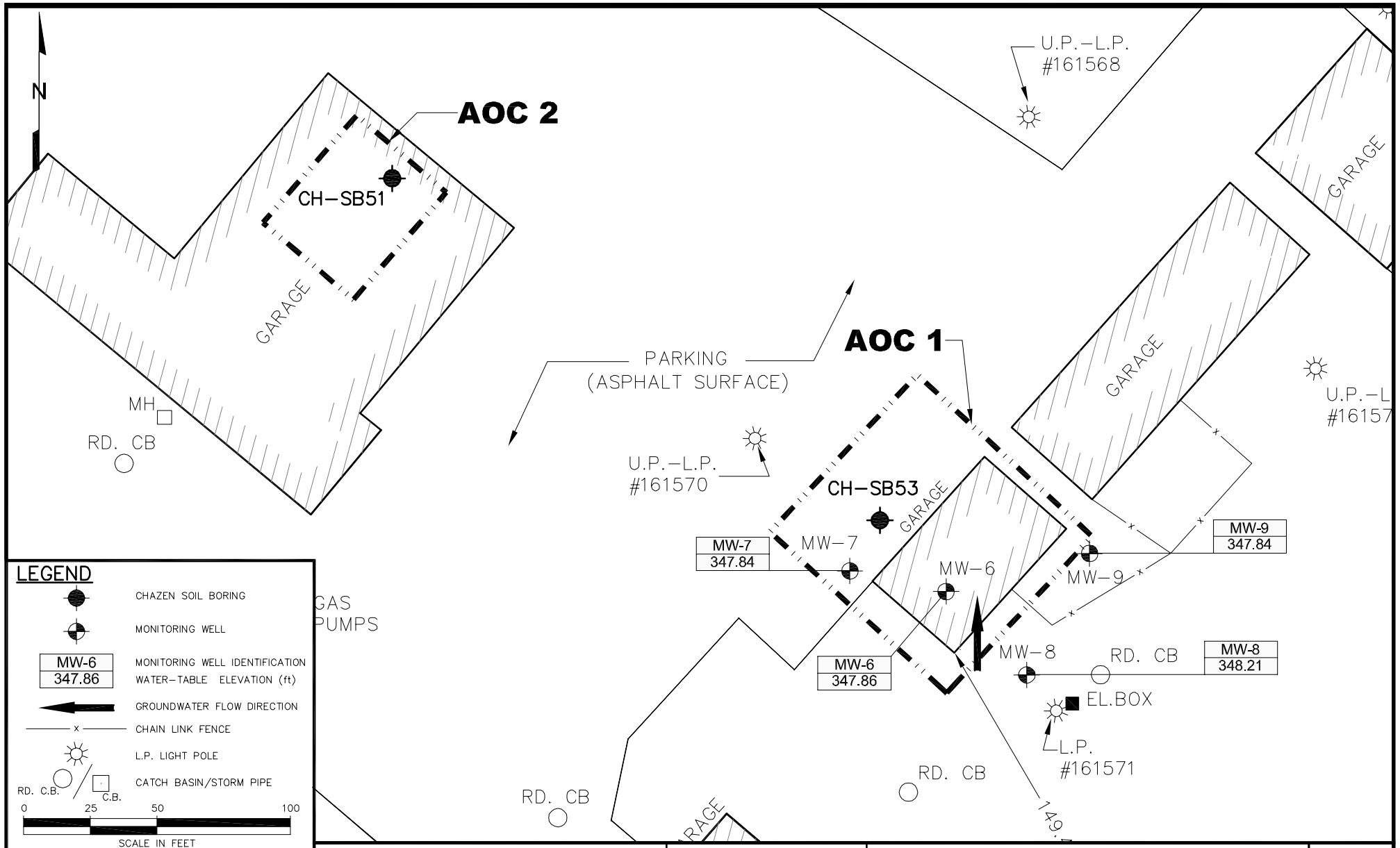
DRAWN:	03/19/2009
DRAWN BY:	JL
CHECKED BY:	JC
FILE NAME:	EltingsCorners.dwg

STORMWATER SYSTEM SAMPLING LOCATION MAP

C.H.G.E. CORP
ELTINGS CORNERS PROPERTY
SOUTH STREET
TOWN OF LLOYD, ULSTER COUNTY, NEW YORK

FIGURE
5

NEWBURGH, NY CAD FILE: G:\CAD\Central Hudson\EltingsCorners\ LAYOUT: GW PLOTTED: 25 Mar 2009, 9:40am, JLubbers



LEGEND

- CHAZEN SOIL BORING
- MONITORING WELL
- MW-6 / 347.86 — MONITORING WELL IDENTIFICATION / WATER-TABLE ELEVATION (ft)
- GROUNDWATER FLOW DIRECTION
- CHAIN LINK FENCE
- L.P. LIGHT POLE
- CATCH BASIN/STORM PIPE (RD. C.B. / C.B.)

0 25 50 100

SCALE IN FEET

REFERENCES:

1. "MAP OF PROPERTY OF C.H.G.&E. CORP, ELTINGS CORNERS PROPERTY", PREPARED BY SPECTRA ENGINEERINGS, ARCHITECTURE AND SURVEYING P.C., DATED 5/29/07.

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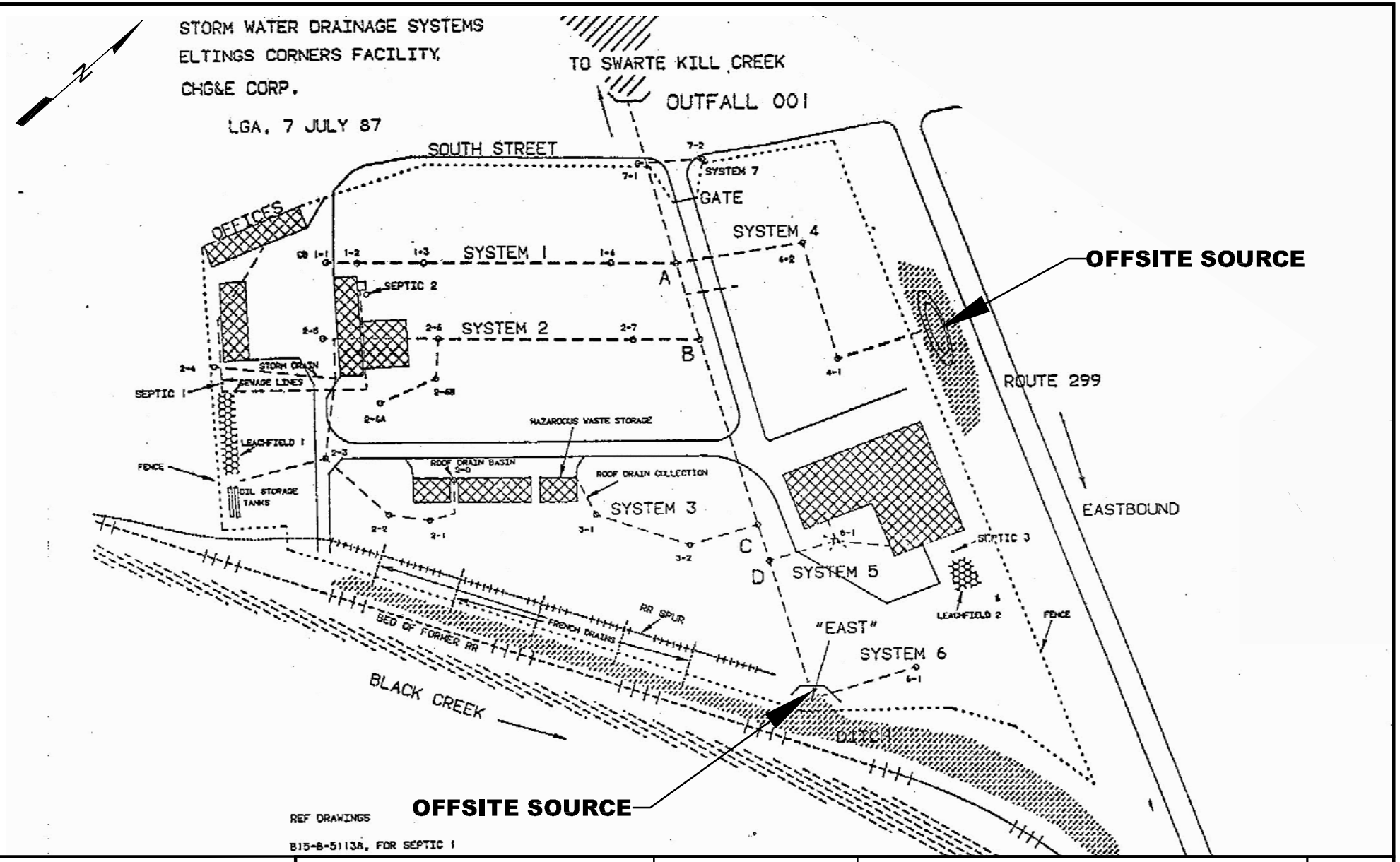
DRAWN:	03/19/2009
DRAWN BY:	JL
CHECKED BY:	JC
FILE NAME:	EltingsCorners.dwg

GROUNDWATER ELEVATION MAP

C.H.G.E. CORP
ELTINGS CORNERS PROPERTY
SOUTH STREET
TOWN OF LLOYD, ULSTER COUNTY, NEW YORK

FIGURE
6



0 125 250 500

APPROXIMATE SCALE IN FEET

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PROJECT NO.	99768
DRAWN:	03/25/2009
DRAWN BY:	JL
CHECKED BY:	JC
FILE NAME:	EltingsCorners.dwg

STORMWATER MANAGEMENT SYSTEM LAYOUT

C.H.G.E. CORP
ELTINGS CORNERS PROPERTY
SOUTH STREET
TOWN OF LLOYD, ULSTER COUNTY, NEW YORK

FIGURE
7

APPENDIX A

SOIL BORING LOGS

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1279 Route 300, Second Floor
Newburgh, New York 12550
Phone: (845) 567-6530 Fax: (845) 567-6542

Bore Log

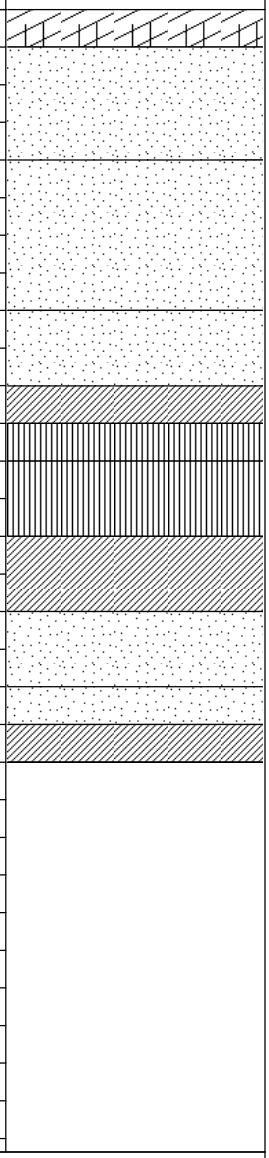
SB-51 (1 of 1)

Project: Central Hudson - Elting's Corners
Client: Central Hudson
Location: 24 South Street, Highland, NY
Drilling Co.: Aquifer Drilling and Testing
Driller: R. Comfort
Method: Geoprobe

Boring ID: SB-51
Casing Elevation: NA
Total Depth: 10'
Depth to First Observed Water: 4'
Start Date: 12/10/2008
End Date: 12/10/2008

Screen Length: NA
Diameter: NA
PVC Type: NA
Slot Size: NA
Casing Length: NA
Diameter: NA

Depth (Feet)	Sample ID	Sample Interval (feet)	PID Headspace (ppmv)	Blow / 6"	Recovery / Penetration (inches)	Description
		0 - 0.5'	NA	NA	NA	Concrete
1						SP: Poorly graded SAND (coarse) with Gravel, reddish brown, dry
		0.5 - 2'	BDL	1-1-2	12"/18"	
2						SP: Poorly graded SAND (medium), some Gravel (medium), reddish brown, moist
3	SB-51 (2' - 4')	2 - 4'	BDL	2-8-48-8	16"/24"	
4						SP: Poorly graded SAND (coarse), reddish brown, wet
5		4 - 6'	BDL	6-7-4-5	18"/24"	CL: CLAY, dark reddish gray, wet
6						ML: SILT with Sand (fine), dark reddish brown, wet
						ML: SILT with Sand (fine), weak red, wet
7		6 - 8'	BDL	2-3-3-3	24"/24"	CL: CLAY, reddish brown, wet
8						SP: Poorly graded SAND (fine), dark reddish brown, wet
9		8 - 10'	BDL	2-3-2-2	24"/24"	SP: Poorly graded SAND (fine) withSilt, dark reddish brown, wet
10						CL: CLAY, dark reddish gray, wet
						Boring terminated at 10 fbg
11						
12						
13						
14						
15						



Notes:

VC	Vacuum Clear	fbg	Feet below grade
NA	Not Available	NSVD	Not Surveyed to Vertical Datum
BDL	Below Instrument Detection Limit of 0.1 ppmv	ppmv	Parts Per Million by Volume

Logged by: E. Chastain

KLEINFELDER
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1279 Route 300, Second Floor
Newburgh, New York 12550
Phone: (845) 567-6530 Fax: (845) 567-6542

Well Log

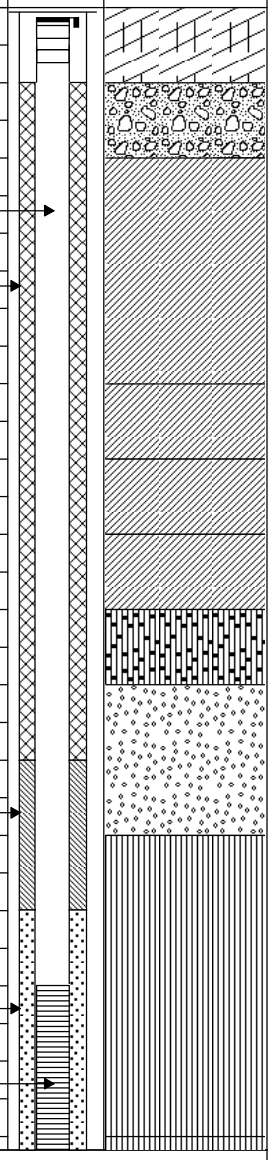
SB-52/ MW-6 (1 of 2)

Project: Central Hudson - Elting's Corners
Client: Central Hudson
Location: 24 South Street, Highland, NY
Drilling Co.: Aquifer Drilling and Testing
Driller: R. Comfort
Method: Hollow Stem Auger

Boring ID: SB-52/MW-6
Casing Elevation: NA
Total Depth: 23'
Depth to First Observed Water: 6'
Start Date: 12/08/2008
End Date: 12/08/2008

Screen Length: 10'
Diameter: 2"
PVC Type: Schedule 40
Slot Size: 0.010"
Casing Length: 13'
Diameter: 2"

Depth (Feet)	Sample ID	Sample Interval (feet)	PID Headspace (ppmv)	Blow / 6"	Recovery / Penetration (inches)	Description
		0' - 1'	NA	NA	NA	Concrete
1		1' - 2'	BDL	8 - 5	14"/24"	GW: Well graded GRAVEL with Sand (coarse), very dusky red, dry
2		2' - 3'	BDL	2 - 2		CL: CLAY with Silt, reddish gray, moist
3		3' - 4'	BDL	3 - 3	16"/24"	
4		4' - 5'	0.1	3 - 4		
5						
6	SB-52/ MW-6 (5' - 6')	5' - 6'	0.2	2 - 2	14"/24"	CL: CLAY, some Silt, dark red, moist
7		6' - 7'	1.0	3 - 3		CL: CLAY, red, wet
8		7' - 8'	2.4	3 - 7	18"/24"	CL: CLAY with Silt, red, wet
9		8' - 9'	2.2	7 - 4		ML: SILT with Gravel (medium), red, wet
10		9' - 10'	1.5	3 - 7	4"/24"	GP: Poorly graded GRAVEL (fine), some Silt, dark reddish gray, wet
11		10' - 11	0.9	6 - 5		
12		11' - 12'	BDL	4 - 4	24"/24"	ML: SILT, dark reddish gray, wet
13		12' - 13'	0.1	4 - 5		
14		13' - 14'	BDL	2 - 9	24"/24"	
15		14' - 15'	BDL	11 - 13		



Notes:

VC	Vacuum Clear	fbg	Feet below grade
NA	Not Applicable	NSVD	Not Surveyed to Vertical Datum
BDL	Below Instrument Detection Limit of 0.1 ppmv	ppmv	Parts Per Million by Volume

Logged by: E. Chastain

KLEINFELDER
Bright People. Right Solutions.

1279 Route 300, Second Floor
Newburgh, New York 12550
Phone: (845) 567-6530 Fax: (845) 567-6542

Well Log

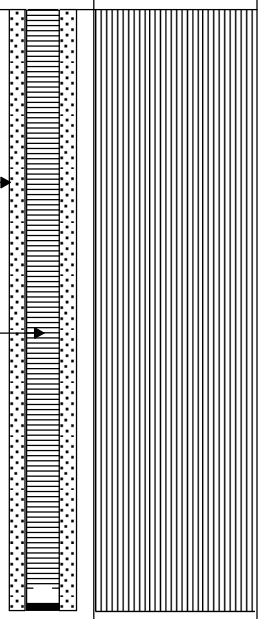
SB-52/ MW-6 (2 of 2)

Project: Central Hudson - Elting's Corners
Client: Central Hudson
Location: 24 South Street, Highland, NY
Drilling Co.: Aquifer Drilling and Testing
Driller: R. Comfort
Method: Hollow Stem Auger

Boring ID: SB-52/MW-6
Casing Elevation: NA
Total Depth: 23'
Depth to First Observed Water: 6'
Start Date: 12/08/2008
End Date: 12/08/2008

Screen Length: 10'
Diameter: 2"
PVC Type: Schedule 40
Slot Size: 0.010"
Casing Length: 13'
Diameter: 2"

Depth (Feet)	Sample ID	Sample Interval (feet)	PID Headspace (ppmv)	Blow / 6"	Recovery / Penetration (inches)	Description
16		15' - 16'	BDL	8 - 12	24"/24"	ML: SILT, dark reddish gray, wet
		16' - 17'	BDL	13 - 8		
17		17' - 18'	BDL	9 - 12	20"/24"	
18		18' - 19'	BDL	12 - 1		
19		19' - 20'	BDL	8 - 1	22"/24"	
20		20' - 21'	BDL	7 - 8		
21		21' - 22'	BDL	8 - 9	18"/24"	
22		22' - 23'	BDL	10 - 25		
23						Boring terminated at 23 fbg
24						
25						
26						
27						
28						
29						
30						



Notes:

VC	Vacuum Clear	fbg	Feet below grade
NA	Not Applicable	NSVD	Not Surveyed to Vertical Datum
BDL	Below Instrument Detection Limit of 0.1 ppmv	ppmv	Parts Per Million by Volume

Logged by: E. Chastain

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Bore Log

SB-53 (1 of 1)

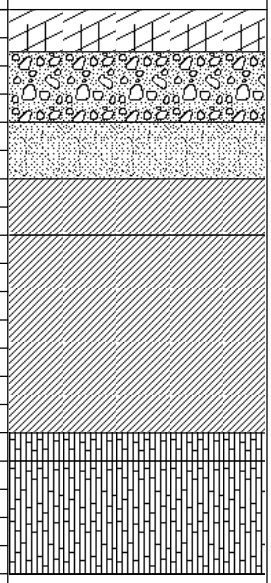
Project: Central Hudson - Elting's Corners
Client: Central Hudson
Location: 24 South Street, Highland, NY
Drilling Co.: Aquifer Drilling and Testing
Driller: R. Comfort
Method: Geoprobe

Boring ID: SB-53
Casing Elevation: NA
Total Depth: 10'
Depth to First Observed Water: 4'
Start Date: 12/10/2008
End Date: 12/10/2008

Screen Length: NA
Diameter: NA
PVC Type: NA
Slot Size: NA
Casing Length: NA
Diameter: NA

Depth (Feet)	Sample ID	Sample Interval (feet)	PID Headspace (ppmv)	Recovery / Penetration (inches)	Description
					Asphalt
1		0 - 2'	BDL	12"/24"	GW: Well graded GRAVEL with Sand, dark red, dry
2					SW: Well graded SAND, some Silt and Clay, weak red, wet
3		2 - 4'	BDL	18"/24"	CL: CLAY, weak red, wet
4					CL: CLAY, weak red, saturated
5		4 - 6'	BDL	20"/24"	
6					
7	SB-53 (6 - 8')	6 - 8'	BDL	22"/24"	
8					SM: Silty SAND, weak red, saturated
9		8 - 10'	BDL	0"/24"	No recovery
10					Boring terminated at 10 fbg
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

Depth (feet) | Lithology



Notes:

VC	Vacuum Clear	fbg	Feet below grade
NA	Not Available	NSVD	Not Surveyed to Vertical Datum
BDL	Below Instrument Detection Limit of 0.1 ppmv	ppmv	Parts Per Million by Volume

Logged by: E. Chastain

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Newburgh, New York 12550
Phone: (845) 567-6530 Fax: (845) 567-6542

Well Log

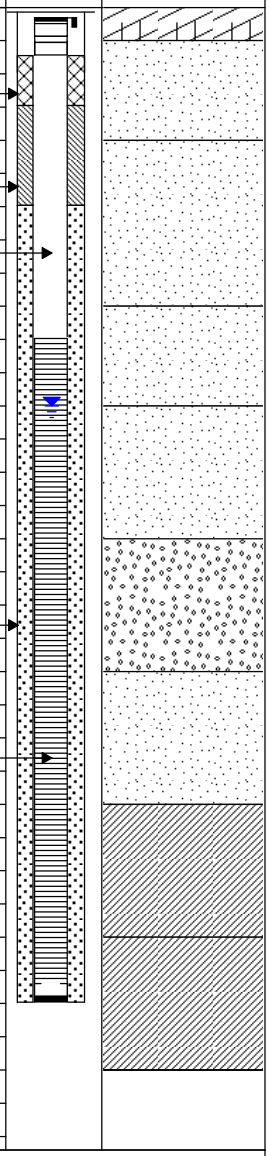
MW-7
(1 of 1)

Project: Central Hudson - Elting's Corners
Client: Central Hudson
Location: 24 South Street, Highland, NY
Drilling Co.: Aquifer Drilling and Testing
Driller: R. Comfort
Method: Hollow Stem Auger

Boring ID: MW-7
Casing Elevation: NA
Total Depth: 15
Depth to First Observed Water: 6'
Start Date: 12/09/2008
End Date: 12/09/2008

Screen Length: 10'
Diameter: 2"
PVC Type: Schedule 40
Slot Size: 0.010"
Casing Length: 4.25'
Diameter: 2"

Depth (Feet)	Sample ID	Sample Interval (feet)	PID Headspace (ppmv)	Blow / 6"	Recovery / Penetration (inches)	Description
		0' - 0.5'	NA	NA	NA	Asphalt
1		0.5' - 2'	BDL	8-7-7	5"/18"	SP: Poorly graded SAND (medium) with Gravel (sub-angular, medium), dark reddish brown, dry
2						No Recovery
3		2' - 4'	NA	2-4-2-2	0"/24"	
4						
5	MW-7	4' - 6'	BDL	2-2-4-4	8"/24"	SP: Poorly graded SAND (medium), trace Gravel (sub-angular, fine), trace Silt, dark reddish brown, moist
6						SP: Poorly graded SAND (fine), trace Gravel (sub-angular, fine), dark reddish brown, wet
7		6' - 8'	BDL	3-3-3-2	7"/24"	
8						GP: Poorly graded GRAVEL (sub-angular, fine-medium), some Sand (coarse), dark reddish brown, wet
9		8' - 10'	BDL	2-3-2-2	4"/24"	
10						SP: Poorly graded SAND (coarse), some Gravel (sub-angular, fine), dark reddish brown, wet
11		10' - 12'	BDL	1-2-4-2	8"/24"	
12						ML: SILT and CLAY, very dark red, wet
13		12' - 14'	BDL	3-3-9-10	6"/24"	
14						CL: CLAY, dark reddish gray, moist
15		14' - 16'	BDL	9-11-11-10	18"/24"	
16						Boring terminated at 16 fbg
17						



Notes:

VC	Vacuum Clear	fbg	Feet below grade
NA	Not Applicable	NSVD	Not Surveyed to Vertical Datum
BDL	Below Instrument Detection Limit of 0.1 ppmv	ppmv	Parts Per Million by Volume

Logged by: E. Chastain

KLEINFELDER
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1279 Route 300, Second Floor
Newburgh, New York 12550
Phone: (845) 567-6530 Fax: (845) 567-6542

Well Log

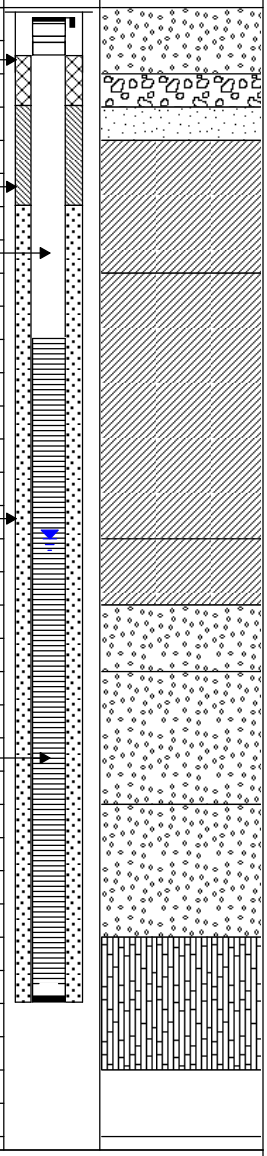
MW-8
(1 of 1)

Project: Central Hudson - Elting's Corners
Client: Central Hudson
Location: 24 South Street, Highland, NY
Drilling Co.: Aquifer Drilling and Testing
Driller: R. Comfort
Method: Hollow Stem Auger

Boring ID: MW-8
Casing Elevation: NA
Total Depth: 15'
Depth to First Observed Water: 8'
Start Date: 12/09/2008
End Date: 12/09/2008

Screen Length: 10'
Diameter: 2"
PVC Type: Schedule 40
Slot Size: 0.010"
Casing Length: 4.5'
Diameter: 2"

Depth (Feet)	Sample ID	Sample Interval (feet)	PID Headspace (ppmv)	Blow / 6"	Recovery / Penetration (inches)	Description
1	MW-8	0' - 2'	BDL	21-22-19-10	10"/24"	GP:Poorly graded GRAVEL, dark reddish brown, dry
						Cobbles, moist
2						SP: Poorly graded SAND (coarse), dark reddish gray, moist
						CL: Silty CLAY, dark reddish brown, moist
3		2' - 4'	0.1	3-3-3-4	13"/24"	
4						CL: CLAY, dark reddish brown, moist
5		4' - 6'	BDL	2-2-2-2	22"/24"	
6						
7		6' - 8'	BDL	2-2-3-2	18"/24"	
8						CL: Silty CLAY, dark reddish brown, wet
9		8' - 10'	BDL	1-1-3-4	7"/24"	GP: Poorly graded GRAVEL (medium, rounded), dark reddish brown, wet
10						GP: Poorly graded GRAVEL (medium, rounded), some Sand (coarse), dark reddish brown, wet
11		10' - 12'	0.1	7-7-7-5	7"/24"	
12						No Recovery
13		12' - 14'	NA	2-3-4-2	0"/24"	
14						SM: Silty SAND (fine), reddish brown, wet
15		14' - 16'	0.2	1-1-2-2	24"/24"	
16						Boring terminated at 16 fbg
17						



Notes:

VC	Vacuum Clear	fbg	Feet below grade
NA	Not Applicable	NSVD	Not Surveyed to Vertical Datum
BDL	Below Instrument Detection Limit of 0.1 ppmv	ppmv	Parts Per Million by Volume

Logged by: E. Chastain

KLEINFELDER
Bright People. Right Solutions.

1279 Route 300, Second Floor
Newburgh, New York 12550
Phone: (845) 567-6530 Fax: (845) 567-6542

Well Log

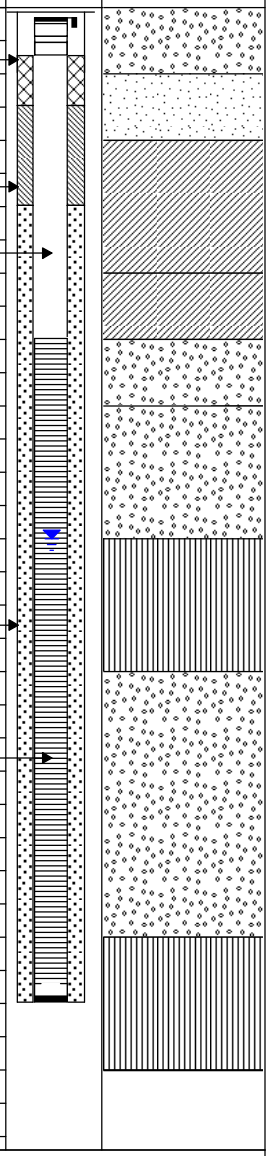
MW-9
(1 of 1)

Project: Central Hudson - Elting's Corners
Client: Central Hudson
Location: 24 South Street, Highland, NY
Drilling Co.: Aquifer Drilling and Testing
Driller: R. Comfort
Method: Hollow Stem Auger

Boring ID: MW-9
Casing Elevation: NA
Total Depth: 15'
Depth to First Observed Water: 8'
Start Date: 12/09/2008
End Date: 12/09/2008

Screen Length: 10'
Diameter: 2"
PVC Type: Schedule 40
Slot Size: 0.010"
Casing Length: 4.5'
Diameter: 2"

Depth (Feet)	Sample ID	Sample Interval (feet)	PID Headspace (ppmv)	Blow / 6"	Recovery / Penetration (inches)	Description
1	MW-9	0' - 2'	BDL	7-9-8-7	20"/24"	GP:Poorly graded GRAVEL, some Sand (coarse), dark reddish brown, dry
2						SP: Poorly graded SAND (coarse), some Silty Clay, dark reddish brown, moist
3		2' - 4'	BDL	2-2-3-2	22"/24"	CL: Clay, dark reddish gray, moist
4						CL: Silty CLAY, dark reddish brown, moist
5		4' - 6'	BDL	4-2-2-2	18"/24"	SP: Poorly graded SAND (fine), some Silt, dark reddish brown, moist
6						No Recovery
7		6' - 8'	NA	2-2-2-2	0"/24"	
8						ML: SILT with Sand (fine), reddish brown, wet
9		8' - 10'	BDL	1-1-1-2	17"/24"	
10						SP: Poorly graded SAND (fine) and SILT, reddish brown, wet
11		10' - 12'	BDL	2-3-3-4	20"/24"	
12						
13		12' - 14'	BDL	5-4-4-3	18"/24"	
14						ML: SILT, some Sand (fine), reddish brown, wet
15		14' - 16'	BDL	6-4-4-4	18"/24"	
16						Boring terminated at 16 fbg
17						



Notes:

VC	Vacuum Clear	fbg	Feet below grade
NA	Not Applicable	NSVD	Not Surveyed to Vertical Datum
BDL	Below Instrument Detection Limit of 0.1 ppmv	ppmv	Parts Per Million by Volume

Logged by: E. Chastain

APPENDIX B

WELL PURGING – FIELD WATER QUALITY MEASUREMENTS FORMS

EXAMPLE (Minimum Requirements) Page ____ of ____

Well PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Location (Site/Facility Name) Eltings Corner, New Paltz, NY
Well Number #6 Date 12/23/08
Field Personnel S. Finch
Sampling Organization Kleinfelder
Identify MP

Depth to (below MP) ____ / ____ of screen (top / bottom)
Pump Intake at (ft. below MP) ____
Purging Device; (pump type) peristaltic

Clock Time 24 HR	Water Depth below MP ft	Pump Dial [1]	Purge Rate ml/min	Cum. Volume Purged liters	Temp. °C	Spec. Cond. [2] µS/cm	pH	ORP/ Eh [3] mv	DO mg/L	Turb-idity NTU	Comments
1444					12.38	0.338	6.69	-56		393	
1450					12.19	0.339	7.14	-120		297	
1454					12.76	0.329	7.21	-122		149	
1459					12.89	0.338	7.32	-132		156	
1503					12.96	0.333	7.39	-131		101	
1506					13.04	0.330	7.42	-130		75.8	
1509					12.90	0.336	7.43	-128		50	
1513					12.83	0.339	7.41	-127		42	
1518					12.88	0.347	7.41	-126		31	

1. Pump dial setting (for example: hertz, cycles/min, etc).
2. µSiemens per cm(same as µmhos/cm)at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Depth to water: 1.68
Depth of well: ~~15.87~~ 22.63

EXAMPLE (Minimum Requirements) Page ____ of ____

Well PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Location (Site/Facility Name) Eltings Corner, New Paltz, NY
Well Number #7 Date 12/23/08
Field Personnel S. Finch
Sampling Organization Kleinfelder
Identify MP

Depth to ____ / ____ of screen
(below MP) top bottom
Pump Intake at (ft. below MP) ____
Purging Device; (pump type) Peristaltic

Clock Time 24 HR	Water Depth below MP ft	Pump Dial [1]	Purge Rate ml/min	Cum. Volume Purged liters	Temp. °C	Spec. Cond. [2] µS/cm	pH	ORP/ Eh [3] mv	DO mg/L	Turb-idity NTU	Comments
1530					6.31	0.372	6.70	-47		151	
1542					8.29	0.370	6.62	-50		48	
1548					9.72	0.366	6.75	-64		17	
1553					10.11	0.363	6.80	-69		35	
1557					10.39	0.362	6.83	-69		13	
1601					10.39	0.360	6.84	-67		8	
1605					10.48	0.355	6.83	-67		9	

1. Pump dial setting (for example: hertz, cycles/min, etc).
2. µSiemens per cm(same as µmhos/cm)at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Depth to WATER: 1.66
Depth of well: 15.61

EXAMPLE (Minimum Requirements) Page ___ of ___

Well PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Location (Site/Facility Name) Eltings Corner, New Paltz, NY
Well Number 8 Date
Field Personnel S. Finch
Sampling Organization Klein Felder
Identify MP

Depth to (below MP) ___ / ___ of screen (top / bottom)
Pump Intake at (ft. below MP)
Purging Device; (pump type) peristaltic

Clock Time 24 HR	Water Depth below MP ft	Pump Dial [1]	Purge Rate ml/min	Cum. Volume Purged liters	Temp. °C	Spec. Cond. [2] µS/cm	pH	ORP/ Eh [3] mv	DO mg/L	Turb-idity NTU	Comments
1838					5.22	0.401	6.82	-44		96	
1843					7.55	0.382	6.790	-48		92	
1847					7.92	0.396	6.82	-51		52	
1853					8.00	0.399	6.81	-55		30	
1859					8.03	0.400	6.83	-56		23	
1905					8.14	0.400	6.87	-58		23	
1910					8.12	0.398	6.85	-54		20	

1. Pump dial setting (for example: hertz, cycles/min, etc).
2. µSiemens per cm(same as µmhos/cm)at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Depth to water 0.5 feet
Depth of well 13.28

EXAMPLE (Minimum Requirements) Page ___ of ___

Well PURGING-FIELD WATER QUALITY MEASUREMENTS FORM

Location (Site/Facility Name) Eltings Corner, New Paltz, NY
Well Number 9 Date 12/23/08
Field Personnel S. FINCH
Sampling Organization Kleinfelder
Identify MP

Depth to ___ / ___ of screen (below MP) top bottom
Pump Intake at (ft. below MP) ___
Purging Device; (pump type) peristaltic

Clock Time 24 HR	Water Depth below MP ft	Pump Dial [1]	Purge Rate ml/min	Cum. Volume Purged liters	Temp. °C	Spec. Cond. [2] µS/cm	pH	ORP/ Eh [3] mv	DO mg/L	Turb-idity NTU	Comments
17:39					3.43	0.429	6.76	-51		218	
1744					8.74	0.379	6.77	-60		50	
1749					9.30	0.376	6.85	-67		35	
1753					9.47	0.376	6.90	-68		33	
1758					9.56	0.371	6.92	-68		26	
1802					9.59	0.376	6.92	-68		26	

1. Pump dial setting (for example: hertz, cycles/min, etc).
2. µSiemens per cm(same as µmhos/cm)at 25 °C.
3. Oxidation reduction potential (stand in for Eh).

Depth to water 1.39
Depth of well 14.89

APPENDIX C

ANALYTICAL DATA PACKAGE

(included as attached CD)

APPENDIX D

TOTAL ORGANIC CARBON
ANALYTICAL DATA PACKAGE

Adirondack Environmental Services, Inc.

Experience is the solution

314 North Pearl Street ♦ Albany, New York 12207
(800) 848-4983 ♦ (518) 434-4546 ♦ Fax (518) 434-0891

March 10, 2009

Chris DeRoberts
Central Hudson Gas & Electric
cderoberts@cenhud.com
Poughkeepsie, NY 12601

TEL: (845) 486-5734
FAX: (845) 486-5952

Work Order No: 090227017
PO#: 24969

RE: Elting's RFI

Dear Chris DeRoberts:

Adirondack Environmental Services, Inc received 6 samples on 2/27/2009 for the analyses presented in the following report.

There were no problems with the analyses and all associated QC met EPA or laboratory specifications, except if noted.

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

Christopher Hess
QA Manager

ELAP#: 10709
AIHA#: 100307

CC:
Kleinfelder

Qualifiers:	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits
	J - Analyte detected below quantitation limits,Estimated	R - RPD outside accepted recovery limits
	B - Analyte detected in the associated Method Blank	T - Tentitively Identified Compound-Estimated Conc.
	X - Value exceeds Maximum Contaminant Level	E - Value above quantitation range

CLIENT: Central Hudson Gas & Electric
Project: Elting's RFI

LabWork Order: 090227017
PO#: 24969

Lab SampleID: 090227017-001 **Collection Date:** 2/26/2009
Client Sample ID: Outfall +10 (0-0.5) **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON LLOYD KAHN						Analyst: **PL**
Total Organic Carbon	41000	100		µg/g-dry	1	3/9/2009

Lab SampleID: 090227017-002 **Collection Date:** 2/26/2009
Client Sample ID: Outfall +10 (0.5-1.0) **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON LLOYD KAHN						Analyst: **PL**
Total Organic Carbon	21200	100		µg/g-dry	1	3/9/2009

Lab SampleID: 090227017-003 **Collection Date:** 2/26/2009
Client Sample ID: Outfall +20 (0-0.5) **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON LLOYD KAHN						Analyst: **PL**
Total Organic Carbon	11000	100		µg/g-dry	1	3/9/2009

Lab SampleID: 090227017-004 **Collection Date:** 2/26/2009
Client Sample ID: Outfall +20 (0.5-1.0) **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON LLOYD KAHN						Analyst: **PL**
Total Organic Carbon	15300	100		µg/g-dry	1	3/9/2009

Qualifiers:
ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits,Estimated
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc.
E - Value above quantitation range

Adirondack Environmental Services, Inc

Date: *10-Mar-09*

CLIENT: Central Hudson Gas & Electric
Project: Elting's RFI

LabWork Order: 090227017
PO#: 24969

Lab SampleID: 090227017-005 **Collection Date:** 2/26/2009
Client Sample ID: Outfall +30 (0-0.5) **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON LLOYD KAHN						Analyst: **PL**
Total Organic Carbon	28500	100		µg/g-dry	1	3/9/2009

Lab SampleID: 090227017-006 **Collection Date:** 2/26/2009
Client Sample ID: Outfall +30 (0.5-1.0) **Matrix:** SOIL

Analyses	Result	PQL	Qual	Units	DF	Date Analyzed
TOTAL ORGANIC CARBON LLOYD KAHN						Analyst: **PL**
Total Organic Carbon	25500	100		µg/g-dry	1	3/9/2009

Qualifiers:

ND - Not Detected at the Reporting Limit
J - Analyte detected below quantitation limits,Estimated
B - Analyte detected in the associated Method Blank
X - Value exceeds Maximum Contaminant Level
S - Spike Recovery outside accepted recovery limits
R - RPD outside accepted recovery limits
T - Tentitively Identified Compound-Estimated Conc
E - Value above quantitation range

Adirondack Environmental Services, Inc.

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314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

A full service analytical research laboratory offering solutions to environmental concerns

CHAIN OF CUSTODY RECORD

AES Work Order # 090227017

Client Name:	Address:	
Central Hudson	284 South Ave Poughkeepsie	
Send Report To:	**Project Name (Location)**	**Samplers: (Names)**
Chris DeRoberts	Eltings RFI - TOC	STEVEN FINCH
Client Phone No:	**Client Fax No:**	**PO Number:**
845 486-5734		

Samplers: (Signature) Steven Finch

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.		Sample Type: Matrix	Comp	Grab	Number of Cont's	Analysis Required
001	OUTFALL 10 (0-0.5)	2/26/09	1530	A					TOC
002	OUTFALL 10 (0.5-1.0)		1530	A					
003	OUTFALL 20 (0-0.5)		1520	A					
004	OUTFALL 20 (0.5-1.0)		1520	A					
005	OUTFALL 30 (0-0.5)		1510	A					
006	OUTFALL 30 (0.5-1.0)		1510	A					
				A					
				A					
				A					
				A					
				A					
				A					
				A					
				A					

Shipment Arrived Via:
FedEx UPS Client AES Other:_____

CC Report To / Special Instructions/Remarks:
send copy of results to Klenkeldor

Turnaround Time Request:
☐ 1 Day ☐ 3 Day ☒ Normal
☐ 2 Day ☐ 5 Day

Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Steven Finch		
Relinquished by: (Signature)	Received by: (Signature)	Date/Time
Relinquished by: (Signature)	Received for Laboratory by:	Date/Time
	Jack Basel	2-27-09 9:58 AM

Temperature	Properly Preserved	Received Within Holding Times
Ambient or (Chilled) 4°C	(Y) N	(Y) N
Notes:_____	Notes:_____	Notes:_____

WHITE - Lab Copy YELLOW - Sampler Copy PINK - Generator Copy

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314 North Pearl Street • Albany, New York 12207 • (518) 434-4546 • Fax (518) 434-0891

TERMS, CONDITIONS & LIMITATIONS

All service rendered by the **Adirondack Environmental Services, Inc.** are undertaken and all rates are based upon the following terms:

(a) Neither **Adirondack Environmental Services, Inc.,** nor any of its employees, agents or sub-contractors shall be liable for any loss or damage arising out of **Adirondack Environmental Services, Inc.'s** performance or nonperformance, whether by way of negligence or breach of contract, or otherwise, in any amount greater than twice the amount billed to the customer for the work leading to the claim of the customer. Said remedy shall be the sole and exclusive remedy against **Adirondack Environmental Services, Inc.** arising out of its work.

(b) All claims made must be in writing within forty-five (45) days after delivery of the **Adirondack Environmental Services, Inc.** report regarding said work or such claim shall be deemed or irrevocably waived.

(c) **Adirondack Environmental Services, Inc.** reports are submitted in writing and are for our customers only. Our customers are considered to be only those entities being billed for our services. Acquisition of an **Adirondack Environmental Services, Inc.** report by other than our customer does not constitute a representation of **Adirondack Environmental Services, Inc.** as to the accuracy of the contents thereof.

(d) In no event shall **Adirondack Environmental Services, Inc.,** its employees, agents or sub-contractors be responsible for consequential or special damages of any kind or in any amount.

(e) No deviation from the terms set forth herein shall bind **Adirondack Environmental Services, Inc.** unless in writing and signed by a Director of **Adirondack Environmental Services, Inc.**

(f) Results pertain only to items analyzed. Information supplied by client is assumed to be correct. This information may be used on reports and in calculations and **Adirondack Environmental Services, Inc.** is not responsible for the accuracy of this information.

(g) Payments by credit card are subject to a 3% additional charge.