

**FINAL  
SITE CHARACTERIZATION  
REPORT  
ACE CLEANERS SITE  
SITE NO. 8-28-133**

**WORK ASSIGNMENT NO. D004434-33**

**Prepared for:**

**New York State Department of Environmental Conservation  
Albany, New York**

**Prepared by:**

**MACTEC Engineering and Consulting, PC  
Portland, Maine**

**MACTEC No. 3612092135**

**JUNE 2010**

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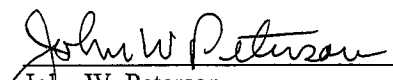
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JUNE 2010

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## GLOSSARY OF ACRONYMS AND ABBREVIATIONS

1,1-DCE	1,1-Dichloroethene
1,2-DCE	1,2-Dichloroethene
ASTM	American Standards of Testing and Measurements
bgs	below ground surface
cis-1,2-DCE	cis-1,2-Dichloroethene
Con-Test	Con-Test Analytical Laboratories
DUSR	Data Usability Summary Report
EDR	Environmental Data Resources, Inc.
°F	degrees Fahrenheit
IDW	investigation-derived waste
MACTEC	MACTEC Engineering and Consulting, P.C.
mg/kg	milligrams per kilogram
msl	mean sea level
NYCRR	New York Codes, Rules, and Regulations
NYS	New York State
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	State of New York Department of Health
PCE	tetrachloroethene
PID	photoionization detector

## GLOSSARY OF ACRONYMS AND ABBREVIATIONS (CONTINUED)

QAPP	Quality Assurance Program Plan
QC	Quality Control
SC	Site Characterization
SCGs	standards, criteria, or guidance
SCOs	Soil Cleanup Objectives
Site	Ace Cleaners Site
SWQG	Surface Water Quality Guidance
TCE	Trichloroethylene
TCL	Target Compound List
TICs	Tentatively Identified Compounds
trans-1,2-DCE	trans-1,2-Dichloroethene
µg/L	micrograms per liter
µg/m <sup>3</sup>	micrograms per cubic meter
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
VC	vinyl chloride
VOC	volatile organic compound
WA	Work Assignment

## 1.0 INTRODUCTION

MACTEC Engineering and Consulting, P.C. (MACTEC), is submitting this Data Summary Report to the New York State Department of Environmental Conservation (NYSDEC). This Report addresses the Site Characterization (SC) at the Ace Cleaners site (Site) in the Village of Brockport, Monroe County New York (Figure 1.1). This Report was prepared in response to Work Assignment (WA) No. D004434 (NYSDEC, 2009a), and in accordance with the April 2005 Superfund Standby Contract No. D004434 between the NYSDEC and MACTEC.

The Ace Cleaners site, Site No. 8-28-133, is currently listed as a potential hazardous waste site, or “P” site, by the NYSDEC, because insufficient information exists to determine whether wastes were disposed of at the site and whether, if present, those wastes pose a potential significant threat to public health or the environment (New York State (NYS), 2006).

The purpose of the SC is to provide information to be used by the NYSDEC to reclassify the site to one of the following categories:

Class 2	Hazardous waste sites presenting a significant threat to public health or the environment; defined by the NYSDEC as sites that had a release(s) resulting in violation of the NYSDEC environmental quality standards and guidelines.
Class 3	Hazardous waste sites not presenting a significant threat to public health or the environment.
Delist	Sites where hazardous waste disposal is not documented.

To complete its reclassification, the NYSDEC requires information to establish the following:

- The existence of documented hazardous waste disposal, as defined in Title 6 of the New York Codes, Rules, and Regulations (NYCRR) Part 371 (NYS, 1999a).
- The Site's significance with respect to the threat it poses to public health and the environment as defined in 6 NYCRR Part 375 (NYS, 2006).
- Identification of contaminant source.

MACTEC collected reclassification documentation and is presenting it to the NYSDEC in this report so it can recommend follow up action for the site (i.e., reclassify, delist, or perform additional investigation).

During Task 1 of WA No. D003826-29, MACTEC conducted a search of state and county site records, and performed a site inspection to develop information necessary for reclassification or delisting. The information collected is presented in Section 2 of this document. Task 1 activities did not develop adequate data on which to base a delist or reclassification recommendation. Therefore, additional field investigations were conducted to develop the required data.

Section 3 of this report presents the scope of work completed for the field investigations. Section 4 of this report presents the results of the field investigation and Section 5 of the report presents conclusions.

Resources used to prepare this report include: (1) information provided in the WA, (2) appropriate guidelines in the NYSDEC DER-10 Guidance (NYSDEC, 2010), and (3) results of previous investigations.

## **2.0 SITE BACKGROUND AND PHYSICAL SETTING**

May 2, 2006, MACTEC personnel reviewed available records from the NYSDEC office in Albany, New York, and visited the Village of Brockport. Information was also collected from the Site owner by the NYSDEC. As part of the review, MACTEC ordered a copy of an Environmental Data Resources, Inc. (EDR) report which provides a listing of federal and state governmental information pertaining to potential and documented environmental impacts, both at the Site and within the American Standards of Testing and Measurements (ASTM) recommended search radii. Complete lists of recommended ASTM record searches for standard due diligence requirements are included in the EDR report provided under separate cover. This information was reviewed to support a Site classification, and to help prepare the scope of work for the SC field investigations. The information collected from these sources is summarized below.

### **2.1 SITE LOCATION**

Ace Cleaners is located at 4626 South Lake Road in an area zoned as retail/commercial in the Village of Brockport, Monroe County, New York (Figure 1.1). The Ace Cleaners property consists of approximately 1.1 acres and contains a one-story building, a paved parking area (west side), and a dirt drive (east side). The east side of the Site property is undeveloped and consists mostly of trees.

Commercial properties border the north (Gas station), south (Auto Parts Store), and western sides of the property (Video Store, former Filling Station). Residential properties border the site to the East. Forested property and an unnamed stream are located between Ace Cleaners and the residential properties to the east.

### **2.2 SITE HISTORY**

According to the EDR-City Directory, the location has been a dry cleaning facility since at least 1967. Site use prior to 1967 is unknown; however the building was observed on a 1958 aerial photo. The dry cleaner is abandoned, and no operations are occurring at the Site (NYSDEC, 2009b).

## **2.3 PREVIOUS INVESTIGATIONS**

A site investigation was conducted in 2005 by NYSDEC's Environmental Enforcement to confirm allegations that waste water containing dry cleaning solvents (tetrachloroethene [PCE]) were discharged to a sump inside the building and to the ground behind the facility. Based on the results of this investigation, a soil removal effort excavated approximately 225 cubic feet of soil impacted with PCE. Confirmation soil sample results indicate additional soil characterization was needed; therefore the site was turned over to the Hazardous Waste Remediation Group.

The property owner signed a consent order with the NYSDEC in the fall of 2006 to investigate the presence of chlorinated solvents in site media above regulatory criteria. Investigations were never completed and the Site was referred to the State Superfund program for the completion of the site's remedial program.

## **2.4 PHYSICAL SETTING**

### **Topography**

The Site is located within the Village of Brockport, NY (Figure 1.1), at approximately 561 feet above mean sea level (msl). The topography slopes down towards Lake Ontario, located about 11 miles to the North, at an elevation of near 245 feet above msl. The topography rises slightly to the south of the site, reaching a small ridge at an elevation of approximately 800 feet msl in 0.8 miles.

The topography to the east and west of the Site is relatively consistent with the Site elevation and has the same general slope down to the north (United States Geological Survey, 1978).

### **Climate**

The climate of the area is characterized by moderately warm summers and cold winters. Mean monthly temperatures range from 24 degrees Fahrenheit (°F) in January to 71°F in July. Average annual precipitation is 34 inches. Average annual snowfall is 96 inches (National Climatic Data Center, 2004).



## **Surface Water Hydrology**

Surface drainage from the site generally follows the topography, flowing toward low areas and then infiltrating into the ground. Rainwater from the paved sections of the site flows to storm drains located on South Lake Road and Sweden Lane. Surface water on the eastern portion of the Site flows to a small unnamed stream. The unnamed stream flows north and eventually becomes Brockport Creek, a Class C Stream. Brockport Creek flows to the northeast, joining Salmon Creek approximately 9.5 miles northeast of the Site, and eventually into Braddock Bay of Lake Ontario approximately 14.3 miles northeast of the Site.

## **Groundwater Hydrology**

Lake Ontario is the regional groundwater discharge area. Some local groundwater may discharge into small streams prior to arrival at Lake Ontario. Groundwater at the Site was noted during the SC investigation to be present at approximately five feet below ground surface (bgs), or approximately 554 feet above msl. Groundwater in the vicinity of the site is interpreted to flow north-northeast, towards Lake Ontario. Additional groundwater information based on the field investigation is presented in Section 4.

## **Geology**

Overburden at the site are mapped as Mb, or made land and are assumed to consist of fill material (U.S. Department of Agriculture, 1973). Overburden logged as part of the field program consisted primarily of silts and sands, with some gravel lenses noted. In addition, a clay layer was noted in boring GW-5 from approximately 6.5 to 12 feet bgs. This clay layer was not noted in the other borings.

The average depth to bedrock in the Brockport area is 14 feet bgs (Leggette and Gould, 1935). Although depth to bedrock was not confirmed during the field program, assumed bedrock based on Geoprobe refusal ranged from 8.5 feet bgs at GW-08 (548.5 feet above msl) to 17 feet bgs at GW-2 (538.5 feet bgs. Geoprobe refusal and assumed bedrock was noted at approximately 13 feet bgs (555 feet above msl) in the rear (east side) of the Ace Cleaners building. Bedrock in the vicinity of

the site is mapped as Sm; Upper Ordovician Medina Group Queenstown Formation; consisting primarily of sandstones. The site is in the vicinity of the contact with the Clinton Group which lies to the South. The Clinton Group is Lower Silurian in age and consists of limestones, dolostones, shales and sandstones (Richard and Fisher, 1970).

## **Site Walkover**

In May, 2006 the MACTEC Site lead, Chuck Staples and the NYSDEC project manager (PM), Matthew Dunham conducted a walkover of the Site area.

The site walkover consisted of viewing the Ace Cleaners property (from the outside), and the surrounding neighborhood to assess possible contamination sources and the logistical concerns for the field program. MACTEC personnel documented the walkover with photographs (Appendix A).

Visible sources of contamination (e.g., leaking drums) were not observed. Detailed inspections of potential sources (i.e., site soils and the interior sump and/or potential floor drains) were not conducted during the site walkover.

## **2.5 FILE REVIEW**

MACTEC reviewed files from various state and local agency offices to develop information to support a reclassification or delisting, and to help prepare the scope of work for future the SC field investigations. In addition, the EDR report was reviewed for relevant background information.

## **2.6 SUMMARY OF DATA RECORDS SEARCH AND ASSESSMENT FINDINGS**

Under federal and state regulations a solid waste may be regulated as a hazardous waste if it is a material included in one of the United States Environmental Protection Agency's (USEPA) or the NYSDEC's lists of hazardous wastes. If a material is regulated because of its inclusion on a federal or state list, it is commonly referred to as a "listed hazardous waste." A waste may also be regulated under the Resource Conservation and Recovery Act as a "characteristic hazardous waste" if it exhibits one of the characteristics of toxicity, corrosivity, reactivity, or flammability.

Results of previous sampling and analysis of the confirmation soil samples taken after excavation of discharged waste water indicated the potential for chlorinated solvents (PCE) in groundwater. Spent chlorinated solvents not originating from household sources, including PCE are included on both the USEPA's and the NYSDEC's lists of hazardous wastes. Under 6 NYCRR Part 371.4(a) (1), these spent solvents constitute hazardous waste from non-specified sources. Disposal of these chlorinated solvents has been confirmed by available analytical results from the site, but the source area had not been characterized.

As defined by 6 NYCRR Part 375, significant threat can be established by documenting a contravention of environmental standards. Soil, surface water and groundwater are the only media for which NYS has promulgated standards. Under NYS Water Quality Regulations (6 NYCRR Parts 701) the state has set numeric standards that are the maximum concentration of compounds in groundwater and surface water that protect public health and/or the environment (NYS, 1999b). Under 6 NYCRR Part 375, the state has set numeric standards for the maximum concentration of compounds in soil that protect public health and/or the environment (NYS, 2006).

Limited analytical data had been collected previously from the Site, and no groundwater data had been collected and therefore it was not known if additional source areas are present and/or if the Site poses a significant threat. The purpose of the SC investigation was to:

- collect the data necessary to verify the likelihood of uncontrolled waste disposal,
- determine if potential contamination is located on the Site and is migrating offsite, and
- provide sufficient information to allow the NYSDEC to re-classify the site.

### **3.0 SCOPE OF WORK**

To reclassify the Site, the NYSDEC requires data documenting hazardous waste disposal as set forth in 6 NYCRR Part 371, and the potential significant threat to human health and the environment as defined by 6 NYCRR Part 375. Because data necessary to determine if potential contamination present in Site media are migrating off-site and pose a potential significant threat to human health and the environment were not available in federal and state files reviewed during Task 1, additional field investigations were performed as described below. Task 3 activities included the Field Investigation (there is no scoped Task 2 for this project). The objective of Task 3 activities was to determine, if possible, whether potential onsite volatile organic compound (VOC) contamination is migrating offsite. Task 4 is the preparation and distribution of this SC Data Summary Report.

#### **3.1 TASK 3 - FIELD INVESTIGATIONS**

The following subsections describe the activities conducted during the field investigation portion of the Site SC. The field investigation was conducted in accordance with the specifications presented in the Quality Assurance Program Plan (QAPP) (MACTEC, 2007) and the site specific QAPP, included as Appendix A to the Site Work Plan (MACTEC 2009). Off-site laboratory analyses was performed by Con-Test Analytical Laboratories (Con-Test), a New York State Department of Health (NYSDOH) approved laboratory, in accordance with the NYSDEC Analytical Services Protocols (NYSDEC, 2005).

##### **3.1.1 General Field Activities**

General field activities, including mobilization, health and safety, and decontamination, are described in the following subsections.

### **3.1.1.1 Mobilization**

Upon receiving the NYSDEC authorization to begin fieldwork, MACTEC and its subcontractors mobilized to the Site and began the field exploration program on November 2, 2009.

Prior to commencing work, a field team orientation meeting was held on-site with MACTEC personnel and subcontractors to familiarize field workers with site history, health and safety requirements, equipment calibration procedures, and other field procedures.

### **3.1.1.2 Health and Safety**

The field investigation activities were conducted at Level D personal protection. Work was conducted in accordance with the Site specific health and safety plan and no health and safety incidence were recorded.

### **3.1.1.3 Decontamination**

Sampling methods and equipment for this field program were chosen to minimize investigation derived wastes (IDW) and minimize possibility of cross contamination. Disposable sampling equipment was used as much as practical to minimize decontamination time and water disposal. Non disposable sampling equipment was decontaminated before and after the collection of each sample.

Non disposable sampling equipment was decontaminated by 1) scrubbing the sample collection equipment with potable water and Liquinox, rinsing with potable water, rinsing with deionized water, and then allowing the equipment to air dry. Decontamination fluids were released on-site to the ground surface in the area of decontamination, so as to allow the liquids to infiltrate into the soil and not run off-site.

### **3.1.1.4 Investigation Derived Wastes**

The method of disposing IDW generated during this SC is described in the following paragraphs.

**Personal Protective Equipment.** Used disposable equipment and protective clothing was double bagged in polyethylene trash bags, sealed with twist ties, and disposed of as non-hazardous refuse.

**Well Purge Water.** Purge water was released on-site to the ground surface in the area of well/boring, so as to allow the liquids to infiltrate into the soil and not run off-site.

**Drill Cuttings.** Geoprobe<sup>®</sup> soil cuttings were used as backfill for the borings at the approximate interval from which they were extracted. Remaining soils were spread evenly on the ground surface in unpaved areas of the Site in the general vicinity of the boring from which they were extracted.

### **3.1.2 Existing Monitoring Well Sampling**

Monitoring wells located at the Former Sunoco site, located west of the Site across Lake Street were proposed to be sampled in the SC Work Plan (MACTEC, 2009). During the Site field work, it was noted that the wells had been paved over and may have been abandoned. Based on discussions with the NYSDEC PM, it was decided that it would not be practical to cut the new pavement to determine if the wells were still in place.

### **3.1.3 Surface Water/Sediment Sampling**

To characterize environmental conditions downgradient of the site, three locations were chosen for surface water and sediment sampling along the unnamed stream that crosses the eastern edge of the Site (Figure 3.1). The sample locations, labeled on Figure 3.1 as SW-1 to SW-3, were from upgradient, at, and downgradient of the Site. Samples were collected starting with the most downstream location (SW-3), and working up-stream. At each location, surface water samples were collected first, followed by sediment samples. In some of the locations, samples were collected through a storm grate. Surface water and sediment samples were sent to Con-Test and analyzed for Target Compound List (TCL) VOCs using USEPA Method 8260. In addition, sediment samples were analyzed for total organic carbon via USEPA Method 415.1. Laboratory analysis included Category B deliverables.

### **3.1.4 Floor Sump Sampling**

Access to the inside of the Site building was not available; therefore, samples were not collected from interior floor drains or sumps. One sample was collected from a hose noted to be present outside the Site building to determine if the hose was used to drain potential VOC containing waste water to exterior locations.

### **3.1.5 Geoprobe® Borings and Sampling**

Field investigation activities included the completion of 19 Geoprobe® borings, the collection and analysis of groundwater, soil, and soil gas samples, and the installation of microwells. The purpose of the activities was to provide groundwater data for comparison to NYS Class GA Groundwater Quality Standards set forth under 6 NYCRR Parts 700-705 (NYS, 1999b), soil data for comparison to Soil Cleanup Objectives set forth under 6 NYCRR Part 375 (NYS, 2006), and to assist the NYSDEC in evaluating significant threat to public health and the environment as defined by 6 NYCRR Part 375 (NYS, 2006). Soil sample analyses were also used to confirm, if possible, a source of chlorinated solvents. Soil gas sample results were used to evaluate whether VOCs present in soil and/or groundwater are migrating towards occupied buildings via vapor migration.

MACTEC used a Geoprobe® sampling device to collect groundwater, soil, and soil gas samples to identify potential chlorinated solvents. The Geoprobe® pushes and/or hammers rods and probe tips into the subsurface for sample collection. MACTEC completed fifteen exterior borings for the collection of 28 groundwater samples (plus quality control [QC]) and five soil samples (plus QC). In addition, four Geoprobe® borings were completed for the collection of four soil vapor samples.

MACTEC worked closely with the NYSDEC, the neighboring property owners, and utility companies to obtain access to the exploration locations. Boring locations are shown on Figure 3.1. Locations were chosen to evaluate groundwater conditions upgradient, at, and downgradient of the site building and the previous soil removal action.

**Soil Sampling.** Soil samples were collected using a four-foot long 2 inch diameter core sampler with an acrylic liner for the collection of discrete subsurface soil samples. Soil samples were collected continuously from the ground surface to refusal, which varied in depth from 8.5 to 17.5

feet below ground surface. Photoionization Detector (PID) headspace readings were used to screen soil samples for the presence of VOCs as each soil sample was removed from the sample collection tube. Samples were described using the Unified Soil Classification System. The sample description and classification, VOC headspace reading, and boring observations were recorded on the Field Data Record (Included in Appendix B). Based on the PID readings and physical evidence such as color or odor five unsaturated soil samples from the Site property were submitted to an off-site laboratory for analysis. Samples exhibiting the highest PID readings and physical evidence of contamination were selected for analysis. Soil samples were shipped to an off-site laboratory for analyses of TCL VOCs using USEPA Method 8260, including calculation of percent moisture. Off-site laboratory analysis included Category B deliverables.

**Groundwater Sampling.** Groundwater samples were collected using a small diameter stainless steel wire wound screen that was exposed to the aquifer, after being pushed to the desired depth interval. A check valve was used for the collection of discrete groundwater samples. One tubing volume of water was purged and if sufficient groundwater flow was available, one set of parameters including temperature, conductivity, pH, and turbidity were collected before sampling. VOC samples were collected at a low purge rate (approximately 100 milliliters per minute) to minimize potential volatilization.

To assess vertical extent of contamination, groundwater samples were collected from two locations in each boring, the water table and at refusal (assumed to be top of rock), if possible. Location GW-13 was not completed due to access issues, and only one groundwater sample was obtained from locations GW-8 and GW-14. Groundwater samples were shipped to an off-site laboratory for analyses for VOCs by USEPA Method 8260. Off-site laboratory analysis included Category B deliverables.

**Microwell Installation.** To determine groundwater flow direction at the Site, four Geoprobe® borings, GW-2, GW-8, GW-12, and GW-14, were completed as microwells. Microwell locations are shown in Figure 3.1. Microwells were constructed with schedule 40 polyvinyl chloride, with 10 foot lengths of 0.01-inch machine slotted well screens, with the exception of GW-8, which was constructed with a 5 foot screen length due to boring refusal at 8.5 feet bgs. The well screens were set with approximately two feet of screen above the water table to determine water table elevations and create a potentiometric map. The wells were constructed with a # 0 sand pack to one foot



above the screen, and a bentonite seal to the ground surface. The wells were completed with a locking cap and a six inch flush mount cover. The wells were developed for twenty minutes with a peristaltic pump.

**Soil Vapor Sampling.** Based on proximity to nearby residences and/or businesses, and discussions with the NYSDEC, four soil vapor samples were collected to evaluate the potential vapor migration of contaminants from the groundwater (Figure 3.1). Soil vapor samples were collected using a Geoprobe<sup>®</sup> sampling device.

The Geoprobe<sup>®</sup> rods were pushed to between 3.5 and four feet bgs to collect samples just above the water table.

Soil gas samples were collected from the Geoprobe<sup>®</sup> points using the Geoprobe<sup>®</sup> PRT system, which allows for the collection of a discrete soil vapor sample at depth using Teflon lined tubing. The soil vapor samples were collected with six-liter SUMMA<sup>®</sup>-type canisters with flow valves (set to approximately 30 minutes per sample). Flow into the canisters was less than 0.2 liters per minute, as requested by the NYSDOH. Samples were sent to Con-Test for VOC analysis by USEPA Method TO-15.

### **3.1.6 Optional Sub-Slab Soil Vapor Sampling**

Access to the Site building was not available; therefore, sub-slab soil vapor samples were not collected from inside the Site building.

### **3.1.7 Site Survey**

Upon completion of field investigation activities, MACTEC's survey subcontractor, Popli Design group, completed a survey of the Site and surrounding area and created a base map. The Site survey is included in Appendix C. Horizontal locations were tied to the NYS Plane Coordinate System using North American Datum of 1983. The site plan provides horizontal locations of relevant Site features, including surrounding homes and businesses at a scale of 1 inch to 50 feet. Relevant visible features include, but are not limited to structures, buildings, roads, fences, new

monitoring wells, underground utilities, fire plugs, and power poles. The survey also includes a certified boundary survey of the Site property.

Vertical elevations of the four new micro wells were tied to msl, North Atlantic Vertical Datum of 1988, and measured to an accuracy of 0.01 feet. Horizontal well locations are accurate to 0.1 foot. Horizontal measurements also included the Geoprobe® sample points.

The base map was also used to locate the surface water and sediment sample points with field tape measurements.

## **4.0 DATA ASSESSMENT**

This section presents results of the laboratory analyses for soil, groundwater, surface water, sediment, and soil vapor samples collected during Task 3, as well as results of the water level surveys.

### **4.1 ANALYTICAL RESULTS**

Soil and groundwater analytical results were compared to appropriate standards, criteria, or guidance (SCGs). There are no exterior soil vapor standards or guidance values, but if detected concentrations exceeded the NYSDOH sub-slab soil vapor guidance values recommended for mitigation, these concentrations were noted as potential concern. Reported concentrations of individual analytes indicating contravention of standards or guidelines are summarized in the following sections, and noted on Tables 4.1 to 4.5.

A Data Usability Summary Report (DUSR) was completed in accordance with the NYSDEC's Guidance for the Development of DUSRs (NYSDEC, 2002). This report and complete analytical results, including tentatively identified compounds (TICS), are presented in Appendix D. TICS were not evaluated as part of the DUSR.

Based on laboratory or data usability review, some of the data was qualified with a J, R, and/or D. Compounds were qualified J if the concentration listed was an estimated value, which was less than the specified minimum reporting limit but greater than the instrument detection limit. Compounds qualified J were analyzed for and determined to be present in the sample and the mass spectrum of the compound met the identification criteria of the method.

A number of groundwater results for acetone were qualified R indicated that the compound was rejected due to laboratory calibrations being out of acceptable range.

Compounds qualified D indicated that the compound was reported from an analytical run that required a dilution due to concentrations greater than the highest calibration standard.

Analytical results were compared to the SCGs described below.

**Soil Samples.** Analytical results are compared to the 6 NYCRR Part 375 Soil Cleanup Objectives (SCOs) for Unrestricted Use (NYS, 2006).

**Sediment samples.** Off-site analytical results are compared to the NYSDEC Division of Fish, Wildlife and Marine Resources Technical Guidance for Screening Contaminated Sediment (NYSDEC, 1999).

**Groundwater and Surface Water Samples.** Analytical results are compared to the NYS Class GA Groundwater Quality Standards and the Class C Surface Water Quality Standards from 6 NYCRR Parts 700-705 (NYS, 1999b).

**Soil Vapor Samples.** There are currently no SCOs for concentrations of compounds in external soil vapor. Soil vapor samples were collected to determine whether this environmental medium is contaminated, characterize the nature and extent of contamination, and identify possible sources of the contamination.

#### 4.1.1 Soil Sample Results

A summary of target VOCs detected in the five soil samples is presented in Table 4.1. Complete analytical results are included in Appendix D. Boring locations are shown on Figure 3.1 (GS locations are same as GW locations). Boring locations for soil sampling targeted the reported area of the historic contaminated soil removal to determine if residual contamination remained above the SCO's for unrestricted use. Chlorinated solvents (primarily PCE) were detected in borings GS-4 (13 milligrams per kilogram [mg/kg]), GS-5 (40 mg/kg), and GS-15 (35 mg/kg), at concentrations above unrestricted use SCO of 1.3 mg/kg. VOCs were not detected in the remaining two samples from borings GS-3 and GS-16.

Trichloroethylene (TCE) (0.56 mg/kg), cis-1,2-dichloroethene (cis-1,2-DCE) (0.94 mg/kg), and vinyl chloride (VC) (0.88 mg/kg) were also detected in boring GS-15 at concentrations above their unrestricted use SCO of 0.47 mg/kg, 0.25 mg/kg, and 0.03 mg/kg respectfully. These compounds are breakdown products of PCE and were not detected in the other borings.

Several fuel related VOCs were also detected in borings GS-4 and GS-15, but at concentrations below their respective SCO for unrestricted use.

#### **4.1.2 Groundwater Sample Results**

A summary of target VOCs detected in groundwater samples collected is presented in Table 4.2. Maximum detections of PCE, TCE, cis-1,2-DCE, and VC in each boring are presented on Figure 4.1. Complete analytical results are included in Appendix D.

PCE was detected in groundwater at 12 of the 15 Geoprobe® boring locations. Detected concentrations ranged from 24 micrograms per liter (µg/L) (GW-1) to 67,000 µg/L (GW-15), in comparison to the NYS Class GA groundwater standard for PCE of 5 µg/L (see Table 4.2). PCE was not detected in the up-gradient locations GW-8, GW-9 and GW-10.

TCE was detected in groundwater at 12 of the 15 Geoprobe® boring locations. Detected concentrations ranged from 11 µg/L (GW-3) to 2,600 µg/L (GW-15), in comparison to the NYS Class GA groundwater standard for TCE of 5 µg/L (see Table 4.2). TCE was not detected in the up-gradient locations GW-8, GW-9 and GW-10.

Cis-1,2-DCE was detected in groundwater at 12 of the 15 Geoprobe® boring locations. Detected concentrations ranged from 18 µg/L (GW-7) to 4,200 µg/L (GW-15), in comparison to the NYS Class GA groundwater standard for cis-1,2-DCE of 5 µg/L (see Table 4.2). Cis-1,2-DCE was not detected in the up-gradient locations GW-8, GW-9 and GW-10.

VC was detected in groundwater at five of the 15 Geoprobe® boring locations. Detected concentrations ranged from 2.8 µg/L (GW-12) to 2,800 µg/L (GW-15), compared to the NYS Class GA groundwater standard for VC of 2 µg/L. VC was not detected in the up-gradient locations GW-8, GW-9 and GW-10.

Additional VOCs were detected in groundwater but less frequently. These included 1,1-dichloroethene (1,1-DCE), trans-1,2-dichloroethene (trans-1,2-DCE), and 1,2,4-trimethylbenzene (Table 4.2).

Several potentially fuel related TICs were also detected in the VOC groundwater samples collected. TICs are reported in Appendix D.

In addition to the groundwater samples, acetone was detected at a concentration of 51 µg/L and PCE was detected at a concentration of 1.2 µg/L in a water sample collected from a hose noted to be present outside the Site building. The sample was collected to evaluate if the hose may have been used to transport PCE contaminated water from inside the dry cleaner to the outside.

#### **4.1.3 Surface Water Sample Results**

A summary of target VOCs detected in surface water samples is presented in Table 4.3. Complete analytical results are included in Appendix D. Sample locations are shown on Figure 3.1.

PCE was detected in the surface water sample at sample location SW-3 at a concentration of 1.2 µg/L, above the NYS Class C Surface Water Quality Guidance (SWQG) value for PCE of 1 µg/L.

Cis-1,2-DCE was detected in the surface water sample at sample location SW-2 at a concentration of 5.4 µg/L and at the sample at sample location SW-3 at a concentration of 3.4 µg/L. There is no established NYS Class C SWQG values for cis-1,2-DCE.

#### **4.1.4 Sediment Sample Results**

A summary of target VOCs detected in sediment samples is presented in Table 4.4. Complete analytical results are included in Appendix D. Sample locations are shown on Figure 3.1.

VOC target compounds were not detected in the sediment samples.

#### **4.1.5 Soil Vapor Sample Results**

A summary of target VOCs detected in soil vapor samples is presented in Table 4.5. Complete analytical results are included in Appendix D.

Although the NYSDOH has promulgated guidance values for soil vapor for several chlorinated solvents, these guidance values are only applicable when evaluating sub-slab soil vapor samples in relation to indoor air concentrations, and not exterior soil vapor samples. The Geoprobe soil vapor samples were therefore not compared to guidance values.

The highest concentrations of chlorinated solvents were detected in the immediate vicinity of the Ace Cleaners building at GV-1 and GV-4. PCE was detected at all four sample locations at concentrations ranging from 21 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) to 110,000  $\mu\text{g}/\text{m}^3$ . TCE was detected in three soil vapor samples (GV-1, GV-2, and GV-4) at concentrations ranging from 250  $\mu\text{g}/\text{m}^3$  to 1,700  $\mu\text{g}/\text{m}^3$ . Cis-1,2-DCE was detected in three soil vapor samples (GV-1, GV-2, and GV-3) at concentrations ranging from 130  $\mu\text{g}/\text{m}^3$  to 2,100  $\mu\text{g}/\text{m}^3$ . VC was detected in GV-1 and GV-4 at concentrations of 41,000  $\mu\text{g}/\text{m}^3$  and 5.9  $\mu\text{g}/\text{m}^3$ , respectfully. Concentrations of 1,1-DCE (50  $\mu\text{g}/\text{m}^3$ ) and trans-1,2-DCE (54  $\mu\text{g}/\text{m}^3$ ) were also detected in GV-1.

Several fuel related compounds were also detected in the soil vapor samples (Table 4.5).

## 4.2 GROUNDWATER FLOW

The microwell survey and depth to water measurements were used to evaluate groundwater flow. Microwell survey and water elevation data are presented in Table 4.6. Depth to water across the survey area in November 2009 varied from approximately 3.75 feet bgs to 5.49 feet bgs, and measured groundwater elevations ranged from 548.27 feet above msl in GW-12 to 555.63 feet above msl in GW-8. The groundwater table gradient in November 2009, based on a measured elevation change of 7.4 feet over 370 feet of distance (GW-8 to GW-12), was 0.02 feet/foot. November 2009 interpreted groundwater contours are presented on Figure 4.2. Based on topography, analytical data, and interpreted groundwater contours, groundwater flow is anticipated to be to the northeast, towards the unnamed stream, but there also appears to be a component of flow from the site building to the north and northwest.

Based on elevations of the culvert along the east side of the Site, as well as the detections of chlorinated solvents in the stream running through this culvert, this culvert and stream channel are likely a groundwater discharge location and thus may influence local groundwater flow.

## 5.0 INVESTIGATION FINDINGS

A review of physical and chemical data collected during the SC resulted in the following findings:

- 1) PCE was detected in soil samples collected from the vicinity of the former soil removal action. PCE was detected at concentrations up to 35 mg/kg (location GS-15 at seven to eight feet bgs), compared to the soil cleanup objective for unrestricted use for PCE of 1.3 mg/kg. Based on this information, it appears that the previous soil removal action did not remove all soil contamination above the soil cleanup objectives for unrestricted use.
- 2) PCE was detected at concentrations above its NYS standard of 5 µg/L in groundwater samples from 12 of the 15 Geoprobe boring locations across the Site area. Detected concentration of PCE in groundwater ranged from 24 µg/L to 67,000 µg/L. TCE, a breakdown product of PCE was also detected at concentrations above its NYS standard of 5 µg/L in groundwater samples from 12 of the 15 Geoprobe boring locations. Detected concentration of TCE in groundwater ranged from 11 µg/L to 2,600 µg/L. The four samples with the highest detections of PCE and TCE were collected from borings (GW-4, GW-5, GW-15, and GW-16) located in the area adjacent to and east of the Site building. Several other breakdown products of PCE, including cis-1,2-DCE and Vinyl Chloride were also detected in the groundwater samples. Chlorinated solvents were not detected in the three up gradient sample locations, GW-8, GW-9, and GW-10. Based on this data, it appears that chlorinated solvent contamination (primarily PCE), has migrated from soil to groundwater and is migrating off-site in groundwater at concentrations above NYS groundwater standards. The downgradient extent of this contamination is not known.
- 3) Based on groundwater measurements collected, topography, and groundwater VOC concentrations, groundwater at the Site and vicinity is interpreted to flow primarily to the northwest, with some flow from the Site to the north and northeast. Hydraulic gradients from GW-8 to GW-12 are relatively flat (0.02 feet/foot).
- 4) PCE was detected in the four soil vapor samples collected, with the samples collected nearest the Site building containing the highest PCE concentrations. The highest concentrations of PCE (110,000 µg/m<sup>3</sup>), TCE (1,700 µg/m<sup>3</sup>), cis-1,2-DCE (2,100 µg/m<sup>3</sup>), and vinyl chloride (41,000 µg/m<sup>3</sup>) were detected in the sample from location GV-1, located adjacent to the south side of the dry cleaner building. These concentrations are high enough for there to be a potential that soil vapor intrusion is occurring at the Site buildings and at buildings adjacent to the south side of the Site.

**Data Gaps.** Based on the SC, the following data gaps still exist:

- 1) The aerial and vertical extent of soil contamination above SCOs for unrestricted use in the vicinity of the former removal action has not been defined.
- 2) The source of the chlorinated solvent concentrations detected in the groundwater west of the site building has not been confirmed. Although this could be the result of soil contamination located on the east side of the Site building, no soil sampling was conducted



below the Site building. It is not known if potential PCE contamination exists in soil below the Site building's concrete slab (i.e. from cracks in the building floor or historic floor drains).

- 3) The vapor intrusion pathway at the site and adjacent buildings has not been evaluated.
- 4) The downgradient extent of groundwater contamination above NYS standards has not been defined.

## 6.0 REFERENCES

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## **TABLES**

**Table 4.1: VOCs in Soil**

	Location	GS-3		GS-3		GS-4		GS-5		GS-15		GS-16	
	Sample Date	11/3/2009		11/3/2009		11/3/2009		11/3/2009		11/3/2009		11/3/2009	
	Sample ID	ACGS0030601XD		ACGS0030601XX		ACGS0040601XX		ACGS0051001XX		ACGS0150701XX		ACGS0160701XX	
	Sample Depth	6-7		6-7		6-7		10-11		7-8		7-8	
	QC Code	FD		FS		FS		FS		FS		FS	
Param Name	Criteria	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,2,4-Trimethylbenzene	NA	0.0017	UJ	0.0014	UJ	<b>0.98</b>		0.2	U	<b>0.28</b>		0.0019	U
1,3,5-Trimethylbenzene	8.4	0.0017	UJ	0.0014	UJ	<b>0.2</b>		0.2	U	0.2	U	0.0019	U
Cis-1,2-Dichloroethene	0.25	0.0017	U	0.0014	U	0.19	U	0.2	U	<b>0.94</b>		0.0019	U
n-Butylbenzene	12	0.0087	UJ	0.0071	UJ	<b>0.31</b>		0.2	U	0.2	U	0.0094	UJ
Tetrachloroethene	1.3	0.0017	U	0.0014	U	<b>13</b>		<b>40</b>	D	<b>35</b>	D	0.0019	U
Trichloroethene	0.47	0.0017	U	0.0014	U	0.19	U	0.2	U	<b>0.56</b>		0.0019	U
Vinyl chloride	0.02	0.0087	UJ	0.0071	UJ	0.38	UJ	0.4	UJ	<b>0.88</b>	J	0.0094	UJ
Percent Solids	NA	<b>86</b>		<b>86.9</b>		<b>87</b>		<b>85.4</b>		<b>87.2</b>		<b>84.4</b>	

**Notes:**

Results in milligrams per kilogram (mg/Kg)

Only detected compounds shown.

Percent Solids in percent (%)

Depth in feet below ground surface

Samples analyzed for VOCs by EPA Method 8260B

QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected at a concentration  
greater than the reporting limit

J = Estimated value

D = Result from dilution run

Criteria - 6 NYCRR 375 Soil Cleanup Objectives  
for unrestricted use.

NA = Not Applicable

Detections are indicated in **BOLD**

**Highlighted results exceed criteria**

**Table 4.2: VOCs in Groundwater**

Location Sample Date Sample ID Sample Depth QC Code	Exterior Hose		GW-1		GW-1		GW-2		GW-2		GW-3		
	11/3/2009		11/2/2009		11/2/2009		11/2/2009		11/2/2009		11/3/2009		
	AC-Exterior Hose-2009		ACGW0010801XX		ACGW0011601XX		ACGW0020801XX		ACGW0021601XX		ACGW0030601XX		
	NA		8		16		8		16		6		
	FS		FS		FS		FS		FS		FS		
Parameter	Criteria	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1-Dichloroethene	5	1	U	1	U	1	U	1	U	50	UD	1.8	J
1,2,4-Trimethylbenzene	5	1	U	1	U	1	U	1	U	50	UD	1	UJ
Acetone	50*	51	J	50	U	50	U	50	U	2500	U	50	UJ
Cis-1,2-Dichloroethene	5	1	U	21		15		12		52	D	34	J
Tetrachloroethene	5	1.2		24	J	1	U	56	J	1800	JD	140	JD
trans-1,2-Dichloroethene	5	1	U	2		1	U	1	U	50	UD	1	UJ
Trichloroethene	5	1	U	36	J	1	U	6	J	54	JD	11	J
Vinyl chloride	2	2	U	2	U	5.4		2	U	100	UD	65	J

**Notes:**

Results in microgram per liter (µg/L)  
Only detected compounds shown.  
Samples analyzed for VOCs by EPA Method 8260B  
NA = Not Applicable

**QC Code:**

FS = Field Sample  
FD = Field Duplicate

**Qualifiers:**

U = Not detected at a concentration  
greater than the reporting limit  
J = Estimated value  
D = Result from dilution run  
R = Result rejected during data validation

Criteria = Values from Technical and Operational  
Guidance Series (TOGS) 1.1.1, Ambient Water  
Quality Standards and Guidance values and  
Groundwater Effluent Limitations (NYSDEC, 1998).

Criteria is New York State Standard unless \*

\* Criteria is NYSDEC Guidance Value

Detections are indicated in **BOLD**

**Highlighted results exceed criteria**

**Table 4.2: VOCs in Groundwater**

Location Sample Date Sample ID Sample Depth QC Code	GW-3		GW-4		GW-4		GW-4		GW-5		GW-5		
	11/3/2009		11/3/2009		11/3/2009		11/3/2009		11/3/2009		11/3/2009		
	ACGW0031201XX		ACGW0040601XD		ACGW0040601XX		ACGW0041201XX		ACGW0050601XX		ACGW0051201XX		
	12		6		6		12		6		12		
	FS		FD		FS		FS		FS		FS		
Parameter	Criteria	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1-Dichloroethene	5	100	UD	100	UJD	100	U	100	U	100	UD	100	UD
1,2,4-Trimethylbenzene	5	100	UD	100	UJD	100	U	100	U	100	UD	100	UD
Acetone	50*		R	5000	UJD		R		R		R		R
Cis-1,2-Dichloroethene	5	100	UD	330	JD	320	D	1000	D	200	D	100	UD
Tetrachloroethene	5	790	D	7500	JD	7500	D	20000	JD	27000	JD	2600	D
trans-1,2-Dichloroethene	5	100	UD	100	UJD	100	UD	100	UD	100	UD	100	UD
Trichloroethene	5	100	UD	570	JD	560	D	820	D	300	D	100	U
Vinyl chloride	2	200	UJD	360	UJD	280	UJD	700	UJD	200	UJD	200	UJD

**Notes:**

Results in microgram per liter (µg/L)  
Only detected compounds shown.  
Samples analyzed for VOCs by EPA Method 8260B  
NA = Not Applicable

**QC Code:**

FS = Field Sample  
FD = Field Duplicate

**Qualifiers:**

U = Not detected at a concentration  
greater than the reporting limit  
J = Estimated value  
D = Result from dilution run  
R = Result rejected during data validation

Criteria = Values from Technical and Operational  
Guidance Series (TOGS) 1.1.1, Ambient Water  
Quality Standards and Guidance values and  
Groundwater Effluent Limitations (NYSDEC, 1998)

Criteria is New York State Standard unless \*

\* Criteria is NYSDEC Guidance Value

Detections are indicated in **BOLD**

**Highlighted results exceed criteria**

**Table 4.2: VOCs in Groundwater**

Location Sample Date Sample ID Sample Depth QC Code	GW-6		GW-6		GW-7		GW-7		GW-8		GW-9		
	11/3/2009		11/3/2009		11/2/2009		11/2/2009		11/2/2009		11/2/2009		
	ACGW0060601XX		ACGW0061401XX		ACGW0070501XX		ACGW0071001XX		ACGW0080601XX		ACGW0090601XX		
	6		14		5		10		6		6		
	FS		FS		FS		FS		FS		FS		
Parameter	Criteria	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1-Dichloroethene	5	1	UJ	3.1	J	1	U	10	UD	1	U	1	UJ
1,2,4-Trimethylbenzene	5	1	UJ	1	UJ	1	U	10	UD	1	U	1	UJ
Acetone	50*	50	UJ	50	UJ	50	U	500	U	50	U	50	UJ
Cis-1,2-Dichloroethene	5	31	J	800	JD	18		10	U	1	U	1	UJ
Tetrachloroethene	5	1.4	J	220	JD	240	D	250	JD	1	U	1	UJ
trans-1,2-Dichloroethene	5	24	J	9.2	J	1	U	10	UD	1	U	1	UJ
Trichloroethene	5	1	UJ	96	JD	23	J	11	JD	1	U	1	UJ
Vinyl chloride	2	2	UJ	2	UJ	2	U	20	UD	2	U	2	UJ

**Notes:**

Results in microgram per liter (µg/L)  
 Only detected compounds shown.  
 Samples analyzed for VOCs by EPA Method 8260B  
 NA = Not Applicable

**QC Code:**

FS = Field Sample  
 FD = Field Duplicate

**Qualifiers:**

U = Not detected at a concentration  
 greater than the reporting limit  
 J = Estimated value  
 D = Result from dilution run  
 R = Result rejected during data validation

Criteria = Values from Technical and Operational  
 Guidance Series (TOGS) 1.1.1, Ambient Water  
 Quality Standards and Guidance values and  
 Groundwater Effluent Limitations (NYSDEC, 1998)

Criteria is New York State Standard unless \*

\* Criteria is NYSDEC Guidance Value

Detections are indicated in **BOLD**

**Highlighted results exceed criteria**



**Table 4.2: VOCs in Groundwater**

Location Sample Date Sample ID Sample Depth QC Code	GW-9		GW-10		GW-10		GW-11		GW-11		GW-12		
	11/2/2009		11/4/2009		11/4/2009		11/4/2009		11/4/2009		11/4/2009		
	ACGW0091201XX		ACGW0100601XX		ACGW0101201XX		ACGW0110601XX		ACGW0111601XX		ACGW0120701XX		
	12		6		12		6		16		7		
	FS		FS		FS		FS		FS		FS		
Parameter	Criteria	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1-Dichloroethene	5	1	UJ	1	U	1	U	100	UD	10	UD	1	U
1,2,4-Trimethylbenzene	5	1	UJ	1	U	1	U	100	UD	10	UD	1	U
Acetone	50*	50	UJ	50	U	50	U	5000	UD	500	U	50	U
Cis-1,2-Dichloroethene	5	1	UJ	1	U	1	U	760	D	290	D	54	
Tetrachloroethene	5	1	UJ	1	U	1	U	2000	D	480	D	32	
trans-1,2-Dichloroethene	5	1	UJ	1	U	1	U	100	UD	10	UD	1	U
Trichloroethene	5	1	UJ	1	U	1	U	190	D	98	D	15	
Vinyl chloride	2	2	UJ	2	U	2	U	200	U	20	U	2.8	

**Notes:**

Results in microgram per liter (µg/L)  
Only detected compounds shown.  
Samples analyzed for VOCs by EPA Method 8260B  
NA = Not Applicable  
QC Code:  
FS = Field Sample  
FD = Field Duplicate  
Qualifiers:  
U = Not detected at a concentration  
greater than the reporting limit  
J = Estimated value  
D = Result from dilution run  
R = Result rejected during data validation  
Criteria = Values from Technical and Operational  
Guidance Series (TOGS) 1.1.1, Ambient Water  
Quality Standards and Guidance values and  
Groundwater Effluent Limitations (NYSDEC, 1998)  
Criteria is New York State Standard unless \*  
\* Criteria is NYSDEC Guidance Value  
Detections are indicated in **BOLD**  
**Highlighted results exceed criteria**

**Table 4.2: VOCs in Groundwater**

Location Sample Date Sample ID Sample Depth QC Code	GW-12		GW-12		GW-14		GW-15		GW-15		GW-16		
	11/4/2009		11/4/2009		11/2/2009		11/3/2009		11/3/2009		11/3/2009		
	ACGW0121201XD		ACGW0121201XX		ACGW0141201XX		ACGW0150601XX		ACGW0151101XX		ACGW0161201XX		
	12		12		12		6		11		12		
	FD		FS		FS		FS		FS		FS		
Parameter	Criteria	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1-Dichloroethene	5	1	UJ	1	U	10	UJD	260	D	100	UD	100	UD
1,2,4-Trimethylbenzene	5	1	UJ	1	U	10	UJD	210	D	100	UD	100	UD
Acetone	50*	50	UJ	50	U	500	UJD		R		R		R
Cis-1,2-Dichloroethene	5	96	JD	160	D	36	JD	4200	D	1700	D	280	D
Tetrachloroethene	5	24	J	24		390	JD	67000	JD	25000	JD	9500	JD
trans-1,2-Dichloroethene	5	1	UJ	1	U	10	UJD	100	UD	100	UD	100	UD
Trichloroethene	5	21	J	20		33	JD	2600	D	730	D	250	D
Vinyl chloride	2	2	UJ	2	U	20	UJD	2800	JD	460	UJ	210	JD

**Notes:**

Results in microgram per liter (µg/L)  
 Only detected compounds shown.  
 Samples analyzed for VOCs by EPA Method 8260B  
 NA = Not Applicable  
 QC Code:  
     FS = Field Sample  
     FD = Field Duplicate  
 Qualifiers:  
     U = Not detected at a concentration  
         greater than the reporting limit  
     J = Estimated value  
     D = Result from dilution run  
     R = Result rejected during data validation  
 Criteria = Values from Technical and Operational  
 Guidance Series (TOGS) 1.1.1, Ambient Water  
 Quality Standards and Guidance values and  
 Groundwater Effluent Limitations (NYSDEC, 1998)  
     Criteria is New York State Standard unless \*  
 \* Criteria is NYSDEC Guidance Value  
 Detections are indicated in **BOLD**  
**Highlighted results exceed criteria**

**Table 4.2: VOCs in Groundwater**

Location		GW-16	
Sample Date		11/3/2009	
Sample ID		ACGW0160701XX	
Sample Depth		7	
QC Code		FS	
Parameter	Criteria	Result	Qualifier
1,1-Dichloroethene	5	10	UJD
1,2,4-Trimethylbenzene	5	10	UJD
Acetone	50*	500	UJD
Cis-1,2-Dichloroethene	5	10	UJD
Tetrachloroethene	5	<b>63</b>	JD
trans-1,2-Dichloroethene	5	10	UJD
Trichloroethene	5	10	UJD
Vinyl chloride	2	20	UJD

**Notes:**

Results in microgram per liter (µg/L)  
 Only detected compounds shown.  
 Samples analyzed for VOCs by EPA Method 8260B  
 NA = Not Applicable

**QC Code:**

FS = Field Sample  
 FD = Field Duplicate

**Qualifiers:**

U = Not detected at a concentration  
 greater than the reporting limit  
 J = Estimated value  
 D = Result from dilution run  
 R = Result rejected during data validation

Criteria = Values from Technical and Operational  
 Guidance Series (TOGS) 1.1.1, Ambient Water  
 Quality Standards and Guidance values and  
 Groundwater Effluent Limitations (NYSDEC, 1998)

Criteria is New York State Standard unless \*

\* Criteria is NYSDEC Guidance Value

Detections are indicated in **BOLD**

**Highlighted results exceed criteria**

**Table 4.3: VOCs in Surface Water**

	Location	SW-1		SW-1		SW-2		SW-3	
	Sample Date	11/4/2009		11/4/2009		11/3/2009		11/3/2009	
	Sample ID	ACSW00100001XD		ACSW00100001XX		ACSW00200001XX		ACSW00300001XX	
	QC Code	FD		FS		FS		FS	
Parameter	Criteria	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
Cis-1,2-Dichloroethene	NA	1	U	1	U	<b>5.4</b>		<b>3.4</b>	
Tetrachloroethene	1	1	U	1	U	1	U	<b>1.2</b>	

**Notes:**

Results in microgram per liter (µg/L)

Only detected compounds shown.

Samples analyzed for VOCs by EPA Method 8260B

Criteria = Class C surface waters values from Technical and Operational Guidance Series (TOGS) 1.1.1, Ambient Water Quality Standards and Guidance values and Groundwater Effluent Limitations (NYSDEC, 1998).

QC Code:

FS = Field Sample

FD = Field Duplicate

Qualifiers:

U = Not detected at a concentration greater than the reporting limit

Detections are indicated in **BOLD**

**Highlighted results exceed criteria**

**Table 4.4: VOCs in Sediment**

June 2010  
 Final

Parameter	Location	SD-1		SD-1		SD-2		SD-3	
	Sample Date	11/4/2009		11/4/2009		11/3/2009		11/3/2009	
	Sample ID	ACSD00100001XD		ACSD00100001XX		ACSD00200001XX		ACSD00300001XX	
	Qc Code	FD		FS		FS		FS	
	Criteria	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
VOC Target Compounds	NA	ND		ND		ND		ND	
Total Organic Carbon	NA	36,200		27,110		24,770		22,650	
Percent Solids	NA	80.9		74.1		75.9		81.6	

**Notes:**

Results in milligrams per kilogram (mg/Kg)

Percent Solids in percent (%)

Only detected compounds shown.

Samples analyzed for VOCs by EPA Method 8260B and TOC by Lloyd Kahn Method

QC Code:

FS = Field Sample

FD = Field Duplicate

NA = Not Applicable

ND = Not Detected

**Table 4.5: VOCs in Soil Vapor**

Location Sample Date Sample ID QC Code	GV-1 11/4/2009 ACGV0010401XX FS		GV-2 11/4/2009 ACGV0020401XX FS		GV-3 11/4/2009 ACGV0030401XX FS		GV-4 11/4/2009 ACGV0040401XX FS	
	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
1,1-Dichloroethene	<b>50</b>		4	U	4	U	4	U
1,2,4-Trimethylbenzene	<b>14</b>		4.9	U	4.9	U	<b>10</b>	
1,3,5-Trimethylbenzene	<b>9</b>		4.9	U	4.9	U	4.9	U
1,3-Butadiene	2.2	U	<b>52</b>		<b>150</b>		<b>290</b>	
2-Butanone	<b>44</b>		<b>65</b>		<b>41</b>		<b>82</b>	
2-Hexanone	4.1	U	<b>8.6</b>		4.1	U	4.1	U
4-Methyl-2-pentanone	4.1	U	<b>5.5</b>		4.1	U	4.1	U
Acetone	<b>85</b>		<b>250</b>		<b>170</b>		<b>330</b>	
Benzene	<b>31</b>		<b>18</b>		<b>56</b>		<b>180</b>	
Carbon disulfide	<b>9</b>		<b>10</b>		<b>7.4</b>		<b>57</b>	
Chloroethane	<b>16</b>	J	2.6	UJ	2.6	UJ	2.6	UJ
Chloroform	4.9	U	4.9	U	4.9	U	<b>5.7</b>	
Chloromethane	2.1	U	2.1	U	<b>6.5</b>		<b>33</b>	
Cis-1,2-Dichloroethene	<b>2100</b>		<b>170</b>		4	U	<b>130</b>	
Cyclohexane	<b>36</b>		3.4	U	<b>9.3</b>		<b>27</b>	
Ethanol	<b>37</b>	J	<b>75</b>	J	<b>65</b>	J	<b>100</b>	J
Ethyl benzene	<b>6.1</b>		<b>4.9</b>		<b>6.9</b>		<b>15</b>	
Heptane	<b>420</b>		<b>18</b>		<b>37</b>		<b>120</b>	
Hexane	<b>970</b>		<b>29</b>		<b>69</b>		<b>190</b>	
Propylene	<b>2500</b>	D	<b>290</b>		<b>870</b>		<b>1200</b>	D
Styrene	4.3	U	<b>6.7</b>		<b>5.6</b>		<b>16</b>	
Tetrachloroethene	<b>110000</b>	D	<b>8000</b>	D	<b>21</b>		<b>24000</b>	D
Toluene	<b>57</b>		<b>21</b>		<b>35</b>		<b>100</b>	
trans-1,2-Dichloroethene	<b>54</b>		4	U	4	U	4	U
Trichloroethene	<b>1700</b>		<b>380</b>		5.4	U	<b>250</b>	
Vinyl chloride	<b>41000</b>	D	2.6	U	2.6	U	<b>5.9</b>	
Xylene, m/p	<b>13</b>		8.7	U	<b>11</b>		<b>29</b>	
Xylene, o	<b>7.4</b>		4.3	U	<b>5.9</b>		<b>14</b>	

## Notes:

Only Detected Compounds shown; detections are indicated in **BOLD**

Samples analyzed for VOCs by USEPA Method TO-15.

Results in microgram per cubic meter (µg/m3)

QC Code: FS = Field Sample

## Qualifiers:

U = Not detected at a concentration  
greater than the reporting limit

J = Estimated value

D = Result from dilution run

**Table 4.6: Groundwater Elevations**

<b>Well ID</b>	<b>Northing</b>	<b>Easting</b>	<b>Casing Elevation</b>	<b>Riser Elevation</b>	<b>Depth to Water 11/5/2009</b>	<b>Groundwater Elevation 11/5/2009</b>	<b>Depth to Water 2/2/2010</b>	<b>Groundwater Elevation 2/2/2010</b>
GW-2	1167902.3	1319315.0	559.47	559.14	5.49	553.65	4.76	554.38
GW-8	1167776.6	1319588.2	559.87	559.61	3.98	555.63	NM	NM
GW-12	1168082.8	1319796.6	552.27	552.02	3.75	548.27	3.49	548.53
GW-14	1167901.8	1319510.8	559.57	559.31	5.04	554.27	3.12	556.19

Notes:

Microwells surveyed by Popli Design Group, November 2009

Horizontal Datum is in feet, using NAD 83(CORS) - New York State Plane Coordinate system, west zone

Vertical Elevation Datum is feet above mean sea level, NAVD 88

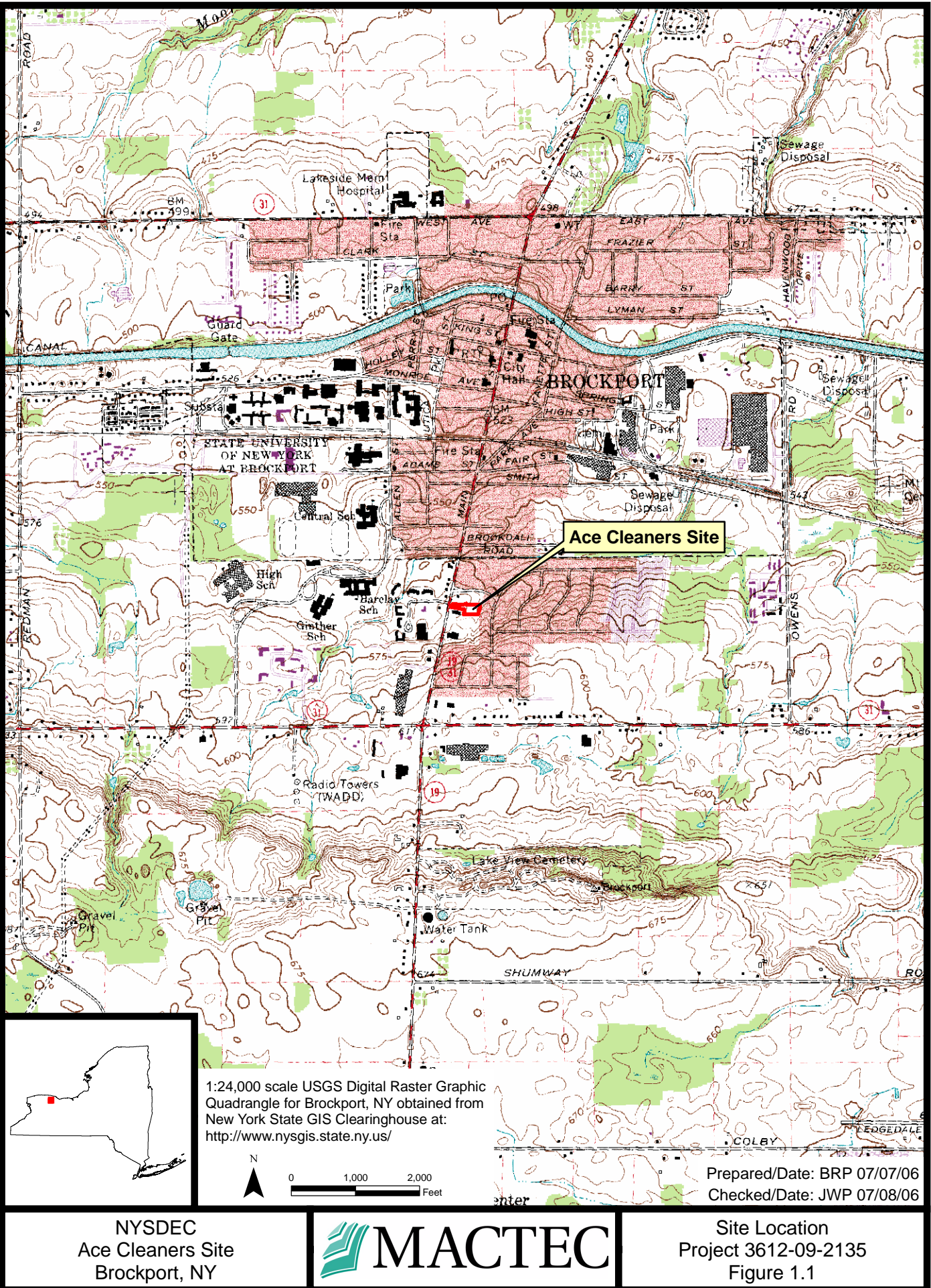
Depth to water measured in feet below top of riser.

Groundwater measurements collected by MACTEC 11/5/2009

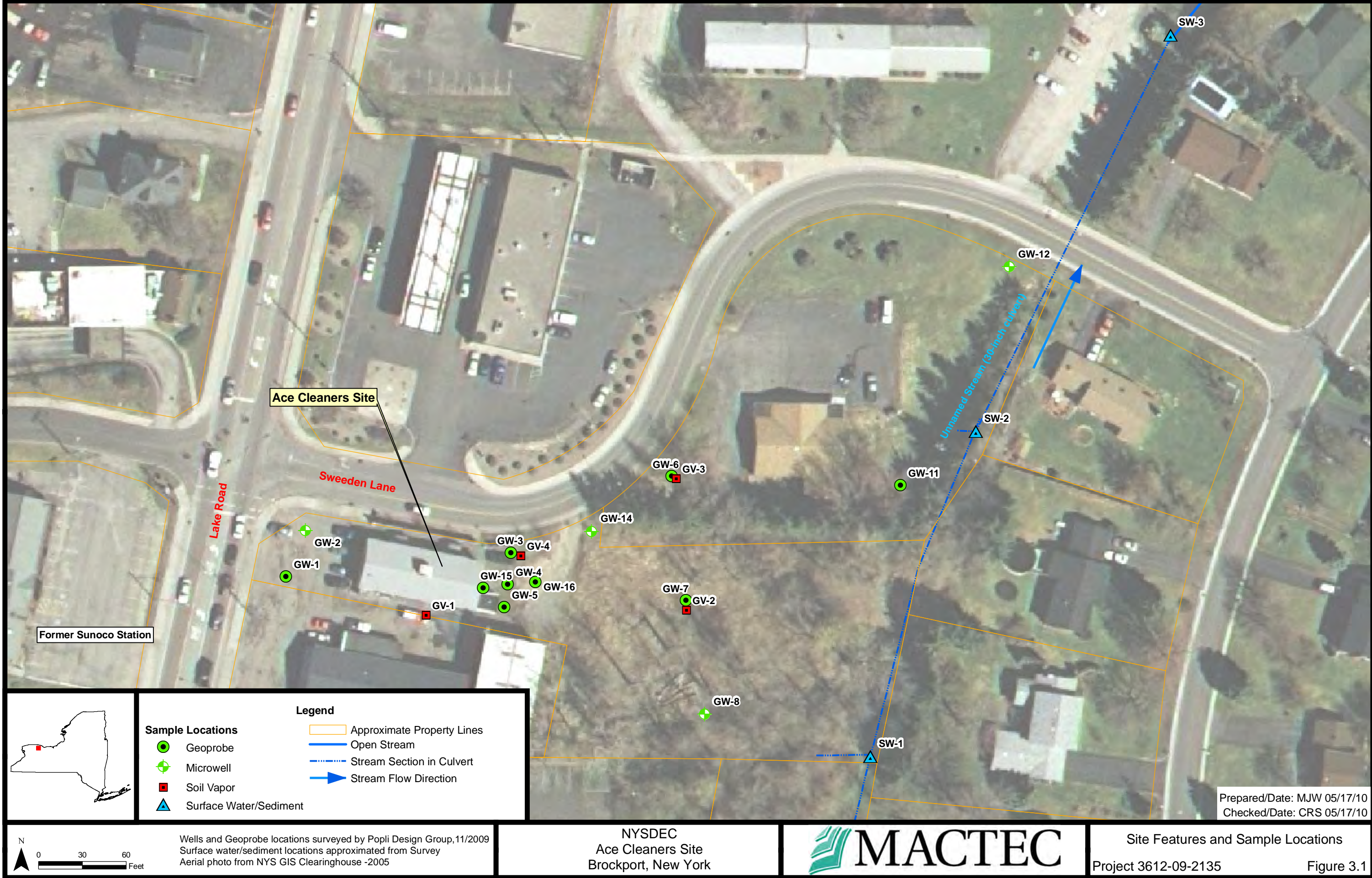
NM = Groundwater measurements not available due to frozen water in riser pipe.

## **FIGURES**

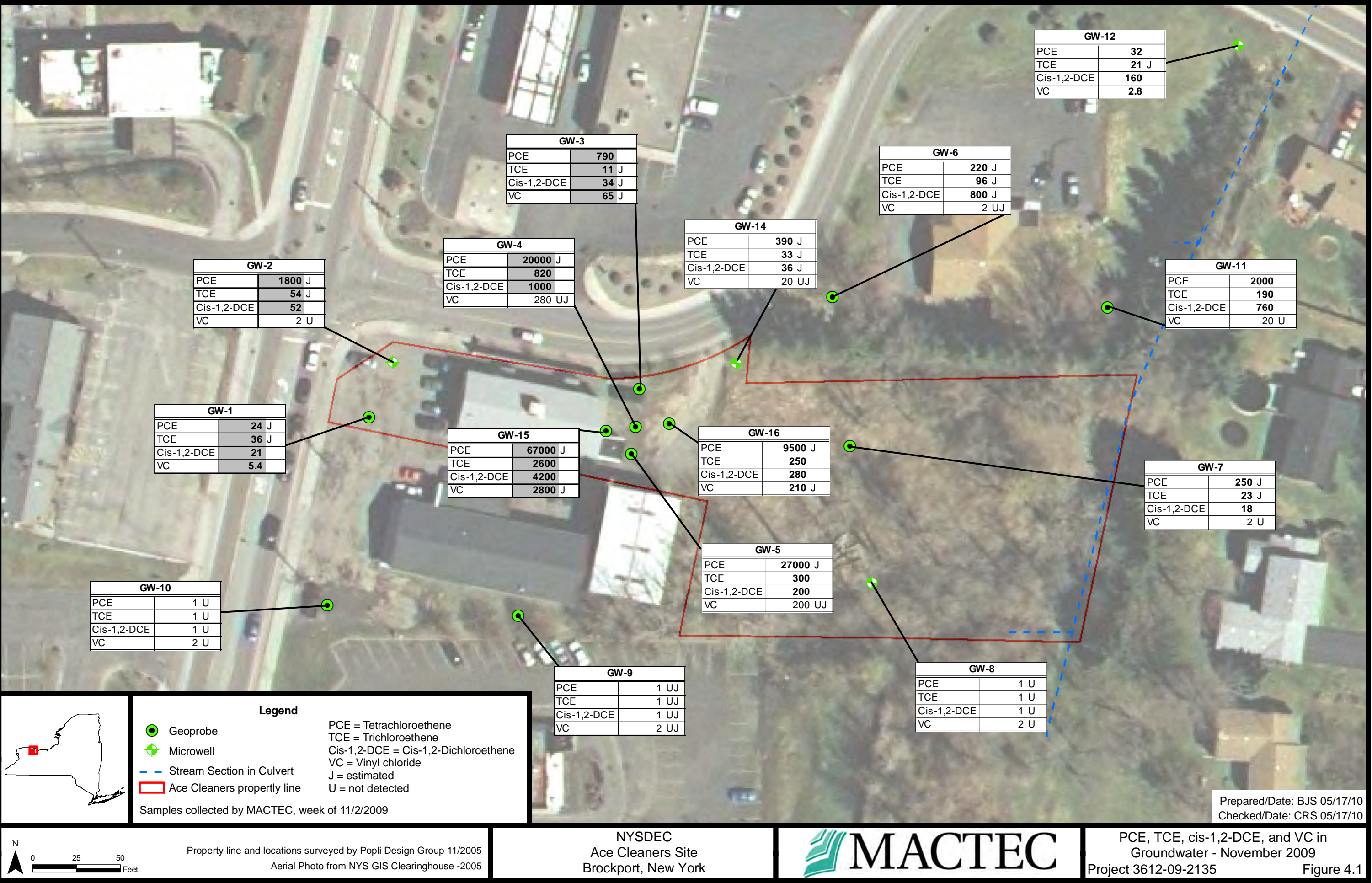




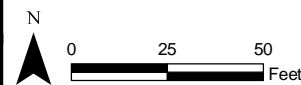








Prepared/Date: BJS 05/17/10  
Checked/Date: CRS 05/17/10



Property line and locations surveyed by Popli Design Group 11/2005  
Aerial Photo from NYS GIS Clearinghouse - 2005

NYSDEC  
Ace Cleaners Site  
Brockport, New York



PCE, TCE, cis-1,2-DCE, and VC in  
Groundwater - November 2009  
Project 3612-09-2135  
Figure 4.1





## **APPENDIX A**

### **SITE PHOTOS**



## ACE CLEANERS SITE PHOTOGRAPHS



Front of Ace Cleaners, looking east.



North Side of Ace Cleaners Building – looking south across Sweden Lane.

### ACE CLEANERS SITE PHOTOGRAPHS



Rear of Ace Cleaners (east side), looking southwest



Rear (east side) of Ace Cleaners Building in area of historic soil removal (PVC in ground are sample points)(photo collected during Site Investigation).



### ACE CLEANERS SITE PHOTOGRAPHS



Sample location SW-1 (culvert on southeast corner of site property) (photo collected during Site Investigation).



SW-3 sample location – outfall of culvert to northeast of Site property (photo collected during Site Investigation).



## **APPENDIX B**

### **FIELD RECORDS**

# INDOOR AIR SAMPLING RECORD

Project Name: Ace Cleaners Client: NYSDEC Location ID: GV-1  
 Project Number: 3612092135 Collector: PJM Date: 11.4.09

## SUMMA Canister Record Information:

SUBSLAB SOIL VAPOR SAMPLE	INDOOR AIR - BASEMENT	INDOOR AIR - FIRST FLOOR	ASSOCIATED AMBIENT
Flow Regulator No: <u>3243</u>	Flow Regulator No:	Flow Regulator No:	Flow Regulator No:
Flow Rate (mL/min): <u>50</u>	Flow Rate (mL/min):	Flow Rate (mL/min):	Flow Rate (mL/min):
Canister Serial No: <u>1443</u>	Canister Serial No:	Canister Serial No:	Canister Serial No:
Start Date/Time: <u>11.4.09 1231</u>	Start Date/Time:	Start Date/Time:	Start Date/Time:
Start Pressure ("Hg): <u>-26</u>	Start Pressure ("Hg):	Start Pressure ("Hg):	Start Pressure ("Hg):
Stop Date/Time: <u>11.4.09 1251</u>	Stop Date/Time:	Stop Date/Time:	Stop Date/Time:
Stop Pressure ("Hg): <u>-4</u>	Stop Pressure ("Hg):	Stop Pressure ("Hg):	Stop Pressure ("Hg):
Sample ID: <u>ACG40010401XX</u>	Sample ID:	Sample ID:	Sample ID:

## Other Sampling Information:

Finished Basement, Crawl Space, Unfinished Basement: <u>—</u>	Story/Level:	Story/Level:	Direction from Building:
Floor Slab Thickness: <u>—</u>	Room:	Room:	Distance from Building:
Potential Vapor Entry Points: <u>—</u>	Potential Vapor Entry Points:	Potential Vapor Entry Points:	Distance from Roadway:
Floor Surface: <u>—</u>	Floor Surface:	Floor Surface:	Ground Surface:
Noticable Odor: <u>None</u>	Noticable Odor:	Noticable Odor:	Noticable Odor:
PID Reading (ppb): <u>32</u>	PID Reading (ppb):	PID Reading (ppb):	PID Reading (ppb):
Intake Depth/Height: <u>3.5'</u>	Intake Height:	Intake Height:	Intake Height Above Ground Surface:
Helium Test Conducted? Breakthrough %: <u>No</u>	Indoor Air Temp:	Indoor Air Temp:	Intake Tubing Used?

Comments/Location Sketch: intake @ 3.5' bgs. Purged 1 L soil gas w/ PID

✓  
 01-27-10



511 Congress Street, Portland, ME 04101

FIGURE 4-18  
 INDOOR AIR SAMPLING RECORD  
 NYSDEC QUALITY ASSURANCE PROJECT PLAN

# INDOOR AIR SAMPLING RECORD

Project Name: Ace Cleaners Client: NYSDEC Location ID: GV-2  
 Project Number: 3612092135 Collector: PSM Date: 11-3-09

## SUMMA Canister Record Information:

SUBSLAB SOIL VAPOR SAMPLE	INDOOR AIR - BASEMENT	INDOOR AIR - FIRST FLOOR	ASSOCIATED AMBIENT
Flow Regulator No: <u>3040</u>	Flow Regulator No:	Flow Regulator No:	Flow Regulator No:
Flow Rate (mL/min): <u>50</u>	Flow Rate (mL/min):	Flow Rate (mL/min):	Flow Rate (mL/min):
Canister Serial No: <u>1431</u>	Canister Serial No:	Canister Serial No:	Canister Serial No:
Start Date/Time: <u>11-3-09 1403</u>	Start Date/Time:	Start Date/Time:	Start Date/Time:
Start Pressure ("Hg): <u>-29</u>	Start Pressure ("Hg):	Start Pressure ("Hg):	Start Pressure ("Hg):
Stop Date/Time: <u>11-3-09 1423</u>	Stop Date/Time:	Stop Date/Time:	Stop Date/Time:
Stop Pressure ("Hg): <u>-8</u>	Stop Pressure ("Hg):	Stop Pressure ("Hg):	Stop Pressure ("Hg):
Sample ID: <u>ACGV00204201XX</u> <i>(PSM)</i>	Sample ID:	Sample ID:	Sample ID:

ACGV0020401XX

## Other Sampling Information:

Finished Basement, Crawl Space, Unfinished Basement	—	Story/Level:		Story/Level:		Direction from Building:	
Floor Slab Thickness:	—	Room:		Room:		Distance from Building:	
Potential Vapor Entry Points:	—	Potential Vapor Entry Points:		Potential Vapor Entry Points:		Distance from Roadway:	
Floor Surface:	—	Floor Surface:		Floor Surface:		Ground Surface:	
Noticable Odor: <u>none</u>		Noticable Odor:		Noticable Odor:		Noticable Odor:	
PID Reading (ppb): <u>12</u>		PID Reading (ppb):		PID Reading (ppb):		PID Reading (ppb):	
Intake Depth/Height: <u>4' bgs</u>		Intake Height:		Intake Height:		Intake Height Above Ground Surface:	
Helium Test Conducted? Breakthrough %: <u>No</u>		Indoor Air Temp:		Indoor Air Temp:		Intake Tubing Used?	

## Comments/Location Sketch:

PRT system. Purged 1 L of soil gas before  
 sample collection w/ PID  
 1 Liter canister

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✓  
 AS  
 01-27-10.

FIGURE 4-18  
 INDOOR AIR SAMPLING RECORD  
 NYSDEC QUALITY ASSURANCE PROJECT PLAN

# INDOOR AIR SAMPLING RECORD

Project Name: Ace Cleaners Client: NYSDEC Location ID: GV-3  
 Project Number: 3612092135 Collector: PJM Date: 11.3.09

(PJM)

## SUMMA Canister Record Information:

SUBSLAB SOIL VAPOR SAMPLE		INDOOR AIR - BASEMENT		INDOOR AIR - FIRST FLOOR		ASSOCIATED AMBIENT	
Flow Regulator No:	3237	Flow Regulator No:		Flow Regulator No:		Flow Regulator No:	
Flow Rate (mL/min):	50	Flow Rate (mL/min):		Flow Rate (mL/min):		Flow Rate (mL/min):	
Canister Serial No:	1889	Canister Serial No:		Canister Serial No:		Canister Serial No:	
Start Date/Time:	11.3.09 1610	Start Date/Time:		Start Date/Time:		Start Date/Time:	
Start Pressure ("Hg):	-30+	Start Pressure ("Hg):		Start Pressure ("Hg):		Start Pressure ("Hg):	
Stop Date/Time:	11.3.09 1630	Stop Date/Time:		Stop Date/Time:		Stop Date/Time:	
Stop Pressure ("Hg):	-8	Stop Pressure ("Hg):		Stop Pressure ("Hg):		Stop Pressure ("Hg):	
Sample ID:	ACGV0030401XX	Sample ID:		Sample ID:		Sample ID:	

## Other Sampling Information:

Finished Basement, Crawl Space, Unfinished Basement	—	Story/Level:		Story/Level:		Direction from Building:	
Floor Slab Thickness:	—	Room:		Room:		Distance from Building:	
Potential Vapor Entry Points:	—	Potential Vapor Entry Points:		Potential Vapor Entry Points:		Distance from Roadway:	
Floor Surface:	—	Floor Surface:		Floor Surface:		Ground Surface:	
Noticable Odor:	none	Noticable Odor:		Noticable Odor:		Noticable Odor:	
PID Reading (ppb):	12	PID Reading (ppb):		PID Reading (ppb):		PID Reading (ppb):	
Intake Depth/Height:	4' hys	Intake Height:		Intake Height:		Intake Height Above Ground Surface:	
Helium Test Conducted? Breakthrough %:	No	Indoor Air Temp:		Indoor Air Temp:		Intake Tubing Used?	

## Comments/Location Sketch:

PRT system - Purged 1 liter of soil gas before sample collection w/ PID

1 liter canister

✓  
GAS  
01-27-10

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FIGURE 4-18  
INDOOR AIR SAMPLING RECORD  
NYSDEC QUALITY ASSURANCE PROJECT PLAN

# INDOOR AIR SAMPLING RECORD

Project Name: Acc Cleaners Client: NYSDEC Location ID: GV-4  
 Project Number: 3612092135 Collector: BM Date: 11.4.09

## SUMMA Canister Record Information:

SUBSLAB SOIL VAPOR SAMPLE	INDOOR AIR - BASEMENT	INDOOR AIR - FIRST FLOOR	ASSOCIATED AMBIENT
Flow Regulator No: <u>3220</u>	Flow Regulator No:	Flow Regulator No:	Flow Regulator No:
Flow Rate (mL/min): <u>50</u>	Flow Rate (mL/min):	Flow Rate (mL/min):	Flow Rate (mL/min):
Canister Serial No: <u>1533</u>	Canister Serial No:	Canister Serial No:	Canister Serial No:
Start Date/Time: <u>11.4.09 1414</u>	Start Date/Time:	Start Date/Time:	Start Date/Time:
Start Pressure ("Hg): <u>-25.5</u>	Start Pressure ("Hg):	Start Pressure ("Hg):	Start Pressure ("Hg):
Stop Date/Time: <u>11.4.09 1434</u>	Stop Date/Time:	Stop Date/Time:	Stop Date/Time:
Stop Pressure ("Hg): <u>-3.5</u>	Stop Pressure ("Hg):	Stop Pressure ("Hg):	Stop Pressure ("Hg):
Sample ID: <u>ACGV0040401XX</u>	Sample ID:	Sample ID:	Sample ID:

## Other Sampling Information:

Finished Basement, Crawl Space, Unfinished Basement: <u>—</u>	Story/Level:	Story/Level:	Direction from Building:
Floor Slab Thickness: <u>—</u>	Room:	Room:	Distance from Building:
Potential Vapor Entry Points: <u>—</u>	Potential Vapor Entry Points:	Potential Vapor Entry Points:	Distance from Roadway:
Floor Surface: <u>—</u>	Floor Surface:	Floor Surface:	Ground Surface:
Noticable Odor: <u>None</u>	Noticable Odor:	Noticable Odor:	Noticable Odor:
PID Reading (ppb): <u>29</u>	PID Reading (ppb):	PID Reading (ppb):	PID Reading (ppb):
Intake Depth/Height: <u>3.5'</u>	Intake Height:	Intake Height:	Intake Height Above Ground Surface:
Helium Test Conducted? Breakthrough %: <u>No</u>	Indoor Air Temp:	Indoor Air Temp:	Intake Tubing Used?

Comments/Location Sketch: Purged 1 L w/ PID.



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✓  
BAS  
01-27-10

FIGURE 4-18  
INDOOR AIR SAMPLING RECORD  
NYSDEC QUALITY ASSURANCE PROJECT PLAN

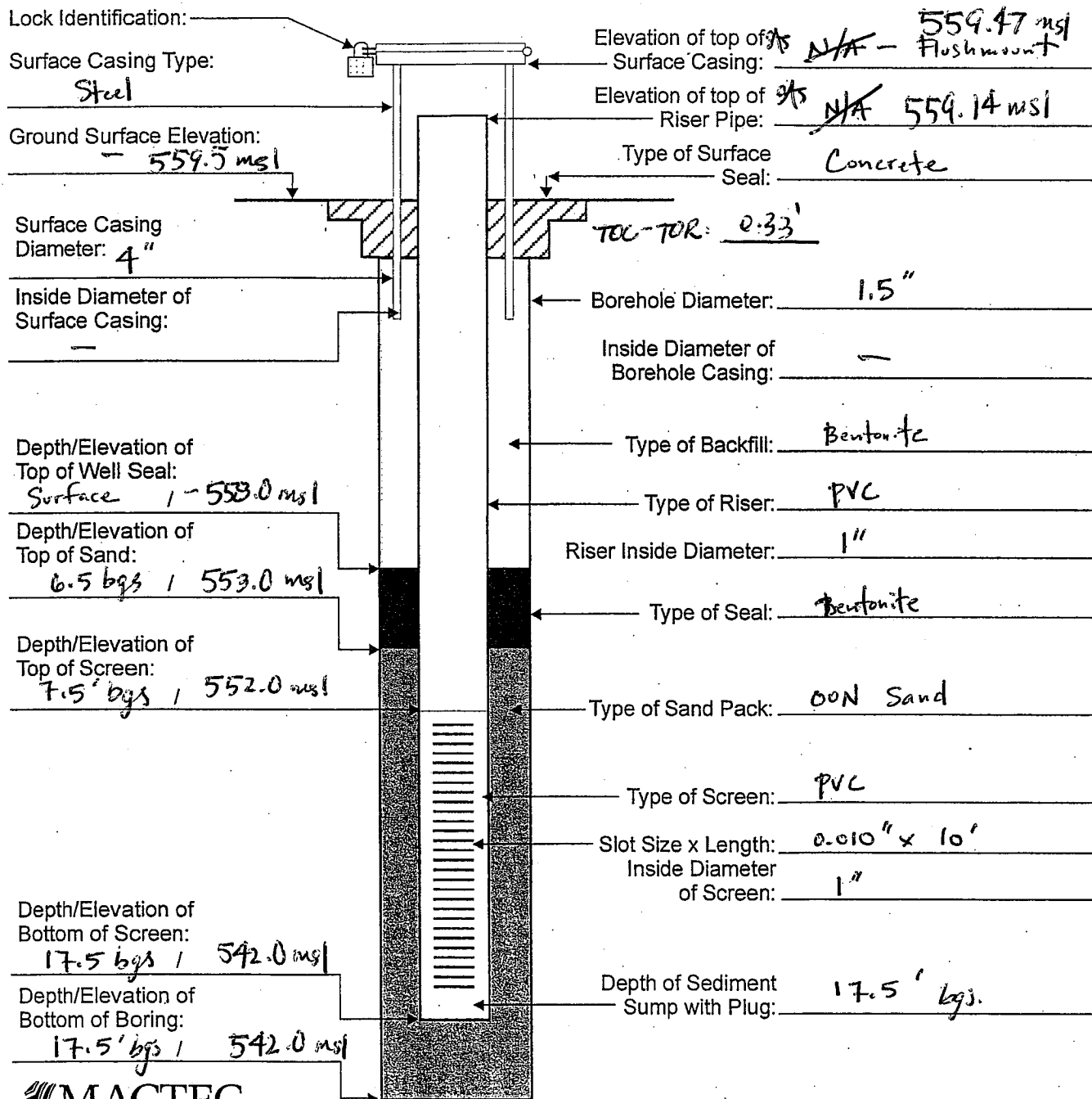
# Overburden Well Construction Diagram

Pressuremeter

Well No.: GW-2  
(13m)

Project No.: 3612 092135		Project Name: Ace Cleaners	
		Project Area: Brockport, NY	
Contractor: Nethridge	Driller: Jeff Schweitzer	Method: Direct Push	
Logged By: PSM		Date Started: 11-2-09	Completed: 11-2-09
Checked By: BAS	Date: 01-27-10	Well Development Date: 11-4-09	

Not To Scale



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# Overburden Well Construction Diagram

Piezometer

Well No.:

(Bm)

GW-8

Project No.: 3612092135

Project Name: Ace Cleaners

Project Area: Brockport, NY

Contractor: Northagle

Driller: Jeff Schwitzer

Method: Direct Push

Logged By: RSM

Date Started: 11.2.09

Completed: 11.2.09

Checked By: BAS

Date: 01-27-10

Well Development Date: 11.4.09

Not To Scale

Lock Identification:

Surface Casing Type:

Steel

Ground Surface Elevation:

- 557.0 msl

Surface Casing Diameter: 4"

Inside Diameter of Surface Casing:

Depth/Elevation of Top of Well Seal: Surface /

Depth/Elevation of Top of Sand: 2.5 bgs / 554.5 msl

Depth/Elevation of Top of Screen: 3.5 bgs / 553.5 msl

Depth/Elevation of Bottom of Screen: 8.5 bgs / 548.5 msl

Depth/Elevation of Bottom of Boring: 8.5 bgs / 548.5 msl

Elevation of top of Surface Casing:

- 559.67 msl

Elevation of top of Riser Pipe:

- 559.61 msl

Type of Surface Seal:

Concrete

TOC - TOR: 0.26

Borehole Diameter:

1.5"

Inside Diameter of Borehole Casing:

-

Type of Backfill:

Bentonite

Type of Riser:

PVC

Riser Inside Diameter:

1"

Type of Seal:

Bentonite

Type of Sand Pack:

00N Sand

Type of Screen:

PVC

Slot Size x Length: 0.010" x 5"

0.010" x 5"

Inside Diameter of Screen:

1"

Depth of Sediment Sump with Plug:

8.5' bgs.

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# Overburden Well Construction Diagram

Piezometer

Well No.: GW-12

Project No.: 3612092135

Project Name: Ace Cleaners

Project Area: Brockport, NY

Contractor: Nottnagle

Driller: Jeff Schweitzer

Method: Direct Push

Logged By: PSM

Date Started: 11-4-09

Completed: 11-4-09

Checked By: BAS

Date: 01-27-10

Well Development Date: 11-4-09

Not To Scale

Lock Identification:

Surface Casing Type:

Steel

Ground Surface Elevation:

552.3 msl

Surface Casing Diameter: 4"

Inside Diameter of Surface Casing:

PSM 4" -

Depth/Elevation of Top of Well Seal:

Surface 1 ~ 552 msl

Depth/Elevation of Top of Sand:

2' bgs 1 550.3 msl

Depth/Elevation of Top of Screen:

3' bgs 1 549.7 msl

Depth/Elevation of Bottom of Screen:

13' bgs 1 539.3 msl

Depth/Elevation of Bottom of Boring:

13' bgs 1 539.3 msl

Elevation of top of Surface Casing:

552.27 msl  
N/A - Flushmount

Elevation of top of Riser Pipe:

552.02 msl

Type of Surface Seal:

Concrete

TOC-TOR: 0.25'

Borehole Diameter:

1.5"

Inside Diameter of Borehole Casing:

-

Type of Backfill:

Bentonite

Type of Riser:

PVC

Riser Inside Diameter:

1"

Type of Seal:

Bentonite

Type of Sand Pack:

00N Sand

Type of Screen:

PVC

Slot Size x Length: 0.010" x 10'

0.010" x 10'

Inside Diameter of Screen:

1"

Depth of Sediment Sump with Plug:

13' bgs

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Portland, ME 04101

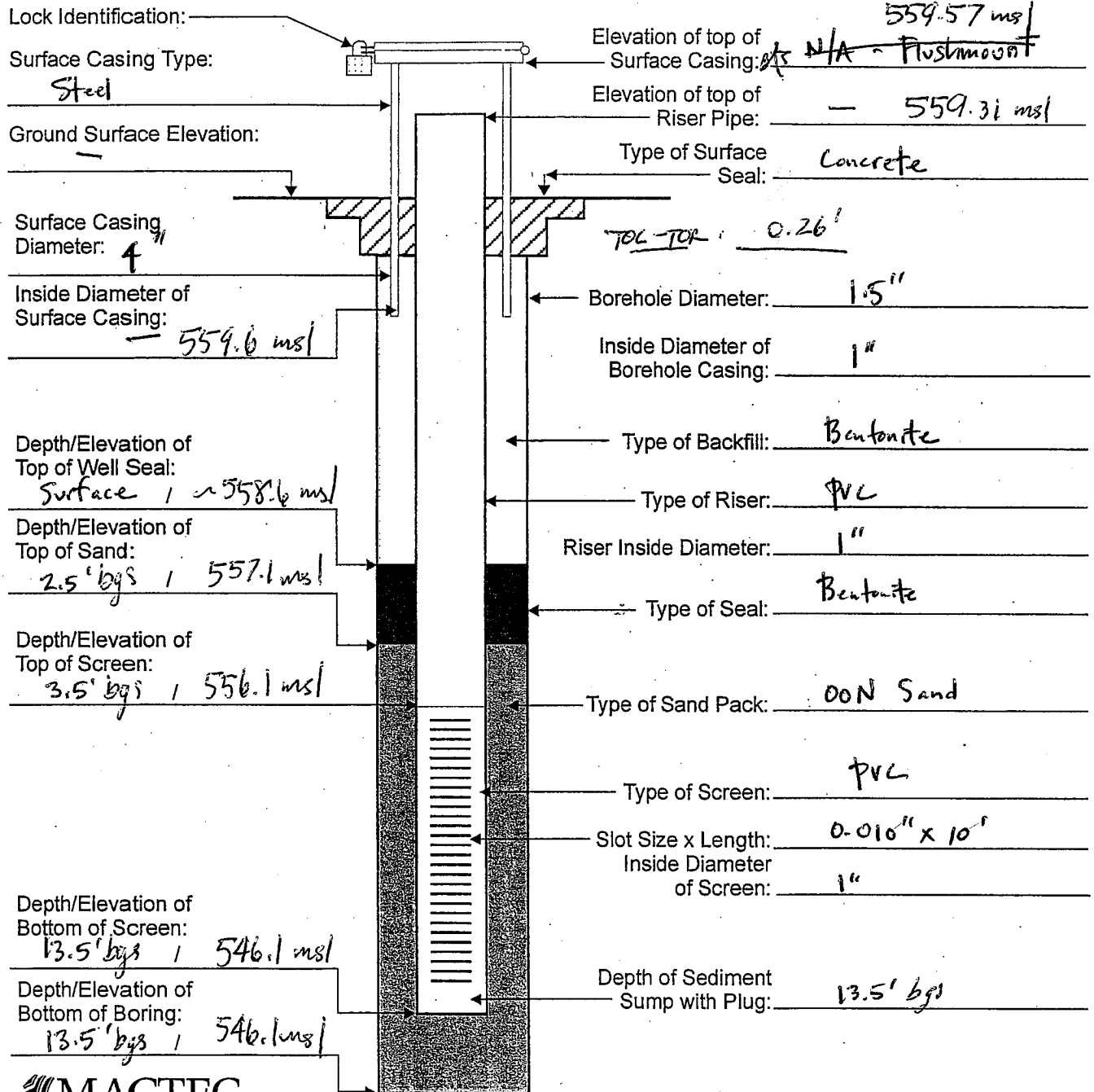


# Overburden Well Construction Diagram

Piezometer  
Well No.: GW-14  
(Pm)

Project No.: 3612092135		Project Name: Ace Cleaners	
		Project Area: Brackport, NY	
Contractor: Nothnagle	Driller: Jeff Schweitzer	Method: Direct Push	
Logged By: PSM	Date Started: 11.2.09	Completed: 11.2.09	
Checked By: BAS	Date: 01-27-10	Well Development Date: 11.4.09	

Not To Scale



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Portland, ME 04101

# SOIL BORING LOG

Project <b>Ace Cleaners</b>		Boring/Well No. <b>GW-2</b>	Project No. <b>3612 092135</b>	
Client <b>NYSDEC</b>	Site <b>Brockport, NY</b>		Sheet No. <u>1</u> of <u>1</u>	
Logged By <b>PSM</b>	Ground Elevation <b>-559.5</b>	Start Date <b>11-2-09</b>	Finish Date <b>11-2-09</b>	
Drilling Contractor <b>Nothnagle</b>		Driller's Name <b>Jeff Schwietzer</b>	Rig Type <b>Geoprobe 6610</b>	
Drilling Method <b>Direct Push</b>	Protection Level <b>D</b>	P.I.D. (eV) <b>11.2 12.6</b>	Casing Size <b>1.5"</b>	Auger Size <b>—</b>
Soil Drilled <b>Yes</b>	Rock Drilled <b>No</b>	Total Depth <b>17.5'</b>	Depth to Groundwater/Date <b>6' (11-2-09)</b>	Piez <input checked="" type="checkbox"/> Well <input type="checkbox"/> Boring <input type="checkbox"/>

Depth (Feet)	Sample No. & Penetration/Recovery (Feet)	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Sample Description	USCS Group Symbol	Monitoring (ppm)		Lab Tests ID Sample
						PI Meter Field Scan	PI Meter Head Space	
2	S-1 4/3.0	—	—	0-0.4' Sand and Gravel (0.1" asphalt) 0.4-4.0' reddish brown f. SAND, some silt, dry	<del>SM</del> GW SM	0	1	
4	S-2 4/3.7	—	—	4.3-5.3' same as S-1 (0.4-4.0') 5.3-6.2' reddish brown f. SAND, dry 6.2-8' reddish brown SILT, some f. sand, moist	SM SM ML	0	1	
8	S-3 4/3.4	—	—	8.6-12' reddish brown f. SAND and SILT, fr. Gravel, wet	<del>SM</del> ML SM	0	1	
12	S-4 4/4.0	—	—	12-14' reddish brown f. SAND and SILT, fr. Gravel, wet 14-15' red SILT, dry 15-16' reddish grey SILT and f. SAND, fr. Gravel No recovery	<del>SM</del> SM ML SM	0	1	
16	S-5 1.5/0	—	—	refusal @ 17.5' bgs	SM	0	1	
18								
20								

Note: GW Sample ACGW0021401XX collected between 15-18' bgs @ location 1' away from GW-2.  
GW Sample ACGW0020901XX collected between 7-10' bgs @ location 1' away from GW-2.

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FIGURE 4-4  
SOIL BORING LOG  
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

# SOIL BORING LOG

Project <b>Ace Cleaners</b>		Boring/Well No. <b>GW-3</b>	Project No. <b>3612092135</b>	
Client <b>NYSDEC</b>	Site <b>Brockport, NY</b>		Sheet No. <b>1</b> of <b>1</b>	
Logged By <b>PSM</b>	Ground Elevation <b>559.7 msl. -</b>	Start Date <b>11-3-09</b>	Finish Date <b>11-3-09</b>	
Drilling Contractor <b>Nothnagle</b>	Driller's Name <b>Jeff Schweitzer</b>	Rig Type <b>Geoprobe 6610</b>		
Drilling Method <b>Direct Push</b>	Protection Level <b>D</b>	P.I.D. (eV) <b>10.6</b>	Casing Size <b>1.5"</b>	Auger Size <b>—</b>
Soil Drilled <b>Yes</b>	Rock Drilled <b>No</b>	Total Depth <b>13.5</b>	Depth to Groundwater/Date <b>5' (11-3-09)</b>	Piez <input type="checkbox"/> Well <input type="checkbox"/> Boring <input checked="" type="checkbox"/>

Depth (Feet)	Sample No. & Penetration/Recovery (Feet)	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Sample Description	USCS Group Symbol	Monitoring (ppm)		Lab Tests ID Sample
						PI Meter Field Scan	PI Meter Head Space	
1	S-1 4/3.2'	—	—	0-0.2' grass and organic matl. 0.2-0.6' SAND and GRAVEL 0.6-3.2' reddish brown f. SAND and SILT tr. Gravel, dry	GW	0	—	
2					SM	0	—	
3								
4								
5	S-2 4/2.5'	—	—	5.5-8' reddish brown f. SAND, some silt, tr. Gravel, wet	SM	0.1 (4.5')	—	
6								
7						0.1 (7.4)	—	
8								
9	S-3 4/1.5'	—	—	10.5-12' reddish brown f. SAND, some Gravel, tr. silt, wet	sp	0	—	
10								
11								
12	S-4 4/1.5'	—	—	12-12.6' reddish brown f. to med. SAND, tr. Gravel, wet	SW	0	—	
13								

12.6-13.5' olive grey f. SAND, some silt, hard  
refusal @ 13.5' bgs

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Note: QC Soil Samples also collected - AC650030601XB,  
AC650030601MS, and  
AC650030601MD.

FIGURE 4-4  
SOIL BORING LOG  
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

PORT2007022w.mac

Note: GW Sample AC650031201XX collected @ 10.5-13.5' bgs, 1' away from GW-3.  
GW Sample AC650030601XX collected @ 4-9' bgs at GW-3.

✓ BGS 01-27-10.

# SOIL BORING LOG

Project <b>Ace Cleaners</b>		Boring/Well No. <b>GW-4</b>	Project No. <b>3612092135</b>	
Client <b>NYSDEC</b>	Site <b>Brockport, NY</b>		Sheet No. <b>1</b> of <b>1</b>	
Logged By <b>PJM</b>	Ground Elevation <b>554.7msl</b>	Start Date <b>11.3.09</b>	Finish Date <b>11.3.09</b>	
Drilling Contractor <b>Nottnagle</b>	Driller's Name <b>Jeff Schweitzer</b>		Rig Type <b>Geoprobe 6610</b>	
Drilling Method <b>Direct Push</b>	Protection Level <b>D</b>	P.I.D. (eV) <b>10.6</b>	Casing Size <b>1.5"</b>	Auger Size <b>—</b>
Soil Drilled <b>Yes</b>	Rock Drilled <b>No</b>	Total Depth <b>13'</b>	Depth to Groundwater/Date <b>5' (11.3.09)</b>	
		Piez	Well	Boring
		<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Depth (Feet)	Sample No. & Penetration/ Recovery (Feet)	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Sample Description	USCS Group Symbol	Monitoring (ppm)		Lab Tests ID Sample
						PI Meter Field Scan	PI Meter Head Space	
1	S-1	—	—	0-0.2' Grass and Organic Mat.	GW	0	—	
2	4/2.6'			0.2-0.7' SAND and GRAVEL	SP	0	—	
3				0.7-2.8' reddish brown f. SAND, fr. Silt, fr. Gravel, moist				
4								
5	S-2	—	—	4.6-5.3' reddish brown f. SAND	SP	0	—	
6	4/3.4'			5.3-6' stained f. SAND to coarse SAND (solvent odor), fr. Silt, fr. Clay, moist	SW	14	—	
7				6-8' reddish brown f. SAND, wet	SP	0	—	
8								
9	S-3	—	—	8-12' reddish brown f. SAND, fr. Gravel	SP			
10	4/4'					1.2 (10.2')	—	
11						4.0 (11.2')	—	
12								
13	S-4	—	—	12-13' yellowish brown f. SAND and Silt, some Gravel, wet	SM	5	—	
	1/6'							

refusal @ 13' bgs

Note: GW Sample AC6W0041201XX collected @ 10-13' bgs, 1' away from GW-4



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GW Sample AC6W0040601XX collected @ 4-9' bgs at GW-4  
+ AC6W0040601XX

BA3 01-27-10

FIGURE 4-4  
SOIL BORING LOG  
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

# SOIL BORING LOG

Project <b>Ace Cleaners</b>		Boring/Well No. <b>GW-5</b>		Project No. <b>3612092135</b>	
Client <b>NYSDEC</b>		Site <b>Brookport, NY</b>		Sheet No. <b>1</b> of <b>1</b>	
Logged By <b>BJM</b>		Ground Elevation <b>554.7 msl</b>		Start Date <b>11-3-09</b>	
Finish Date <b>11-3-09</b>		Drilling Contractor <b>Nothnagle</b>		Driller's Name <b>Jeff Schwicker</b>	
Rig Type <b>Geoprobe 6610</b>		Drilling Method <b>Direct Push</b>		Protection Level <b>D</b>	
P.I.D. (eV) <b>10.6</b>		Casing Size <b>1.5"</b>		Auger Size <b>—</b>	
Soil Drilled <b>Yes</b>		Rock Drilled <b>No</b>		Total Depth <b>13'</b>	
Depth to Groundwater/Date <b>5' (11-3-09)</b>		Piez <input type="checkbox"/>		Well <input type="checkbox"/>	
Boring <input checked="" type="checkbox"/>					

Depth (Feet)	Sample No. & Penetration/Recovery (Feet)	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Sample Description	USCS Group Symbol	Monitoring (ppm)		Lab Tests ID Sample
						PI Meter Field Scan	PI Meter Head Space	
1	S-1	—	—	0-0.1' Grass and Organic Material	GW	0	—	
2	4/2.6'	—	—	0.1-0.3' SAND and GRAVEL				
3				0.3-2.6' dk. brown to reddish brown f. SAND and SILT, some Gravel, dry	SM	0.1	—	
4								
5	S-2	—	—	4.5-6.4' reddish brown f. SAND, fr. silt	SP	0.1	—	
6	4/3.5	—	—	fr. Gravel, wet				
7				6.4-8' brown CLAY, some f. Sand, wet	CL	6	—	
8				Solvent odor				
9	S-3	—	—	9.1-12' brown/grey CLAY, fr. silt,				
10	4/2.9	—	—	fr. Gravel, wet, solvent odor	CH	15	—	
11								
12								
13	S-4	—	—	12-13' yellowish brown f. SAND to coarse SAND, some silt, fr. Gravel, wet	SW	0	—	
	1/1							

Refusal @ 13' bgs

Notes GW sample ACGW0051201XX collected @ 10-13' bgs, 1' away from GW-5.

GW sample ACGW0050606XX collected @ 4-9' bgs in GW-5.

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FIGURE 4-4  
SOIL BORING LOG  
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

ACG0051001XX  
@ 10.5' bgs

# SOIL BORING LOG

Project <b>Ace Cleaners</b>		Boring/Well No. <b>GW-0</b>		Project No. <b>3612092135</b>	
Client <b>NYSDEC</b>		Site <b>Brockport, NY</b>		Sheet No. <b>1</b> of <b>1</b>	
Logged By <b>PSM/TLC</b>		Ground Elevation <b>557.0 msl. —</b>		Start Date <b>11.2.09</b>	
Finish Date <b>11.2.09</b>		Drilling Contractor <b>Nothnagle</b>		Driller's Name <b>Jeff Schweitzer</b>	
Rig Type <b>Geoprobe 6610</b>		Drilling Method <b>Direct Push</b>		Protection Level <b>D</b>	
P.I.D. (eV) <b>(P) 11.2.10.6</b>		Casing Size <b>1.5"</b>		Auger Size <b>—</b>	
Soil Drilled <b>Yes</b>		Rock Drilled <b>No</b>		Total Depth <b>8.5'</b>	
Depth to Groundwater/Date <b>3.98' TOR / 11.5.09</b>		Piez <input checked="" type="checkbox"/>		Well <input type="checkbox"/>	
Boring <input type="checkbox"/>					

Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Sample Description	USCS Group Symbol	Monitoring (ppm)		Lab Tests ID Sample
						PI Meter Field Scan	PI Meter Head Space	

1	S-1 4/2.6'	—	—	0 - 1.1' dk. brown Silty Sand , fr. Organics damp, no odor	SM	0	—	
2				1.1 - 2.8' reddish brown SAND, fr. silt <u>Bm</u>	SM	0	—	
3								
4								
5	S-2 3.5/ 3.5 <u>Bm</u>	—	—	4-5.6' reddish brown f SAND and SILT damp, no odor, fr. Gravel	SM SP/ ML <u>Bm</u>	0	—	
6				5.0 - 7.5' light brown f. SAND , some SILT wet, no odor	SM	0	—	
7				refusal @ 7.5' more 15' west				
8								
9	S-3 0.5/0.5	—	—	8-8.5' reddish brown SILT, some Clay fr. Gravel.	ML	0	—	
10				refusal @ 8.5' bgs				

Note: GW Sample AC6W0080601XX collected from piezometer (Screened 3.5-8.5 bgs).

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FIGURE 4-4  
SOIL BORING LOG  
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

# SOIL BORING LOG

Project <b>Ace Cleaners</b>		Boring/Well No. <b>GW-12</b>	Project No. <b>3612092135</b>	
Client <b>NYSDEC</b>	Site <b>Brockport, NY</b>		Sheet No. <b>1</b> of <b>1</b>	
Logged By <b>PSM</b>	Ground Elevation <b>552.3msl</b>	Start Date <b>11.4.09</b>	Finish Date <b>11.4.09</b>	
Drilling Contractor <b>Nothnagle</b>		Driller's Name <b>Jeff Schmitzer</b>	Rig Type <b>Geoprobe 6610</b>	
Drilling Method <b>Direct Push</b>		Protection Level <b>D</b>	P.I.D. (eV) <b>10.6</b>	Casing Size <b>1.5"</b>
Soil Drilled <b>Yes</b>	Rock Drilled <b>No</b>	Total Depth <b>13'</b>	Depth to Groundwater/Date <b>3.75' TOR / 11.5.09</b>	
			Piez <input checked="" type="checkbox"/>	Well <input type="checkbox"/> Boring <input type="checkbox"/>

Depth (Feet)	Sample No. & Penetration/ Recovery (Feet)	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Sample Description	USCS Group Symbol	Monitoring (ppm)		Lab Tests ID Sample
						PI Meter Field Scan	PI Meter Head Space	
1 2 3 4	S-1 4/3.3'	-	-	0-0.1' Grass 0.1-0.5' Black loam 0.5-3.3' reddish brown SILT and fr SAND fr. Gravel, dry	ML	0	11	
5 6 7 8	S-2 4/3.3'	-	-	4.7-8' reddish brown SILT and fr SAND, fr. Gravel, wet. Grey Sand lenses @ 6.5' and 7-3'	ML	0	-	
9 10 11	S-3 4/4.0'	-	-	8-12' reddish brown fr SAND, fr. Silt, wet	SM	0	-	
12 13	S-4 1/1.0'	-	-	12-13' reddish brown fr SAND, some Gravel, fr. Silt, wet	SM	0	-	

Refusal @ 13' bgs  
 Note: GW Sample ACGW0121201XX and ACGW0121201XD collected @ 10-13' bgs, 1' away from GW-12.  
 GW Sample ACGW0120701XX collected @ 6-9' bgs, 1' away from GW-12.

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FIGURE 4-4  
 SOIL BORING LOG  
 NYSDEC QUALITY ASSURANCE PROGRAM PLAN

# SOIL BORING LOG

Project <b>Ace Cleaners</b>		Boring/Well No. <b>GW-14</b>		Project No. <b>3612092135</b>	
Client <b>NYSDEC</b>		Site <b>Brockport, NY</b>		Sheet No. <b>1</b> of <b>1</b>	
Logged By <b>PSM</b>		Ground Elevation <b>559.6 msll</b>		Start Date <b>11-2-09</b>	
				Finish Date <b>11-2-09</b>	
Drilling Contractor <b>Nothnagle</b>		Driller's Name <b>Jeff Schweizer</b>		Rig Type <b>Geoprobe 6610</b>	
Drilling Method <b>Direct Push</b>		Protection Level <b>D</b>		P.I.D. (eV) <b>10.6 + 22 (P)</b>	
				Casing Size <b>1.5"</b>	
Soil Drilled <b>Yes</b>		Rock Drilled <b>No</b>		Total Depth <b>13.5</b>	
				Depth to Groundwater/Date <b>5.04 (TOR) / 11-5-09</b>	
				Piez <input checked="" type="checkbox"/> Well <input type="checkbox"/> Boring <input type="checkbox"/>	

Depth (Feet)	Sample No. & Penetration/ Recovery (Feet)	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Sample Description	USCS Group Symbol	Monitoring (ppm)		Lab Tests ID Sample
						PI Meter Field Scan	PI Meter Head Space	
1	S-1 4/32'	—	—	0-0.2' GRASS and brown SAND 0.2-3.2' brown f. SAND, some silt, fr. gravel, dry	SW SM	0	—	
2								
3								
4	S-2 4/25'	—	—	5.5-8' brown and brown/grey SILT, some f. Sand, moist	ML	0	—	
5								
6								
7								
8								
9	S-3 4/28'	—	—	9.2-12' reddish brown f. SAND, fr. gravel, wet	SP	0	—	
10								
11								
12								
13	S-4 1.5/1.2'	—	—	12.3-13.5 yellow brown to brown SILT, fr. gravel moist. Refusal @ 13.5' bgs		3	11	

Note: GW sample AGW0141201XX collected @ 10.5-13.5' bgs, 1' away from GW-14.

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FIGURE 4-4  
SOIL BORING LOG  
NYSDEC QUALITY ASSURANCE PROGRAM PLAN



# SOIL BORING LOG

Project <b>Ace Cleaners</b>		Boring/Well No. <b>GW-15</b>		Project No. <b>3612092135</b>	
Client <b>NYSDEC</b>		Site <b>Brockport, NY</b>		Sheet No. <b>1</b> of <b>1</b>	
Logged By <b>BSM</b>		Ground Elevation <b>554.7 msl</b>		Start Date <b>11.3.09</b>	
				Finish Date <b>11.3.09</b>	
Drilling Contractor <b>Nothnagle</b>		Driller's Name <b>Jeff Schweitzer</b>		Rig Type <b>Geoprobe 6610</b>	
Drilling Method <b>Direct Push</b>		Protection Level <b>D</b>		P.I.D. (eV) <b>10.6</b>	
				Casing Size <b>1.5"</b>	
Soil Drilled <b>Yes</b>		Rock Drilled <b>No</b>		Total Depth <b>12.5</b>	
				Depth to Groundwater/Date <b>5' (11.3.09)</b>	
				Piez <input type="checkbox"/> Well <input type="checkbox"/> Boring <input checked="" type="checkbox"/>	

Depth(Feet)	Sample No. & Penetration/ Recovery (Feet)	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Sample Description	USCS Group Symbol	Monitoring (ppm)		Lab Tests ID Sample
						PI Meter Field Scan	PI Meter Head Space	
1	S-1 4/2.9	—	—	0- 0.1' Grass	MH	0	—	ACG50150701XX @ 7.5' bgs
2				0.1 - 1.3' brown SILT and CLAY, fr. Gravel, dry	ML	0	—	
3				1.3 - 2.9' brown SILT, some f. Sand, moist				
4								
5	S-2 4/2.5	—	—	5.5 - 6.7' brown SILT, some f. Sand, fr. Gravel, wet	ML	8	—	
6				6.7 - 8' grey f. to med. SAND, some Gravel, fr. Silt	SW	32	—	
7								
8								
9	S-3 4/2.0	—	—	10 - 12' brown and grey f. SAND, fr. Silt, fr. Gravel	SP	105	—	
10								
11								
12								
13	S-4 0.5/0.5	—	—	12 - 12.5' brown and grey f. SAND and GRAVEL some Silt	SW	0	—	

refusal @ 12.5' bgs

Note: GW Sample ACGW01511 01XX collected @ 9.5-12.5' bgs, 1' away from GW-15.

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✓

GW Sample ACGW01506 01XX collected @ 4-9' bgs at GW-15  
BAS 01-27-10

FIGURE 4-4  
SOIL BORING LOG  
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

# SOIL BORING LOG

Project <b>Ace Cleaners</b>		Boring/Well No. <b>GW-16</b>	Project No. <b>3612092135</b>	
Client <b>NYSDEC</b>	Site <b>Brockport, NY</b>		Sheet No. <b>1</b> of <b>1</b>	
Logged By <b>TJM</b>	Ground Elevation <b>574.3 msl</b>	Start Date <b>11-3-09</b>	Finish Date <b>11-3-09</b>	
Drilling Contractor <b>Nothnagle</b>	Driller's Name <b>Jeff Schweitzer</b>	Rig Type <b>Geoprobe 6610</b>		
Drilling Method <b>Direct Push</b>	Protection Level <b>D</b>	P.I.D. (eV) <b>10.6</b>	Casing Size <b>1.5"</b>	Auger Size <b>—</b>
Soil Drilled <b>Yes</b>	Rock Drilled <b>No</b>	Total Depth <b>13.5'</b>	Depth to Groundwater/Date <b>5' (11-3-09)</b>	Piez <input type="checkbox"/> Well <input type="checkbox"/> Boring <input checked="" type="checkbox"/>

Depth (Feet)	Sample No. & Penetration/Recovery (Feet)	SPT Blows/6" or Core Rec./Rqd. %	SPT-N (Blows/Ft.)	Sample Description	USCS Group Symbol	Monitoring (ppm)		Lab Tests ID Sample
						PI Meter Field Scan	PI Meter Head Space	
1	S-1 4/2.6	—	—	0-0.9' dk. brown loam, fr. Gravel, fr. Organics	SP	0	—	
2				0.9-2.6' reddish brown f. SAND, some Silt, fr. Gravel, dry		0	—	
3								
4								
5	S-2 4/2.5	—	—	5.5-8' reddish brown f. SAND and SILT, fr. Gravel, wet	SM	0	—	AC6W0160701XX
6								
7								
8								
9	S-3 4/3.5	—	—	8.5-12' reddish brown f. SAND and GRAVEL, wet	GW	0	—	
10								
11								
12								
13	S-4 4/1.5	—	—	12-13.5' yellowish brown f. SAND to coarse SAND, some Silt, fr. Gravel, wet	SW	0	—	

Refusal @ 13.5' bgs

Note: GW sample AC6W0161201XX collected @ 10.5-13.5' bgs, 1' away from GW-16



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GW sample AC6W0160701XX collected @ 4-9' bgs at GW-16.  
01-27-10.

FIGURE 4-4  
SOIL BORING LOG  
NYSDEC QUALITY ASSURANCE PROGRAM PLAN

# SURFACE WATER AND SEDIMENT SAMPLE FIELD DATA RECORD

Project: NYSDEC  
 Project Number: 3612092135  
 Sample Location ID: SW/SD-1  
 Time: Start: 1000 End: 1120

Site: Ace Cleaners  
 Date: 11-4-09  
 Signature of Sampler: Tige Lougher

## SURFACE WATER INFORMATION

TYPE OF SURFACE WATER:  
☒ STREAM ☐ RIVER  
☐ POND/LAKE ☐ SEEP

## DECONTAMINATION FLUIDS USED:

☐ ALL USED  
☐ ETHYL ALCOHOL  
☐ 25% METHANOL/ 75% ASTM TYPE II WATER  
☒ DEIONIZED WATER  
☒ LIQUINOX SOLUTION  
☐ HEXANE  
☐ HNO<sub>3</sub> SOLUTION  
☐ POTABLE WATER  
☐ NONE

WATER DEPTH AND SAMPLE LOCATION 0.10 (ft)

DEPTH OF SAMPLE 0.05 (ft)  
 FROM TOP OF WATER  
 EQUIPMENT USED FOR COLLECTION:  
☐ NONE, GRAB INTO BOTTLE  
☐ BOMB SAMPLER  
☒ PUMP Geo pump  
Dedicated tubing

VELOCITY MEASUREMENTS OBTAINED? ☐ YES, SEE FLOW MEASUREMENT DATA RECORD NO

TEMPERATURE 9.4 Deg. C. SPEC. COND. 2.19  $\mu$ mhos/cm pH 7.03 Units DISS. O<sub>2</sub> 9.65 ppm

FIELD GC DATA: ☒ FIELD DUPLICATE COLLECTED  
 DUPLICATE ID \_\_\_\_\_

SAMPLE LOCATION SKETCH:  
☒ YES  
☐ NO

METHOD USED:  
☐ WINKLER  
☒ PROBE

DUP/MS/MSD collected ORP = 62 mv

Turb = 0.78 NTU

## SEDIMENT INFORMATION

EQUIPMENT USED FOR COLLECTION:  
☐ GRAVITY CORER  
☐ S.S. SPLIT SPOON  
☐ DREDGE  
☐ HAND SPOON  
☐ ALUMINUM PANS  
☐ SS BUCKET  
☒ SS Spoon

## DECONTAMINATION FLUIDS USED:

☐ ALL USED  
☐ ETHYL ALCOHOL  
☐ 25% METHANOL/ 75% ASTM TYPE II WATER  
☒ DEIONIZED WATER  
☒ LIQUINOX SOLUTION  
☐ HEXANE  
☐ HNO<sub>3</sub> SOLUTION  
☐ POTABLE WATER  
☐ NONE

DEPTH OF SEDIMENT SAMPLE 0.05 (ft)

TYPE OF SAMPLE COLLECTED:  
☒ DISCRETE  
☐ COMPOSITE

## SEDIMENT TYPE:

☐ CLAY  
☒ SAND  
☒ ORGANIC (Trace)  
☒ GRAVEL

SAMPLE OBSERVATIONS:  
☒ ODOR None  
☒ COLOR Dark Brown/Black  
☐

FIELD GC DATA: ☒ FIELD DUPLICATE COLLECTED  
 DUPLICATE ID \_\_\_\_\_

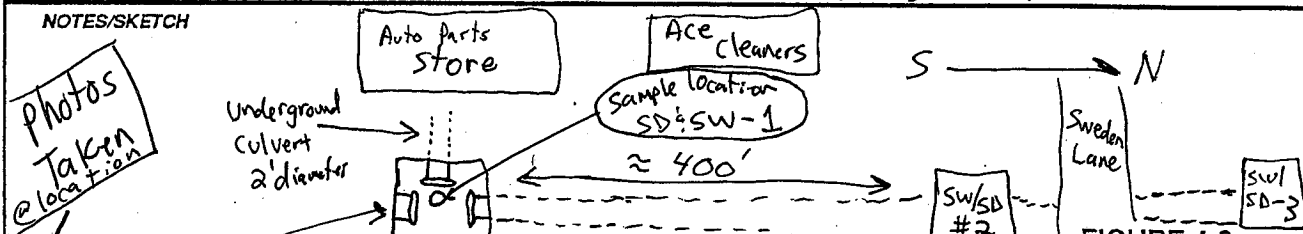
MS/MSD/DUP collected

## SAMPLES COLLECTED

Bottle Time: 1025 (4) Sets of bottles collected

MATRIX						SAMPLE BOTTLE IDS	
3 IF REQUIRED AT THIS LOCATION		3 IF PRESERVED WITH ACID-BASE	VOLUME REQUIRED	3 IF SAMPLE COLLECTED			
VOC 8260B	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		ACS000100001XX	
VOC 8260B	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>			
VOC 8260B	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>			
TOC/96 Solid	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>		ACS000100001XX	

## NOTES/SKETCH



SURFACE WATER AND SEDIMENT SAMPLE FIELD DATA RECORD  
 NYSDEC QUALITY ASSURANCE PROGRAM PLAN

ABB Environmental Services, Inc.

# SURFACE WATER AND SEDIMENT SAMPLE FIELD DATA RECORD

Project: NYS DEC  
 Project Number: 3612092135  
 Sample Location ID: SW/SD-2  
 Time: Start: 1545 End: UNKNOWN

Site: Ace Cleaners  
 Date: 11-3-09  
 Signature of Sampler: [Signature]

## SURFACE WATER INFORMATION

TYPE OF SURFACE WATER:  
☒ STREAM ☐ RIVER  
☐ POND/LAKE ☐ SEEP

## DECONTAMINATION FLUIDS USED:

☒ ALL USED  
☐ ETHYL ALCOHOL  
☐ 25% METHANOL/75% ASTM TYPE II WATER  
☐ DEIONIZED WATER  
☐ LIQUINOX SOLUTION

WATER DEPTH AND SAMPLE LOCATION 0.1 (ft)

DEPTH OF SAMPLE FROM TOP OF WATER 0.05 (ft)

EQUIPMENT USED FOR COLLECTION:  
☐ NONE, GRAB INTO BOTTLE  
☐ BOMB SAMPLER  
☒ PUMP Geo Pump

☐ HEXANE  
☐ HNO<sub>3</sub> SOLUTION  
☐ POTABLE WATER  
☒ NONE - dedicated tubing

Silastic & LDPE tubing

VELOCITY MEASUREMENTS OBTAINED? ☐ YES, SEE FLOW MEASUREMENT DATA RECORD ☒ NO

not recorded

TEMPERATURE 10.2 Deg. C. SPEC. COND. 2.06 ms/cm pH 8.18 Units ppm DISS. O<sub>2</sub> 10.72 ppm

FIELD GC DATA: ☐ FIELD DUPLICATE COLLECTED  
 DUPLICATE ID \_\_\_\_\_

SAMPLE LOCATION SKETCH:  
☐ YES  
☒ NO

METHOD USED:  
☐ WINKLER  
☒ PROBE - U-22

ORP = 21 mV

## SEDIMENT INFORMATION

## EQUIPMENT USED FOR COLLECTION:

☐ GRAVITY CORER  
☐ S.S. SPLIT SPOON  
☐ DREDGE  
☐ HAND SPOON  
☐ ALUMINUM PANS  
☐ SS BUCKET  
☒ SS spoon

## DECONTAMINATION FLUIDS USED:

☒ ALL USED  
☐ ETHYL ALCOHOL  
☐ 25% METHANOL/75% ASTM TYPE II WATER  
☐ DEIONIZED WATER  
☒ LIQUINOX SOLUTION

DEPTH OF SEDIMENT SAMPLE 0.1 (ft)

Sample collected from under water surface

TYPE OF SAMPLE COLLECTED:  
☐ DISCRETE  
☐ COMPOSITE

☐ HEXANE  
☐ HNO<sub>3</sub> SOLUTION  
☐ POTABLE WATER  
☒ NONE Stream water

## SAMPLE OBSERVATIONS:

☒ ODOR none  
☒ COLOR gray  
☐ \_\_\_\_\_

## SEDIMENT TYPE:

☐ CLAY  
☒ SAND  
☐ ORGANIC  
☒ GRAVEL

FIELD GC DATA: ☐ FIELD DUPLICATE COLLECTED  
 DUPLICATE ID N/A

## SAMPLES COLLECTED

Sample time = 16:05

	MATRIX	
	SURFACE WATER	SEDIMENT
3 IF REQUIRED AT THIS LOCATION		
<input checked="" type="checkbox"/> VOC's	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/> VOC's	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3 IF PRESERVED WITH ACID-BASE

VOLUME REQUIRED

3 IF SAMPLE COLLECTED

SAMPLE BOTTLE IDS

☒ HCl 2 40ml VOC  
☐  
☐ (3) 1-meth  
☐ 2-DIH<sub>2</sub>O

ACSW00200001XX

ACSD00200001XX

## NOTES/SKETCH

Sample from below lip of 3' culvert pipe

SW-2  
SD-2

sample collected under grate

Sweden Lane

S → N

01-27-10

SW/SD-3

FIGURE 4-3

SURFACE WATER AND SEDIMENT SAMPLE FIELD DATA RECORD  
 NYSDEC QUALITY ASSURANCE PROGRAM PLAN

# SURFACE WATER AND SEDIMENT SAMPLE FIELD DATA RECORD

Project: NYSDEC Site: Ace Cleaners  
 Project Number: 3612092/35 Date: 11-3-09  
 Sample Location ID: SW-3/Sed-3  
 Time: Start: 1445 End: Unknown Signature of Sampler: [Signature]

## SURFACE WATER INFORMATION

TYPE OF SURFACE WATER:  
☒ STREAM ☐ RIVER  
☐ POND/LAKE ☐ SEEP

## DECONTAMINATION FLUIDS USED:

☒ ALL USED  
☐ ETHYL ALCOHOL  
☐ 25% METHANOL/ 75% ASTM TYPE II WATER  
☐ DEIONIZED WATER  
☐ LIQUINOX SOLUTION  
☐ HEXANE  
☐ HNO<sub>3</sub> SOLUTION  
☐ POTABLE WATER  
☐ NONE

WATER DEPTH AND SAMPLE LOCATION 0.5 (ft)

DEPTH OF SAMPLE FROM TOP OF WATER 0.25 (ft)

EQUIPMENT USED FOR COLLECTION:  
☐ NONE, GRAB INTO BOTTLE  
☐ BOMB SAMPLER  
☒ PUMP Geopump

VELOCITY MEASUREMENTS OBTAINED? ☐ YES, SEE FLOW MEASUREMENT DATA RECORD None

TEMPERATURE 10.8 Deg. C. SPEC. COND. 2.23 ns/cm pH 8.01 Units ppm DISS. O<sub>2</sub> 11.68

FIELD GC DATA: ☐ FIELD DUPLICATE COLLECTED  
 DUPLICATE ID \_\_\_\_\_

SAMPLE LOCATION SKETCH:  
☐ YES  
☒ NO

METHOD USED:  
☐ WINKLER  
☒ PROBE

Turb 2.23 NTU

## SEDIMENT INFORMATION

EQUIPMENT USED FOR COLLECTION:  
☐ GRAVITY CORER  
☐ S.S. SPLIT SPOON  
☐ DREDGE  
☐ HAND SPOON  
☐ ALUMINUM PANS  
☐ SS BUCKET  
☒ SS spoon

## DECONTAMINATION FLUIDS USED:

☒ ALL USED  
☐ ETHYL ALCOHOL  
☐ 25% METHANOL/ 75% ASTM TYPE II WATER  
☐ DEIONIZED WATER  
☐ LIQUINOX SOLUTION  
☐ HEXANE  
☐ HNO<sub>3</sub> SOLUTION  
☐ POTABLE WATER  
☐ NONE

DEPTH OF SEDIMENT SAMPLE 0.75 (ft)

Sample collected  
 from 8" below  
 water surface

TYPE OF SAMPLE COLLECTED:  
☒ DISCRETE  
☐ COMPOSITE

SAMPLE OBSERVATIONS:  
☒ ODOR none  
☐ COLOR \_\_\_\_\_

## SEDIMENT TYPE:

☐ CLAY  
☒ SAND  
☐ ORGANIC  
☒ GRAVEL

FIELD GC DATA: ☐ FIELD DUPLICATE COLLECTED  
 DUPLICATE ID N/A

## SAMPLES COLLECTED

Time of Sample: 1500

3 IF REQUIRED AT THIS LOCATION	MATRIX		3 IF PRESERVED WITH ACID-BASE	VOLUME REQUIRED	3 IF SAMPLE COLLECTED	SAMPLE BOTTLE IDS
	SURFACE WATER	SEDIMENT				
<input checked="" type="checkbox"/> VOC's	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u>(2) 40mL VOA vials</u>	<input type="checkbox"/>	<u>ACSW00300001XX</u>
<input checked="" type="checkbox"/> VOC's	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>(2) 40mL w/ DI water</u>	<input type="checkbox"/>	<u>ACSD00300001XX</u>
<input checked="" type="checkbox"/> %Solid & TOC	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<u>(1) 40mL w/ H<sub>2</sub>PO<sub>4</sub></u>	<input type="checkbox"/>	<u>ACSD00300001XX</u>
				<u>(1) 40mL Jar</u>	<input type="checkbox"/>	

## NOTES/SKETCH

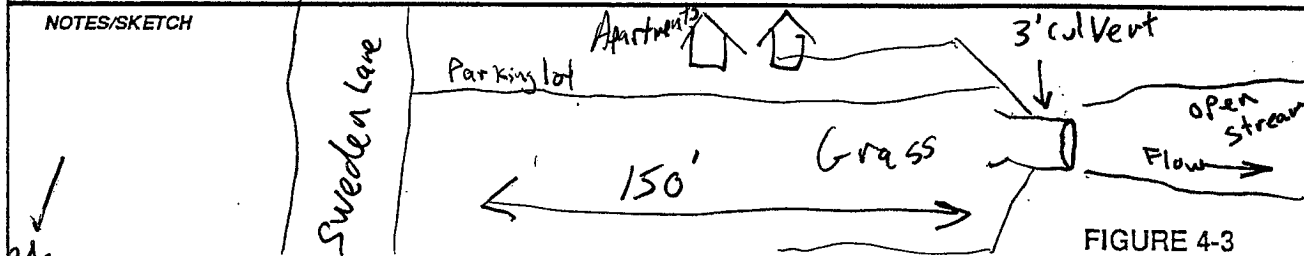


FIGURE 4-3

SURFACE WATER AND SEDIMENT SAMPLE FIELD DATA RECORD  
 NYSDEC QUALITY ASSURANCE PROGRAM PLAN

ABB Environmental Services, Inc.

# WELL DEVELOPMENT RECORD

Project: <u>Ace Cleaners</u>	Well Installation Date: <u>11-2-2009</u>	Project No. <u>3612092135</u>
Client: <u>NYSDEC</u>	Well Development Date: <u>11-4-2009</u>	Logged by: <u>PM</u> Checked by: <u>BT</u>
Well/Site I.D.: <u>GW-2</u>	Weather: <u>1- Cool, 50 degrees F, Clear</u>	Start Date: <u>11-4-09</u> Finish Date: <u>11-4-09</u>


Well Construction Record Data:		Well Diameter	Start Time:	Finish Time:
Bottom of Screen	<u>617.5</u> ft.	<u>1</u> in.	<u>1520</u>	<u>1620</u>
Sediment Sump/Plug	<u>NA</u> ft.	From Ground Surface <input type="checkbox"/> From Top of Riser <input type="checkbox"/>		
Screen Length	<u>~10</u> ft.	Fluids Lost during Drilling	<u>0</u> gal.	

Protective Casing Stick-up	<u>0</u> ft.	Protective Casing/Well Diff.	<u>0-33</u> ft.	PID Readings:
				Ambient Air <u>—</u> ppm
				Well Mouth <u>—</u> ppm

Well Levels:		Sediment:	
Initial	<u>5.50</u> ft.	Well Depth before Development	<u>—</u> ft. (from top of PVC)
End of Development	<u>Dry</u> ft.	Well Depth after Development	<u>~17.5</u> ft.
24 Hours after Development	<u>NA</u> ft.	Sediment Depth Removed	<u>—</u> ft.
HT of Water Column	<u>~12</u> ft.	$\times \begin{cases} \square 1.68^* \text{ gal./ft.} \\ \square 0.18 \end{cases} = \begin{cases} \square \\ \square \sim 2.1 \end{cases} \text{ gal./vol.}$	
*for 4" HSA Installed Wells			

Equipment:	Approximate Recharge Rate	<input type="checkbox"/> Well water clear to unaided eye <input type="checkbox"/> Sediment thickness remaining in well is <1.0% of screen length <input type="checkbox"/> Total water removed = a minimum of 5x calculated well volume plus 5x drilling fluid lost <input type="checkbox"/> Turbidity < 5NTUs <input type="checkbox"/> 10% change in field parameters
<input type="checkbox"/> Dedicated Submersible Pump <input type="checkbox"/> Surge Block <input type="checkbox"/> Bailer <input type="checkbox"/> 2" <input checked="" type="checkbox"/> <u>geopump</u> <input type="checkbox"/> Grundfos Pump 2" <u>—</u> 4" <u>—</u>	Total Gallons Removed <u>~2</u> gal.	
Well Development Criteria Met:		Yes No <u>unk</u>
Notes:		<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>
End of Well Development Sample (1 pint) Collected?		<input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

Water Parameter Measurements							
Record at start, twice during and at the end of development (minimum):							
Time	Volume	*Total Gallons	pH	Temp.	Conductance	Turbidity	Pumping Rate

Well Developer's Signature	<u>Brandon Shaw</u>	FIGURE 4-9
	<u>for Phil Muller</u>	WELL DEVELOPMENT RECORD
 511 Congress Street Portland, ME 04101		NYSDEC QUALITY ASSURANCE PROGRAM PLAN

Project: Ace Cleaners

Client: NYSDEC

Well/Site I.D.: GW-8

Well Installation Date: 11-4-2009

Well Development Date: 11-4-09

Weather: ... Cool, 50 degrees F, Clear

Project No. 3612092135

Logged by: PM

Start Date: 11-4-09

Checked by: BJS

Finish Date: 11-4-09

Well Construction Record Data:

Bottom of Screen

8.5 ft.

Sediment Sump/Plug

— ft.

Screen Length

~5 ft.

Well Diameter

1 in.

Start Time: 1630

Finish Time: 1700

From Ground Surface ☒

From Top of Riser ☒

Fluids Lost during Drilling

0 gal.

Protective Casing Stick-up

~28 ft.

Protective Casing/Well Diff.

0.26 ft.

PID Readings:

Ambient Air — ppm

Well Mouth — ppm

Well Levels:

Initial

— ft.

End of Development

0.4 ft.

24 Hours after Development

— ft.

HT of Water Column

— ft.

Sediment:

Well Depth before Development

— ft.

Well Depth after Development

— ft.

Sediment Depth Removed

— ft.

1.68\* gal./ft.

—

gal./vol.

\*for 4" HSA Installed Wells

Equipment:

☐ Dedicated Submersible Pump
☐ Surge Block
☐ Bailer ☐ 2" ☒ 4"
☐ Grundfos Pump 2" ☐ 4"

Approximate Recharge Rate

— gpm

Total Gallons Removed

~3 gal.

Well Development Criteria Met:

Well water clear to unaided eye

☒ Yes
☐ No

Sediment thickness remaining in well is <1.0% of screen length

☐ Yes
☒ No

Total water removed = a minimum of 5x calculated well volume plus 5x drilling fluid lost

☐ Yes
☒ No

Turbidity < 5NTUs

☐ Yes
☒ No

10% change in field parameters

☐ Yes
☒ No

Notes:

End of Well Development Sample (1 pint) Collected?

Yes

No ☒

Water Parameter Measurements

Record at start, twice during and at the end of development (minimum):

Time	Volume	Total Gallons	pH	Temp.	Conductance	Turbidity	Pumping Rate

Well Developer's Signature Phil Muller

— Brandon Shaw w/ permission

MACTEC

511 Congress Street

Portland, ME 04101

FIGURE 4-9

WELL DEVELOPMENT RECORD

NYSDEC QUALITY ASSURANCE PROGRAM PLAN

Project: ACE Cleaners

Well Installation Date: 11-4-2009

Project No. 3612092135

Client: NYSDEC

Well Development Date: 11-4-2009

Logged by: TLL

Checked by: BAS

Well/Site I.D.: GW-12

Weather: Cool, 50 degrees F, Clear

Start Date: 11-4-09

Finish Date: 11-4-09

Well Construction Record Data:

Bottom of Screen

~13 ft.

Sediment Sump/Plug

~13 ft.

Screen Length

~10 ft.

Well Diameter

1 in.

Start Time:

1420

Finish Time:

~1630

From Ground Surface ☒

From Top of Riser ☐

Fluids Lost during Drilling

0 gal.

Protective Casing Stick-up

0 ft.

Protective Casing/Well Diff.

0.25 ft.

PID Readings:

Ambient Air

— ppm

Well Mouth

— ppm

Well Levels:

Initial

3.75 ft.

End of Development

Dry ft.

24 Hours after Development

NA ft.

HT of Water Column

~9.2 ft.

Sediment:

Well Depth before Development

NA ft.

Well Depth after Development

~13 ft.

Sediment Depth Removed

NA ft.

☐ 1.68\* gal./ft.

☒ 0.18

=

~1.6 gal./vol.

\*for 4" HSA Installed Wells

Equipment:

☐ Dedicated Submersible Pump

☐ Surge Block

☐ Bailer ☐ 2" ☒ 4"

☐ Grundfos Pump 2" ☐ 4"

Approximate Recharge Rate

NA gpm

Total Gallons Removed

~1 gal.

Well Development Criteria Met:

☒ Well water clear to unaided eye

☐ Sediment thickness remaining in well is <1.0% of screen length

☒ Total water removed = a minimum of 5x calculated well volume plus 5x drilling fluid lost

☐ Turbidity < 5NTUs

☒ 10% change in field parameters

Notes:

End of Well Development Sample (1 pint) Collected?

☐ Yes ☒ No

Water Parameter Measurements

Record at start, twice during and at the end of development (minimum):

Time	Volume	Total Gallons	pH	Temp.	Conductance	Turbidity	Pumping Rate
1530	<1	<1	7.20	13.3	1.38	71000	~500
1600	<1	<1	7.12	13.7	1.40	432	~500
1610	<1	1	7.03	13.7	1.38	284	~500

Well Developer's Signature

TLL

MACTEC

511 Congress Street

Portland, ME 04101

FIGURE 4-9

WELL DEVELOPMENT RECORD

NYSDEC QUALITY ASSURANCE PROGRAM PLAN



# WELL DEVELOPMENT RECORD

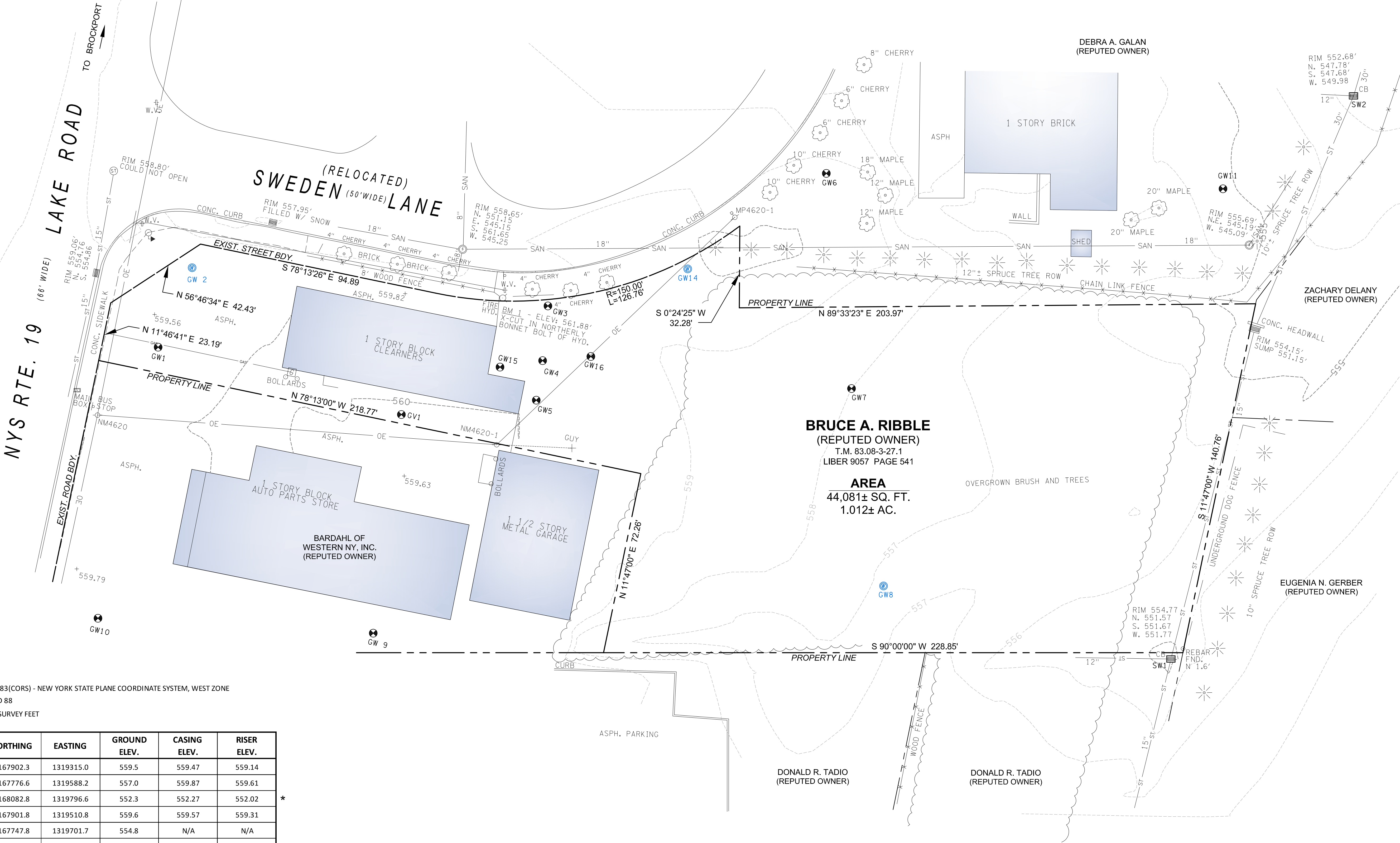
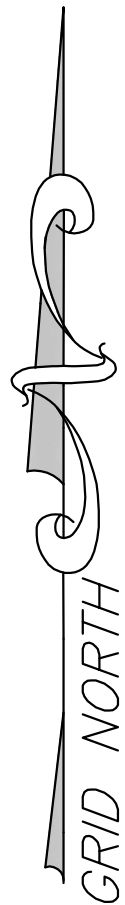
Project: <u>Ace Cleaners</u>		Well Installation Date: <u>11-3-09</u>		Project No: <u>3612012135</u>													
Client: <u>NYS DEC</u>		Well Development Date: <u>11-4-09</u>		Logged by: <u>TLC</u>													
Well/Site I.D.: <u>GW-14</u>		Weather: <u>cool 50°F clear</u>		Start Date: <u>11-4-09</u>													
				Finish Date: <u>11-4-09</u>													
Well Construction Record Data:																	
Bottom of Screen		Well Diameter: <u>1</u> in.		Start Time: <u>1445</u>													
Sediment Sump/Plug				Finish Time: <u>1700</u>													
Screen Length		Fluids Lost during Drilling: <u>0</u> gal.		<u>Direct Push Geoprobe</u>													
Protective Casing Stick-up: <u>0</u> ft.		Protective Casing/Well Diff: <u>0.26</u> ft.		PID Readings:													
				Ambient Air: <u>0</u> ppm													
				Well Mouth: <u>0</u> ppm													
Well Levels:																	
Initial		Sediment:															
<u>5.07</u> ft.		Well Depth before Development		<u>NA</u> ft. (from top of PVC)													
End of Development		Well Depth after Development		<u>~13.5</u> ft.													
24 Hours after Development		Sediment Depth Removed		<u>unk.</u> ft.													
HT of Water Column		$\square 1.68^* \text{ gal./ft.}$ $\times \checkmark \underline{0.18}$		$=$ <u>~1.5</u> gal./vol. <u>Direct Push</u> <small>*for 4" HOA Installed Wells</small>													
Equipment:																	
<input type="checkbox"/> Dedicated Submersible Pump <input type="checkbox"/> Surge Block <input type="checkbox"/> Bailer <input type="checkbox"/> 2" <input checked="" type="checkbox"/> <u>Geopump</u> <input type="checkbox"/> Grundfos Pump 2" <u>      </u> 4" <u>      </u>		Approximate Recharge Rate		<u>NA</u> gpm													
		Total Gallons Removed		<u>~1</u> gal.													
Well Development Criteria Met:																	
Notes: _____																	
<table border="0" style="width:100%;"> <tr> <td style="width:50%; vertical-align: top;">                 End of Well Development Sample (1 pint) Collected? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No             </td> <td style="width:50%; vertical-align: top;"> <table border="0"> <tr> <td><input checked="" type="checkbox"/> Well water clear to unaided eye</td> <td>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> Sediment thickness remaining in well is &lt;1.0% of screen length</td> <td>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Total water removed = a minimum of 5x calculated well volume plus 5x drilling fluid lost</td> <td>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Turbidity &lt; 5NTUs</td> <td>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> 10% change in field parameters</td> <td>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></td> </tr> </table> </td> </tr> </table>						End of Well Development Sample (1 pint) Collected? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<table border="0"> <tr> <td><input checked="" type="checkbox"/> Well water clear to unaided eye</td> <td>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> Sediment thickness remaining in well is &lt;1.0% of screen length</td> <td>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Total water removed = a minimum of 5x calculated well volume plus 5x drilling fluid lost</td> <td>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Turbidity &lt; 5NTUs</td> <td>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> 10% change in field parameters</td> <td>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></td> </tr> </table>	<input checked="" type="checkbox"/> Well water clear to unaided eye	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Sediment thickness remaining in well is <1.0% of screen length	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<input type="checkbox"/> Total water removed = a minimum of 5x calculated well volume plus 5x drilling fluid lost	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<input type="checkbox"/> Turbidity < 5NTUs	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<input type="checkbox"/> 10% change in field parameters	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
End of Well Development Sample (1 pint) Collected? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<table border="0"> <tr> <td><input checked="" type="checkbox"/> Well water clear to unaided eye</td> <td>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></td> </tr> <tr> <td><input checked="" type="checkbox"/> Sediment thickness remaining in well is &lt;1.0% of screen length</td> <td>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Total water removed = a minimum of 5x calculated well volume plus 5x drilling fluid lost</td> <td>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> Turbidity &lt; 5NTUs</td> <td>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> 10% change in field parameters</td> <td>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></td> </tr> </table>	<input checked="" type="checkbox"/> Well water clear to unaided eye	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/> Sediment thickness remaining in well is <1.0% of screen length	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<input type="checkbox"/> Total water removed = a minimum of 5x calculated well volume plus 5x drilling fluid lost	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<input type="checkbox"/> Turbidity < 5NTUs	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<input type="checkbox"/> 10% change in field parameters	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>						
<input checked="" type="checkbox"/> Well water clear to unaided eye	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																
<input checked="" type="checkbox"/> Sediment thickness remaining in well is <1.0% of screen length	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>																
<input type="checkbox"/> Total water removed = a minimum of 5x calculated well volume plus 5x drilling fluid lost	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																
<input type="checkbox"/> Turbidity < 5NTUs	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																
<input type="checkbox"/> 10% change in field parameters	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>																
Water Parameter Measurements																	
Record at start, twice during and at the end of development (minimum):																	
Time	Volume	*Total Gallons	pH	Temp.	ms/cm												
<u>1455</u>	<u>0</u>	<u>0</u>	<u>7.12</u>	<u>14.0</u>	<u>2.24</u>												
<u>1300 well is dry purged ~1000mls</u>																	
<u>1310 water is coming in</u>																	
<u>1645</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>30.5</u>												
<u>1650</u>	<u>Well Dry.</u>				<u>500</u>												
<u>01-27-10</u>																	
Well Developer's Signature: <u>[Signature]</u>																	

**MACTEC**  
511 Congress Street  
Portland, ME 04101

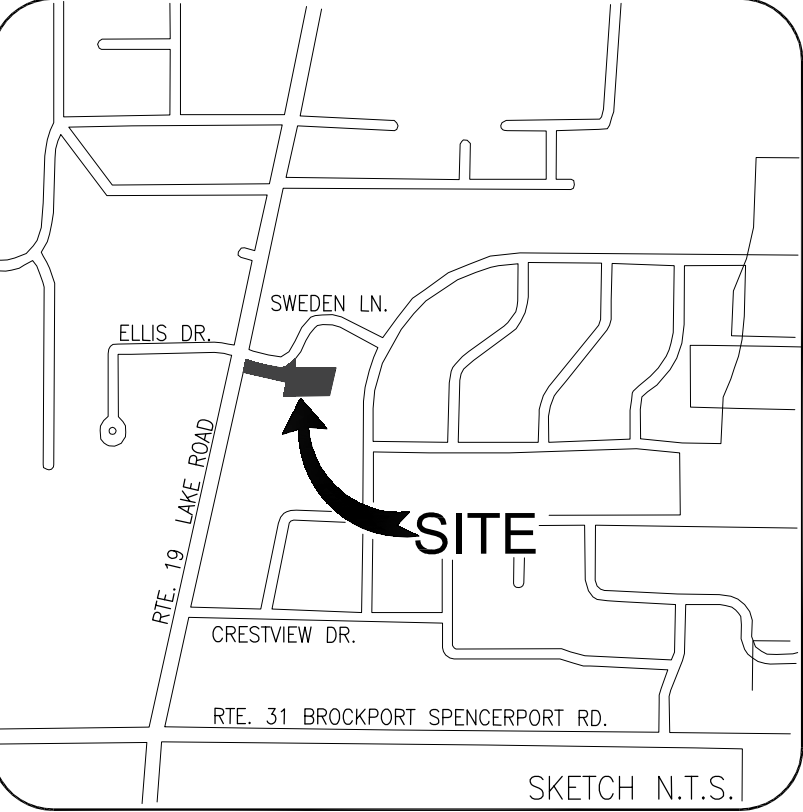
**FIGURE 4-9**  
**WELL DEVELOPMENT RECORD**  
**NYSDEC QUALITY ASSURANCE PROGRAM PLAN**

## **APPENDIX C**

### **SITE SURVEY**



VICINITY MAP



BOUNDARY REFERENCES

- DEED, FILED IN LIBER 9057 AT PAGE 541
- DEED, FILED IN LIBER 6201 AT PAGE 296
- DEED, FILED IN LIBER 8964 AT PAGE 568
- DEED, FILED IN LIBER 9443 AT PAGE 245
- DEED, FILED IN LIBER 10379 AT PAGE 55
- MAP ENTITLED "MAP OF A SURVEY OF SWEDEN LANE REALIGNMENT", DATED MAY 22, 1991 AND FILED AT THE MONROE COUNTY CLERK'S OFFICE IN LIBER 270 OF MAPS, PAGE 65.
- MAP ENTITLED "MAP OF SECTION 1, SWEDEN VILLAGE", DATED JULY 27, 1962 AND FILED AT THE MONROE COUNTY CLERK'S OFFICE IN LIBER 155 OF MAPS, PAGE 30.

SURVEY NOTES

- MAPPING SHOWN HEREON IS REFERENCED TO NAD 83(CORS) - NEW YORK STATE PLANE COORDINATE SYSTEM, WEST ZONE.
- ELEVATIONS ARE REFERENCED TO NAVD 88.
- PROJECT UNITS ARE U.S. SURVEY FEET.
- CONTOUR INTERVAL IS ONE (1) FOOT.
- THE SITE WAS SNOW COVERED AT THE TIME OF SURVEY.

CERTIFICATION

WE, POPLI, ARCHITECTURE + ENGINEERING & L.S., P.C., HEREBY CERTIFY TO THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION THAT THIS SURVEY AND MAP WAS PREPARED UNDER THE DIRECTION OF A LICENSED LAND SURVEYOR AND FROM THE NOTES OF AN INSTRUMENT SURVEY COMPLETED FEBRUARY 5, 2010 AND THE REFERENCES LISTED HEREON. THIS SURVEY IS SUBJECT TO ANY EASEMENTS AND/OR ENCUMBRANCES AN UP-TO-DATE ABSTRACT OF TITLE MAY REVEAL, AS NONE WAS PROVIDED.



HORIZ. DATUM: NAD 83(CORS) - NEW YORK STATE PLANE COORDINATE SYSTEM, WEST ZONE  
VERT. DATUM: NAVD 88  
UNITS: U.S. SURVEY FEET

POINT ID	NORTHING	EASTING	GROUND ELEV.	CASING ELEV.	RISER ELEV.
WELL GW 2	1167902.3	1319315.0	559.5	559.47	559.14
WELL GW 8	1167776.6	1319588.2	557.0	559.87	559.61
WELL GW 12	1168082.8	1319796.6	552.3	552.27	552.02
WELL GW 14	1167901.8	1319510.8	559.6	559.57	559.31
SW 1	1167747.8	1319701.7	554.8	N/A	N/A
SW 2	1167970.2	1319773.8	552.7	N/A	N/A
SW 3	1168241.4	1319907.1	543.9	N/A	N/A
GV 1	1167844.3	1319397.7	559.6	N/A	N/A
GW 1	1167870.9	1319301.6	559.7	N/A	N/A
GW 3	1167887.2	1319455.6	559.7	N/A	N/A
GW 4	1167865.6	1319453.5	559.7	N/A	N/A
GW 5	1167850.0	1319451.0	559.7	N/A	N/A
GW 6	1167939.5	1319565.6	559.4	N/A	N/A
GW 7	1167854.6	1319575.5	558.0	N/A	N/A
GW 9	1167758.0	1319386.6	559.8	N/A	N/A
GW 10	1167763.9	1319277.9	559.8	N/A	N/A
GW 11	1167933.5	1319722.2	555.1	N/A	N/A
GW 15	1167863.0	1319436.7	559.7	N/A	N/A
GW 16	1167867.2	1319472.5	559.3	N/A	N/A

\* SAMPLE LOCTIONS OUTSIDE MAPPING LIMITS (LOCATIONS ARE SHOWN IN THE DESIGN SPACE OF THE CAD FILE).

LEGEND

- SAMPLE LOCATION
- MONITORING WELL
- SANITARY MANHOLE
- PEDESTRIAN SIGNAL
- CATCH BASIN
- GAS METER
- FIRE HYDRANT
- WATER VALVE

SURVEY BY: PREPARED FOR:

<b>POPLI DESIGN GROUP</b> ARCHITECTS & ENGINEERS 555 Pentrooke Drive Pentfield NY 14520	
<b>MACTEC</b>	
SURVEYOR JOB NUMBER:	3280.13
SURVEY CREW:	J. PHILLIPS, W. STRATTON
DRAWN BY:	J. PHILLIPS
CHECKED BY:	M. VENTURO
REVISIONS	

BOUNDARY & TOPOGRAPHIC MAP

FOR THE  
NEW YORK STATE DEPARTMENT  
OF ENVIRONMENTAL CONSERVATION

ACE CLEANERS SITE

Town of Sweden, County of Monroe, State of New York

DATE: FEBRUARY 12, 2010  
SCALE: 1" = 20'

SHEET: 1 OF 1

## **APPENDIX D**

### **DATA USABILITY SUMMARY REPORT**



**DATA USABILITY SUMMARY REPORT**  
**NOVEMBER 2009 SOIL, SEDIMENT AND WATER SAMPLING PROGRAM**  
**ACE CLEANERS**  
**BROCKPORT, NY**

**1.0 Introduction:**

**Soil, Sediment and Water Volatile Organic Analyses by SW846 Method 8260B**

**Sediment Total Organic Carbon Analysis by SW846 Method 9060**

**Samples Collected: November 3, 2009**

**Samples Received at Con-Test Analytical Laboratory on November 4, 2009**

**Sample Delivery Group: 09K0085**

**Laboratory Reference Numbers:**

<b>Field Sample ID</b>	<b>Laboratory Sample ID</b>	<b>Matrix</b>
ACSW00200001XX	09K0085-01	Surface Water
ACSW00300001XX	09K0085-02	Surface Water
ACSD00200001XX	09K0085-03	Soil
ACSD00300001XX	09K0085-04	Soil
ACGS0030601XX	09K0085-05	Soil
ACGS0030601XD	09K0085-06	Soil
ACGS0030601MS	09K0085-06 MS	Soil
ACGS0030601MD	09K0085-06 MSD	Soil
ACGS0040601XX	09K0085-07	Soil
ACGS0051001XX	09K0085-08	Soil ML
ACGS0051001XX	09K0085-08 10X	Soil ML
ACGS0150701XX	09K0085-09	Soil ML
ACGS0150701XX	09K0085-09 10X	Soil ML
ACGS0160701XX	09K0085-10	Soil
ACGW0030601XX	09K0085-11	Groundwater
ACGW0030601XX	09K0085-11 10X	Groundwater
ACGW0030601XX	09K0085-11 100X	Groundwater
ACGW0031201XX	09K0085-12 100X	Groundwater
ACGW0041201XX	09K0085-13 100X	Groundwater
ACGW0041201XX	09K0085-13 1000X	Groundwater
ACGW0040601XD	09K0085-14 100X	Groundwater
ACGW0040601XX	09K0085-15 100X	Groundwater
ACGW0050601XX	09K0085-16 100X	Groundwater
ACGW0050601XX	09K0085-16 500X	Groundwater
ACGW0051201XX	09K0085-17 100X	Groundwater
ACGW0061401XX	09K0085-18	Groundwater
ACGW0061401XX	09K0085-18 10X	Groundwater
ACGW0061401XX	09K0085-18 100X	Groundwater
ACGW0060601XX	09K0085-19	Groundwater
ACGW0150601XX	09K0085-20 100X	Groundwater
ACGW0150601XX	09K0085-20 5000X	Groundwater
ACGW0151101XX	09K0085-21 100X	Groundwater
ACGW0151101XX	09K0085-21 1000X	Groundwater
ACGW0160701XX	09K0085-22 10X	Groundwater
ACGW0161201XX	09K0085-23 100X	Groundwater
ACGW0161201XX	09K0085-23 500X	Groundwater
ACQT001XXX01XX	09K0085-24	Trip Blank Water
ACQT002XXX01XX	09K0085-25	Trip Blank Soil

AC-Exterior Hose-2009 09K0085-26

Water

Deliverables for the off-site laboratory analyses included a Category B deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 2005) for SDG 09K0085. The analysis of sediment samples for total organic carbon (TOC) by SW846 Method 9060 was performed by First Light Power lab in West Springfield, Massachusetts. Results for TOC were not reported in a Category B deliverable and were not validated. TOC results are reported as received from the laboratory.

A project chemist review was completed based on NYSDEC Division of Environmental Remediation guidance for Data Usability Summary Reports (NYSDEC, 2002) for SDG 09K0085. Soil and water samples were reviewed using criteria in the US EPA Region II checklist, Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B (SOP # HW-24, Revision #2, October 2006). The following parameters were reviewed.

- \* - Data Completeness
- \* - GC/MS Tuning
- \* - Holding Times
  - Calibrations
  - Laboratory Blanks
  - Trip Blank
- \* - Surrogate Compound Recoveries
- \* - Internal Standard Recoveries
  - Matrix Spike
  - Laboratory Control Sample
- \* - Compound Identification
- \* - Compound Quantitation

\* - Indicates that all criteria were met for this parameter.

## 2.0 DATA VALIDATION SUMMARY

It was not possible to correlate the quality control summary data with the raw data because the laboratory used two different file numbers which could not be correlated. The laboratory supplied an email which correlated the two file numbers. Original copies of laboratory logs showing the correlation were not provided.

Raw data for extraction logs were not initially provided. A copy was received from the lab on 1/5/2009.

### Holding Times

The laboratory's case narrative notes that the pH of several samples were greater than 2, which is the required limit for the 14 day holding time.

The following samples had a pH greater than 2 and were analyzed 1 day beyond the 7 day holding time for non-preserved water samples.

ACGW0030601XX	09K0085-11	Groundwater
ACGW0030601XX	09K0085-11 10X	Groundwater
ACGW0041201XX	09K0085-13 1000X	Groundwater
ACGW0040601XD	09K0085-14 100X	Groundwater
ACGW0050601XX	09K0085-16 500X	Groundwater
ACGW0061401XX	09K0085-18	Groundwater
ACGW0061401XX	09K0085-18 10X	Groundwater
ACGW0060601XX	09K0085-19	Groundwater
ACGW0150601XX	09K0085-20 5000X	Groundwater
ACGW0151101XX	09K0085-21 1000X	Groundwater
ACGW0160701XX	09K0085-22 10X	Groundwater
ACGW0161201XX	09K0085-23 500X	Groundwater

The data for these samples were flagged with the "J" qualifier and are estimated values.

All other soil and preserved water samples were analyzed within 14 days of collection.

### Tunes

No problems were detected with the tunes associated with the samples of this delivery group. The NYS DEC ASP FORM V was not included in the data package.

### Surrogate Compound Recoveries

All surrogate compound recoveries were within the 70% - 130% quality assurance limits.

### Calibrations

The 11/6/2009 initial calibration (page 176, A1105015) is associated with samples:

ACSW00200001XX	09K0085-01	Surface Water
ACSW00300001XX	09K0085-02	Surface Water
ACGW0030601XX	09K0085-11 100X	Groundwater
ACGW0031201XX	09K0085-12 100X	Groundwater
ACGW0041201XX	09K0085-13 100X	Groundwater
ACGW0040601XX	09K0085-15 100X	Groundwater
ACGW0050601XX	09K0085-16 100X	Groundwater
ACGW0051201XX	09K0085-17 100X	Groundwater
ACGW0061401XX	09K0085-18 100X	Groundwater
ACGW0150601XX	09K0085-20 100X	Groundwater
ACGW0151101XX	09K0085-21 100X	Groundwater
ACGW0161201XX	09K0085-23 100X	Groundwater
ACGS0040601XX	09K0085-07	Soil ML
ACGS0051001XX	09K0085-08	Soil ML
ACGS0051001XX	09K0085-08 10X	Soil ML
ACGS0150701XX	09K0085-09	Soil ML

ACGS0150701XX

09K0085-09 10X

Soil ML

All of the %RSDs were less than 20% with the exceptions of bromomethane (63%) acetone (36%), 1,4-dioxane (27%) and isopropylbenzene (28%).

All of the relative response factors (rrfs) were greater than 0.05 with the exceptions of acetone (0.037), t-butyl alcohol (0.049) and 1,4-dioxane (0.003).

Both the run log and raw data for the highest standard in this initial calibration were noted as 80 ug/l, (page 200) but a concentration of 100 ug/l was noted on the initial calibration summary form. The rrfs were calculated on the basis of 100 ug/l. The laboratory verified in a 1/8/2009 email that the correct concentration was 100 ug/l.

All of the percent differences in the one 11/10/2009 continuing calibration (page 459/ A1110020) associated with the following samples were less than 20% with the exceptions of carbon tetrachloride (23%), 1,1,1,2-tetrachloroethane (21%), trans-1,4-dichloro-2-butene (21%), 1,2-dibromo-3-chloropropane (23%) and bromoform (31%).

ACSW00200001XX	09K0085-01	Surface Water
ACSW00300001XX	09K0085-02	Surface Water
ACGW0030601XX	09K0085-11 100X	Groundwater
ACGW0031201XX	09K0085-12 100X	Groundwater
ACGW0041201XX	09K0085-13 100X	Groundwater
ACGW0040601XX	09K0085-15 100X	Groundwater
ACGW0050601XX	09K0085-16 100X	Groundwater
ACGW0051201XX	09K0085-17 100X	Groundwater
ACGW0061401XX	09K0085-18 100X	Groundwater
ACGW0150601XX	09K0085-20 100X	Groundwater
ACGW0151101XX	09K0085-21 100X	Groundwater
ACGW0161201XX	09K0085-23 100X	Groundwater

The 11/9/2009 continuing calibration (page 609, A1109003) is associated is associated with samples:

ACGS0040601XX	09K0085-07	Soil SM
ACGS0051001XX	09K0085-08	Soil SM
ACGS0051001XX	09K0085-08 10X	Soil SM
ACGS0150701XX	09K0085-09	Soil SM
ACGS0150701XX	09K0085-09 10X	Soil SM

All of the percent differences were less than 20% with the exceptions of bromomethane (22%), 1,4-dioxane (33%) and 1,2-dibromo-3-chloropropane (21%).

The 11/11/2009 initial calibration (page 333, B1111002) associated is associated with samples:

ACGW0030601XX	09K0085-11	Groundwater
ACGW0030601XX	09K0085-11 10X	Groundwater
ACGW0041201XX	09K0085-13 1000X	Groundwater



ACGW0040601XD	09K0085-14 100X	Groundwater
ACGW0050601XX	09K0085-16 500X	Groundwater
ACGW0061401XX	09K0085-18	Groundwater
ACGW0061401XX	09K0085-18 10X	Groundwater
ACGW0060601XX	09K0085-19	Groundwater
ACGW0150601XX	09K0085-20 5000X	Groundwater
ACGW0151101XX	09K0085-21 1000X	Groundwater
ACGW0160701XX	09K0085-22 10X	Groundwater
ACGW0161201XX	09K0085-23 500X	Groundwater
ACQT001XXX01XX	09K0085-24	Trip Blank Water
AC-Exterior Hose-2009	09K0085-26	Water

All of the %RSDs were less than 20% with the exceptions acetone (48%), acrylonitrile (59%), methylene chloride (116%), bromoform (36%), 1,2-dibromo-3-chloropropane (26%) and naphthalene (25%).

All of the relative response factors (rrfs) were greater than 0.05 with the exception of 1,4-dioxane (0.005).

All of the percent differences in the 11/11/2009 continuing calibration (page 742) associated with the following samples were less than 20% with the exceptions of bromomethane (44%), acetone (32%), t-butyl alcohol (28%), acrylonitrile (28%), methylene chloride (59%), bromoform (24%) and naphthalene (23%).

ACGW0060601XX	09K0085-19	Groundwater
ACGW0150601XX	09K0085-20 5000X	Groundwater
ACGW0151101XX	09K0085-21 1000X	Groundwater
ACGW0160701XX	09K0085-22 10X	Groundwater
ACGW0161201XX	09K0085-23 500X	Groundwater
ACQT001XXX01XX	09K0085-24	Trip Blank Water
AC-Exterior Hose-2009	09K0085-26	Water

The 11/9/2009 initial calibration (page 416, D1106004) is associated with samples:

ACSD00200001XX	09K0085-03	Soil
ACSD00300001XX	09K0085-04	Soil
ACGS0030601XX	09K0085-05	Soil
ACGS0030601XD	09K0085-06	Soil
ACGS0030601MS	09K0085-06 MS	Soil
ACGS0030601MD	09K0085-06 MSD	Soil
ACGS0160701XX	09K0085-10	Soil
ACQT002XXX01XX	09K0085-25	Trip Blank Soil

All %RSDs were less than 20% with the exceptions of isopropylbenzene (34%), n-propylbenzene (26%), 1,3,5-trimethylbenzene (22%), 1,2,4-trimethylbenzene (25%), n-butylbenzene (32%), 1,2,4-trichlorobenzene (35%), naphthalene (53%) and 1,2,3-trichlorobenzene (36%).

All relative response factors were greater than 0.05 with the exceptions of t-butyl alcohol (0.035), tetrahydrofuran (0.033) and 1,4-dioxane (0.003).

All of the percent differences in the 11/9/2009 continuing calibration (page 577) associated with sample ACGS0160701XX (09K0085-10) were less than 20% with the exceptions of 1,4-dioxane (33%) and n-butylbenzene (26%)

Compounds with %RSDs or percent differences above 20% were flagged with the "J" qualifier and are estimated values.

Compounds with %RSDs or percent differences above 90% were flagged with the "J" qualifier when they were detected in a sample and flagged with the "R" qualifier and technically rejected when not detected.

Compounds with relative response factors less than 0.05 were flagged with the "J" qualifier when they were detected in a sample and flagged with the "R" qualifier and technically rejected when not detected.

### Matrix Spike

Soil sample ACGS0030601XD (09K0085-06) was used as the matrix spike and matrix spike duplicate. All recoveries and RPDs were within the required limits with the following exceptions:

Compound	MS % Rec	MSD % Rec.	RPD
Bromomethane	65%	69%	
Dichlorodifluoromethane	52%	54%	
Naphthalene	62%	67%	
1,3,5-Trichlorobenzene	132%	131%	
Vinyl Chloride	59%	61%	

Compounds with high recoveries were not qualified if they were not detected in a sample.

The data for compounds with low recoveries in all of the soil samples were flagged with the "J" qualifier and are estimated values.

A water matrix spike was not analyzed.

### Laboratory Control Sample

The laboratory's in-house QC limits noted on their summary forms were often wider than the 70% - 130% Region 2 limits. The data were validated on the basis of the Region 2 limits.

All of the laboratory control samples were within the 70% - 130% limits in the LCS pair B006941 / A1110021 associated with the analyses of the following samples with the exceptions of dichlorodifluoromethane (52%) and vinyl chloride (66%).

ACSW00200001XX	09K0085-01	Surface Water
ACSW00300001XX	09K0085-02	Surface Water
ACGW0030601XX	09K0085-11 100X	Groundwater
ACGW0031201XX	09K0085-12 100X	Groundwater
ACGW0041201XX	09K0085-13 100X	Groundwater
ACGW0040601XX	09K0085-15 100X	Groundwater

ACGW0050601XX	09K0085-16 100X	Groundwater
ACGW0051201XX	09K0085-17 100X	Groundwater
ACGW0061401XX	09K0085-18 100X	Groundwater
ACGW0150601XX	09K0085-20 100X	Groundwater
ACGW0151101XX	09K0085-21 100X	Groundwater
ACGW0161201XX	09K0085-23 100X	Groundwater

All of the laboratory control samples were within the 70% - 130% limits in the LCS pair B006952 / D1106013 associated with the analyses of the below samples with the exceptions of bromomethane (52%), dichlorodifluoromethane (55%), 1,3,5-trichlorobenzene (133%) and vinyl chloride (62%).

ACSD00200001XX	09K0085-03	Soil
ACSD00300001XX	09K0085-04	Soil
ACGS0030601XX	09K0085-05	Soil
ACGS0030601XD	09K0085-06	Soil

All of the laboratory control samples were within the 70% - 130% limits in the LCS pair D1109003 / B007006 associated with the analyses of the below sample with the exceptions of bromomethane (54%), dichlorodifluoromethane (47%), 1,3,5-trichlorobenzene (132%) and vinyl chloride (57%).

ACGS0160701XX	09K0085-10	Soil SM
---------------	------------	---------

All of the laboratory control samples were within the 70% - 130% limits in the LCS pair B007005 / B1111013 associated with the analyses of the below samples with the exception of with the exceptions of bromomethane (64%) and tert-butyl alcohol (59%). The RPD of tert-butyl alcohol was 39%.

ACGW0030601XX	09K0085-11	Groundwater
ACGW0030601XX	09K0085-11 10X	Groundwater
ACGW0041201XX	09K0085-13 1000X	Groundwater
ACGW0040601XD	09K0085-14 100X	Groundwater
ACGW0050601XX	09K0085-16 500X	Groundwater
ACGW0061401XX	09K0085-18	Groundwater
ACGW0061401XX	09K0085-18 10X	Groundwater

All of the laboratory control samples were within the 70% - 130% limits in the LCS pair B007003 / B1111029 associated with the analyses of the below samples with the exception of tert-butyl alcohol (66%).

ACGW0060601XX	09K0085-19	Groundwater
ACGW0150601XX	09K0085-20 5000X	Groundwater
ACGW0151101XX	09K0085-21 1000X	Groundwater
ACGW0160701XX	09K0085-22 10X	Groundwater
ACGW0161201XX	09K0085-23 500X	Groundwater
ACQT001XXX01XX	09K0085-24	Trip Blank Water
AC-Exterior Hose-2009	09K0085-26	Water

The data for the compounds associated with laboratory control samples with low recoveries were flagged with the "J" qualifier and are estimated values.

The data for compounds with high recoveries or RPDs in the laboratory control samples were only flagged with the "J" qualifier if they were detected in a sample since high recoveries do not affect undetected data.

### Method Blanks

Naphthalene (2.0 ug/l) was detected in the method blank associated with the analyses of samples:

ACGW0030601XX	09K0085-11	Groundwater
ACGW0030601XX	09K0085-11 10X	Groundwater
ACGW0041201XX	09K0085-13 1000X	Groundwater
ACGW0040601XD	09K0085-14 100X	Groundwater
ACGW0050601XX	09K0085-16 500X	Groundwater
ACGW0061401XX	09K0085-18	Groundwater
ACGW0061401XX	09K0085-18 10X	Groundwater

This compound was not detected in any of the samples and the data were not affected by the blank contamination.

No other compounds were detected in the other method blanks.

### Trip Blanks

No compounds were detected in either the soil or water trip blanks.

### Internal Standard Areas and Retention Times

The areas and retention times of all internal standards were within the required quality control limits.

### Sample Results

Validated results are presented in Table 2.

#### **Samples ACGS0051001XX (09K0085-08) and Sample ACGW0050601XX 100X (09K0085-16)**

The data for tetrachloroethene were flagged with the DP qualifier by the laboratory in the EDD and not on the Form 1's. The P qualifier was not referenced in the laboratory report. The lab was contacted for a reference to the meaning of the P qualifier. The response from the laboratory was that the P qualifier was inadvertently added to the EDD. The P qualifier was therefore removed from the final data set during validation.

### Tentatively Identified Compounds (TICs)

Tentatively identified compounds (TICs) were reported by the laboratory. TICs reported in samples are presented in Table 3. Only samples that had TICs reported are included on Table 3. If a sample is not listed, no TICs were reported.

No other problems were found with the reported results of any of the samples in SDG09K0085.

**References:**

New York State Department of Environmental Conservation (NYSDEC), 2005. "Analytical Services Protocols"; July 2005.

New York State Department of Environmental Conservation (NYSDEC), 2002. "Technical Guidance for Site Investigation and Remediation-Appendix 2B"; Draft DER-10; Division of Environmental Remediation; December 2002.

Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B (SOP # HW-24, Revision #2, October 2006).

Validated by Nancy Potak

January 28, 2010



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Reviewed by Tige Cunningham (MACTEC)

 4/20/10

TABLE 2 - RESULTS SUMMARY  
SDG 09K0085  
DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009 SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

		Sample Delivery Group	09K0085		09K0085		09K0085		09K0085		09K0085	
		Location	AC-Exterior Hose-2009		GS-15		GS-15		GS-16		GS-16	
		Sample Date	11/3/2009		11/3/2009		11/3/2009		11/3/2009		11/3/2009	
		Sample ID	AC-Exterior Hose-2009		ACGS0150701XX		ACGS0150701XX		ACGS0160701XX		ACGS0160701XX	
		Qc Code	FS		FS		FS		FS		FS	
		Units	UG/L		mg/Kg		PERCENT		mg/Kg		PERCENT	
Analysis	Fraction	Param Name	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	1,1,1,2-Tetrachloroethane	1	U	0.2	U			0.0019	U		
SW8260	N	1,1,1-Trichloroethane	1	U	0.2	U			0.0019	U		
SW8260	N	1,1,2,2-Tetrachloroethane	0.5	U	0.098	U			0.00094	U		
SW8260	N	1,1,2-Trichloro-1,2,2-Trifluoroethane	1	U	0.2	U			0.0094	U		
SW8260	N	1,1,2-Trichloroethane	1	U	0.2	U			0.0019	U		
SW8260	N	1,1-Dichloroethane	1	U	0.2	U			0.0019	U		
SW8260	N	1,1-Dichloroethene	1	U	0.2	U			0.0038	U		
SW8260	N	1,1-Dichloropropene	2	U	0.39	U			0.0019	U		
SW8260	N	1,2,3-Trichlorobenzene	5	U	0.98	U			0.0094	U		
SW8260	N	1,2,3-Trichloropropane	2	U	0.39	U			0.0019	U		
SW8260	N	1,2,4-Trichlorobenzene	1	U	0.2	U			0.0094	U		
SW8260	N	1,2,4-Trimethylbenzene	1	U	0.28				0.0019	U		
SW8260	N	1,2-Dibromo-3-chloropropane	5	UJ	0.98	UJ			0.0019	U		
SW8260	N	1,2-Dibromoethane	0.5	U	0.098	U			0.00094	U		
SW8260	N	1,2-Dichlorobenzene	1	U	0.2	U			0.0019	U		
SW8260	N	1,2-Dichloroethane	1	U	0.2	U			0.0019	U		
SW8260	N	1,2-Dichloropropane	1	U	0.2	U			0.0019	U		
SW8260	N	1,3,5-Trichlorobenzene	1	U	0.2	U			0.0019	U		
SW8260	N	1,3,5-Trimethylbenzene	1	U	0.2	U			0.0019	U		
SW8260	N	1,3-Dichlorobenzene	1	U	0.2	U			0.0019	U		
SW8260	N	1,3-Dichloropropane	0.5	U	0.098	U			0.00094	U		
SW8260	N	1,4-Dichlorobenzene	1	U	0.2	U			0.0019	U		
SW8260	N	1,4-Dioxane		R		R				R		
SW8260	N	2,2-Dichloropropane	1	UJ	0.2	U			0.0019	U		
SW8260	N	2-Butanone	20	U	3.9	U			0.038	U		
SW8260	N	2-Chlorotoluene	1	U	0.2	U			0.0019	U		
SW8260	N	2-Hexanone	10	U	2	U			0.094	U		
SW8260	N	4-Chlorotoluene	1	U	0.2	U			0.0019	U		
SW8260	N	4-iso-Propyltoluene	1	U	0.2	U			0.0019	U		
SW8260	N	4-Methyl-2-pentanone	10	U	2	U			0.094	U		
SW8260	N	Acetone	51	J		R				R		
SW8260	N	Acrylonitrile	5	UJ	0.98	U			0.0056	U		
SW8260	N	Benzene	1	U	0.2	U			0.0019	U		
SW8260	N	Bromobenzene	1	U	0.2	U			0.0019	UJ		
SW8260	N	Bromochloromethane	1	U	0.2	U			0.0019	U		
SW8260	N	Bromodichloromethane	0.5	U	0.2	U			0.0019	U		
SW8260	N	Bromoform	5	UJ	2	U			0.0019	U		
SW8260	N	Bromomethane	2	UJ	2	UJ			0.0094	UJ		
SW8260	N	Butane, 2-methoxy-2-methyl-	0.5	U	0.098	U			0.00094	U		
SW8260	N	Carbon disulfide	3	U	0.59	U			0.0056	U		
SW8260	N	Carbon tetrachloride	1	U	0.2	U			0.0094	U		
SW8260	N	Chlorobenzene	1	U	0.2	U			0.0019	U		
SW8260	N	Chlorodibromomethane	5	U	0.098	U			0.00094	U		
SW8260	N	Chloroethane	2	U	0.39	U			0.019	U		
SW8260	N	Chloroform	2	U	0.39	U			0.0038	U		
SW8260	N	Chloromethane	2	U	2	U			0.0094	U		
SW8260	N	Cis-1,2-Dichloroethene	1	U	0.94				0.0019	U		
SW8260	N	cis-1,3-Dichloropropene	0.5	U	0.098	U			0.0094	U		
SW8260	N	Dibromomethane	1	U	0.2	U			0.0019	U		
SW8260	N	Dichlorodifluoromethane	2	U	0.39	UJ			0.019	UJ		
SW8260	N	Diethyl ether	2	U	0.39	U			0.019	U		
SW8260	N	Diisopropylether	0.5	U	0.098	U			0.00094	U		
SW8260	N	Ethyl benzene	1	U	0.2	U			0.0019	U		
SW8260	N	Ethyl-t-Butyl Ether	0.5	U	0.098	U			0.00094	U		
SW8260	N	Hexachlorobutadiene	0.5	U	0.2	U			0.0019	U		
SW8260	N	Isopropylbenzene	1	U	0.2	U			0.0094	U		
SW8260	N	Methyl Tertbutyl Ether	1	U	0.2	U			0.0038	U		
SW8260	N	Methylene chloride		R	0.98	U			0.019	U		
SW8260	N	n-Butylbenzene	1	U	0.2	U			0.0094	UJ		
SW8260	N	Naphthalene	5	UJ	2	UJ			0.019	UJ		
SW8260	N	Propylbenzene	1	U	0.2	U			0.0019	U		
SW8260	N	sec-Butylbenzene	1	U	0.2	U			0.0019	U		
SW8260	N	Styrene	1	U	0.2	U			0.0094	U		
SW8260	N	t-Butyl alcohol	20	UJ		R				R		
SW8260	N	tert-Butylbenzene	1	U	0.2	U			0.0094	U		
SW8260	N	Tetrachloroethene	1.2		35	D			0.0019	U		

TABLE 2 - RESULTS SUMMARY  
SDG 09K0085  
DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009 SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

		Sample Delivery Group	09K0085		09K0085		09K0085		09K0085		09K0085	
		Location	AC-Exterior Hose-2009		GS-15		GS-15		GS-16		GS-16	
		Sample Date	11/3/2009		11/3/2009		11/3/2009		11/3/2009		11/3/2009	
		Sample ID	AC-Exterior Hose-2009		ACGS0150701XX		ACGS0150701XX		ACGS0160701XX		ACGS0160701XX	
		Qc Code	FS		FS		FS		FS		FS	
		Units	UG/L		mg/Kg		PERCENT		mg/Kg		PERCENT	
Analysis	Fraction	Param Name	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	Tetrahydrofuran	10	U	2	U			0.0094	U		
SW8260	N	Toluene	1	U	0.2	U			0.0019	U		
SW8260	N	trans-1,2-Dichloroethene	1	U	0.2	U			0.0019	U		
SW8260	N	trans-1,3-Dichloropropene	0.5	U	0.098	U			0.00094	U		
SW8260	N	trans-1,4-Dichloro-2-butene	2	U	0.39	U			0.0038	U		
SW8260	N	Trichloroethene	1	U	0.56				0.0019	U		
SW8260	N	Trichlorofluoromethane	2	U	0.39	U			0.0094	U		
SW8260	N	Vinyl chloride	2	U	0.88	J			0.0094	UJ		
SW8260	N	Xylene, m/p	2	U	0.39	U			0.0038	U		
SW8260	N	Xylene, o	1	U	0.2	U			0.0019	U		
SW9060	N	Total Organic Carbon										
SM2540G	N	Percent Solids					87.2				84.4	
Notes:												
mg/kg = milligrams per kilogram												
ug/L = micrograms per liter												
QC Code: FS = Field Sample FD = Field Duplicate												
TB = Trip Blank EB = Equipment Rinse Blank												
Qualifiers: U = not detected at the reporting limit												
J = estimated value R = rejected												
D = result from a dilution analysis												

TABLE 2 - RESULTS SUMMARY  
SDG 09K0085  
DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009 SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

		Sample Delivery Group	09K0085		09K0085		09K0085		09K0085		09K0085	
		Location	GS-3		GS-3		GS-3		GS-3		GS-4	
		Sample Date	11/3/2009		11/3/2009		11/3/2009		11/3/2009		11/3/2009	
		Sample ID	ACGS0030601XD		ACGS0030601XD		ACGS0030601XX		ACGS0030601XX		ACGS0040601XX	
		Qc Code	FD		FD		FS		FS		FS	
		Units	mg/Kg		PERCENT		mg/Kg		PERCENT		mg/Kg	
Analysis	Fraction	Param Name	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	1,1,1,2-Tetrachloroethane	0.0017	U			0.0014	U			0.19	U
SW8260	N	1,1,1-Trichloroethane	0.0017	U			0.0014	U			0.19	U
SW8260	N	1,1,2,2-Tetrachloroethane	0.00087	U			0.00071	U			0.096	U
SW8260	N	1,1,2-Trichloro-1,2,2-Trifluoroethane	0.0087	U			0.0071	U			0.19	U
SW8260	N	1,1,2-Trichloroethane	0.0017	U			0.0014	U			0.19	U
SW8260	N	1,1-Dichloroethane	0.0017	U			0.0014	U			0.19	U
SW8260	N	1,1-Dichloroethene	0.0035	U			0.0028	U			0.19	U
SW8260	N	1,1-Dichloropropene	0.0017	U			0.0014	U			0.38	U
SW8260	N	1,2,3-Trichlorobenzene	0.0087	UJ			0.0071	UJ			0.96	U
SW8260	N	1,2,3-Trichloropropane	0.0017	U			0.0014	U			0.38	U
SW8260	N	1,2,4-Trichlorobenzene	0.0087	UJ			0.0071	UJ			0.19	U
SW8260	N	1,2,4-Trimethylbenzene	0.0017	UJ			0.0014	UJ			0.98	
SW8260	N	1,2-Dibromo-3-chloropropane	0.0017	U			0.0014	U			0.96	UJ
SW8260	N	1,2-Dibromoethane	0.00087	U			0.00071	U			0.096	U
SW8260	N	1,2-Dichlorobenzene	0.0017	U			0.0014	U			0.19	U
SW8260	N	1,2-Dichloroethane	0.0017	U			0.0014	U			0.19	U
SW8260	N	1,2-Dichloropropane	0.0017	U			0.0014	U			0.19	U
SW8260	N	1,3,5-Trichlorobenzene	0.0017	U			0.0014	U			0.19	U
SW8260	N	1,3,5-Trimethylbenzene	0.0017	UJ			0.0014	UJ			0.2	
SW8260	N	1,3-Dichlorobenzene	0.0017	U			0.0014	U			0.19	U
SW8260	N	1,3-Dichloropropane	0.00087	U			0.00071	U			0.096	U
SW8260	N	1,4-Dichlorobenzene	0.0017	U			0.0014	U			0.19	U
SW8260	N	1,4-Dioxane		R				R				R
SW8260	N	2,2-Dichloropropane	0.0017	U			0.0014	U			0.19	U
SW8260	N	2-Butanone	0.035	U			0.028	U			3.8	U
SW8260	N	2-Chlorotoluene	0.0017	U			0.0014	U			0.19	U
SW8260	N	2-Hexanone	0.017	U			0.014	U			1.9	U
SW8260	N	4-Chlorotoluene	0.0017	U			0.0014	U			0.19	U
SW8260	N	4-iso-Propyltoluene	0.0017	U			0.0014	U			0.19	U
SW8260	N	4-Methyl-2-pentanone	0.017	U			0.014	U			1.9	U
SW8260	N	Acetone	0.087	U			0.071	U				R
SW8260	N	Acrylonitrile	0.0052	U			0.0043	U			0.96	U
SW8260	N	Benzene	0.0017	U			0.0014	U			0.19	U
SW8260	N	Bromobenzene	0.0017	U			0.0014	U			0.19	U
SW8260	N	Bromochloromethane	0.0017	U			0.0014	U			0.19	U
SW8260	N	Bromodichloromethane	0.0017	U			0.0014	U			0.19	U
SW8260	N	Bromoform	0.0017	U			0.0014	U			1.9	U
SW8260	N	Bromomethane	0.0087	UJ			0.0071	UJ			1.9	UJ
SW8260	N	Butane, 2-methoxy-2-methyl-	0.00087	U			0.00071	U			0.096	U
SW8260	N	Carbon disulfide	0.0052	U			0.0043	U			0.57	U
SW8260	N	Carbon tetrachloride	0.0087	U			0.0071	U			0.19	U
SW8260	N	Chlorobenzene	0.0017	U			0.0014	U			0.19	U
SW8260	N	Chlorodibromomethane	0.00087	U			0.00071	U			0.096	U
SW8260	N	Chloroethane	0.017	U			0.014	U			0.38	U
SW8260	N	Chloroform	0.0035	U			0.0028	U			0.38	U
SW8260	N	Chloromethane	0.0087	U			0.0071	U			1.9	U
SW8260	N	Cis-1,2-Dichloroethene	0.0017	U			0.0014	U			0.19	U
SW8260	N	cis-1,3-Dichloropropene	0.0087	U			0.0071	U			0.096	U
SW8260	N	Dibromomethane	0.0017	U			0.0014	U			0.19	U
SW8260	N	Dichlorodifluoromethane	0.017	UJ			0.014	UJ			0.38	UJ
SW8260	N	Diethyl ether	0.017	U			0.014	U			0.38	U
SW8260	N	Diisopropylether	0.00087	U			0.00071	U			0.096	U
SW8260	N	Ethyl benzene	0.0017	U			0.0014	U			0.19	U
SW8260	N	Ethyl-t-Butyl Ether	0.00087	U			0.00071	U			0.096	U
SW8260	N	Hexachlorobutadiene	0.0017	U			0.0014	U			0.19	U
SW8260	N	Isopropylbenzene	0.0087	UJ			0.0071	UJ			0.19	U
SW8260	N	Methyl Tertbutyl Ether	0.0035	U			0.0028	U			0.19	U
SW8260	N	Methylene chloride	0.017	U			0.014	U			0.96	U
SW8260	N	n-Butylbenzene	0.0087	UJ			0.0071	UJ			0.31	
SW8260	N	Naphthalene	0.017	UJ			0.014	UJ			1.9	UJ
SW8260	N	Propylbenzene	0.0017	UJ			0.0014	UJ			0.19	U
SW8260	N	sec-Butylbenzene	0.0017	U			0.0014	U			0.19	U
SW8260	N	Styrene	0.0087	U			0.0071	U			0.19	U
SW8260	N	t-Butyl alcohol		R				R				R
SW8260	N	tert-Butylbenzene	0.0087	U			0.0071	U			0.19	U
SW8260	N	Tetrachloroethene	0.0017	U			0.0014	U			13	



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SDG 09K0085  
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		Sample Delivery Group	09K0085		09K0085		09K0085		09K0085		09K0085	
		Location	GS-3		GS-3		GS-3		GS-3		GS-4	
		Sample Date	11/3/2009		11/3/2009		11/3/2009		11/3/2009		11/3/2009	
		Sample ID	ACGS0030601XD		ACGS0030601XD		ACGS0030601XX		ACGS0030601XX		ACGS0040601XX	
		Qc Code	FD		FD		FS		FS		FS	
		Units	mg/Kg		PERCENT		mg/Kg		PERCENT		mg/Kg	
Analysis	Fraction	Param Name	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	Tetrahydrofuran		R				R			1.9	U
SW8260	N	Toluene	0.0017	U			0.0014	U			0.19	U
SW8260	N	trans-1,2-Dichloroethene	0.0017	U			0.0014	U			0.19	U
SW8260	N	trans-1,3-Dichloropropene	0.00087	U			0.00071	U			0.096	U
SW8260	N	trans-1,4-Dichloro-2-butene	0.0035	U			0.0028	U			0.38	U
SW8260	N	Trichloroethene	0.0017	U			0.0014	U			0.19	U
SW8260	N	Trichlorofluoromethane	0.0087	U			0.0071	U			0.38	U
SW8260	N	Vinyl chloride	0.0087	UJ			0.0071	UJ			0.38	UJ
SW8260	N	Xylene, m/p	0.0035	U			0.0028	U			0.38	U
SW8260	N	Xylene, o	0.0017	U			0.0014	U			0.19	U
SW9060	N	Total Organic Carbon										
SM2540G	N	Percent Solids			86				86.9			
Notes:												
mg/kg = milligrams per kilogram												
ug/L = micrograms per liter												
QC Code: FS = Field Sample FD = Field Duplicate												
TB = Trip Blank EB = Equipment Rinse Blank												
Qualifiers: U = not detected at the reporting limit												
J = estimated value R = rejected												
D = result from a dilution analysis												

TABLE 2 - RESULTS SUMMARY  
SDG 09K0085  
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NOVEMBER 2009 SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
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		Sample Delivery Group	09K0085		09K0085		09K0085		09K0085		09K0085	
		Location	GS-4		GS-5		GS-5		GW-15		GW-15	
		Sample Date	11/3/2009		11/3/2009		11/3/2009		11/3/2009		11/3/2009	
		Sample ID	ACGS0040601XX		ACGS0051001XX		ACGS0051001XX		ACGW0151101XX		ACGW0150601XX	
		Qc Code	FS		FS		FS		FS		FS	
		Units	PERCENT		mg/Kg		PERCENT		UG/L		UG/L	
Analysis	Fraction	Param Name	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	1,1,1,2-Tetrachloroethane			0.2	U			100	UD	100	UD
SW8260	N	1,1,1-Trichloroethane			0.2	U			100	UD	100	UD
SW8260	N	1,1,2,2-Tetrachloroethane			0.1	U			50	UD	50	UD
SW8260	N	1,1,2-Trichloro-1,2,2-Trifluoroethane			0.2	U			100	UD	100	UD
SW8260	N	1,1,2-Trichloroethane			0.2	U			100	UD	100	UD
SW8260	N	1,1-Dichloroethane			0.2	U			100	UD	100	UD
SW8260	N	1,1-Dichloroethene			0.2	U			100	UD	260	D
SW8260	N	1,1-Dichloropropene			0.4	U			200	UD	200	UD
SW8260	N	1,2,3-Trichlorobenzene			1	U			500	UD	500	UD
SW8260	N	1,2,3-Trichloropropane			0.4	U			200	UD	200	UD
SW8260	N	1,2,4-Trichlorobenzene			0.2	U			100	UD	100	UD
SW8260	N	1,2,4-Trimethylbenzene			0.2	U			100	UD	210	D
SW8260	N	1,2-Dibromo-3-chloropropane			1	UJ			500	UJ	500	UJD
SW8260	N	1,2-Dibromoethane			0.1	U			50	UD	50	UD
SW8260	N	1,2-Dichlorobenzene			0.2	U			100	UD	100	UD
SW8260	N	1,2-Dichloroethane			0.2	U			100	UD	100	UD
SW8260	N	1,2-Dichloropropane			0.2	U			100	UD	100	UD
SW8260	N	1,3,5-Trichlorobenzene			0.2	U			100	UD	100	UD
SW8260	N	1,3,5-Trimethylbenzene			0.2	U			100	UD	100	U
SW8260	N	1,3-Dichlorobenzene			0.2	U			100	UD	100	UD
SW8260	N	1,3-Dichloropropane			0.1	U			50	UD	50	UD
SW8260	N	1,4-Dichlorobenzene			0.2	U			100	UD	100	UD
SW8260	N	1,4-Dioxane			R				R		R	
SW8260	N	2,2-Dichloropropane			0.2	U			100	UD	100	UD
SW8260	N	2-Butanone			4	U			2000	UD	2000	UD
SW8260	N	2-Chlorotoluene			0.2	U			100	UD	100	UD
SW8260	N	2-Hexanone			2	U			1000	UD	1000	UD
SW8260	N	4-Chlorotoluene			0.2	U			100	UD	100	UD
SW8260	N	4-iso-Propyltoluene			0.2	U			100	UD	100	UD
SW8260	N	4-Methyl-2-pentanone			2	U			1000	UD	1000	UD
SW8260	N	Acetone			R				R		R	
SW8260	N	Acrylonitrile			1	U			500	UD	500	UD
SW8260	N	Benzene			0.2	U			100	UD	100	UD
SW8260	N	Bromobenzene			0.2	U			100	UD	100	UD
SW8260	N	Bromochloromethane			0.2	U			100	UD	100	UD
SW8260	N	Bromodichloromethane			0.2	U			50	UD	50	UD
SW8260	N	Bromoform			2	U			500	UJ	500	UJD
SW8260	N	Bromomethane			2	UJ			500	UJ	500	UJD
SW8260	N	Butane, 2-methoxy-2-methyl-			0.1	U			50	UD	50	UD
SW8260	N	Carbon disulfide			0.6	U			300	UD	300	UD
SW8260	N	Carbon tetrachloride			0.2	U			100	UJ	100	UJD
SW8260	N	Chlorobenzene			0.2	U			100	UD	100	UD
SW8260	N	Chlorodibromomethane			0.1	U			50	UD	50	UD
SW8260	N	Chloroethane			0.4	U			200	UD	200	UD
SW8260	N	Chloroform			0.4	U			200	U	200	U
SW8260	N	Chloromethane			2	U			500	UD	500	UD
SW8260	N	Cis-1,2-Dichloroethene			0.2	U			1700	D	4200	D
SW8260	N	cis-1,3-Dichloropropene			0.1	U			50	UD	50	UD
SW8260	N	Dibromomethane			0.2	U			100	UD	100	UD
SW8260	N	Dichlorodifluoromethane			0.4	UJ			200	UJ	200	UJD
SW8260	N	Diethyl ether			0.4	U			200	UD	200	UD
SW8260	N	Diisopropylether			0.1	U			50	UD	50	UD
SW8260	N	Ethyl benzene			0.2	U			100	UD	100	UD
SW8260	N	Ethyl-t-Butyl Ether			0.1	U			50	UD	50	UD
SW8260	N	Hexachlorobutadiene			0.2	U			50	UD	50	UD
SW8260	N	Isopropylbenzene			0.2	U			100	UD	100	UD
SW8260	N	Methyl Tertbutyl Ether			0.2	U			100	UD	100	UD
SW8260	N	Methylene chloride			1	U			500	UD	500	UD
SW8260	N	n-Butylbenzene			0.2	U			100	UD	100	UD
SW8260	N	Naphthalene			2	UJ			500	UD	500	U
SW8260	N	Propylbenzene			0.2	U			100	UD	100	UD
SW8260	N	sec-Butylbenzene			0.2	U			100	UD	100	UD
SW8260	N	Styrene			0.2	U			100	UD	100	UD
SW8260	N	t-Butyl alcohol			R				R		R	
SW8260	N	tert-Butylbenzene			0.2	U			100	UD	100	UD
SW8260	N	Tetrachloroethene			40	D			25000	JD	67000	JD

TABLE 2 - RESULTS SUMMARY  
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		Sample Delivery Group	09K0085		09K0085		09K0085		09K0085		09K0085	
		Location	GS-4		GS-5		GS-5		GW-15		GW-15	
		Sample Date	11/3/2009		11/3/2009		11/3/2009		11/3/2009		11/3/2009	
		Sample ID	ACGS0040601XX		ACGS0051001XX		ACGS0051001XX		ACGW0151101XX		ACGW0150601XX	
		Qc Code	FS		FS		FS		FS		FS	
		Units	PERCENT		mg/kg		PERCENT		UG/L		UG/L	
Analysis	Fraction	Param Name	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	Tetrahydrofuran			2 U				1000 UD		1000 UD	
SW8260	N	Toluene			0.2 U				100 UD		100 UD	
SW8260	N	trans-1,2-Dichloroethene			0.2 U				100 UD		100 UD	
SW8260	N	trans-1,3-Dichloropropene			0.1 U				50 UD		50 UD	
SW8260	N	trans-1,4-Dichloro-2-butene			0.4 U				200 UJ		200 UJD	
SW8260	N	Trichloroethene			0.2 U				730 D		2600 D	
SW8260	N	Trichlorofluoromethane			0.4 U				200 UD		200 UD	
SW8260	N	Vinyl chloride			0.4 UJ				460 UJ		2800 JD	
SW8260	N	Xylene, m/p			0.4 U				200 UD		200 UD	
SW8260	N	Xylene, o			0.2 U				100 UD		100 UD	
SW9060	N	Total Organic Carbon										
SM2540G	N	Percent Solids	87				85.4					
Notes:												
mg/kg = milligrams per kilogram												
ug/L = micrograms per liter												
QC Code: FS = Field Sample FD = Field Duplicate												
TB = Trip Blank EB = Equipment Rinse Blank												
Qualifiers: U = not detected at the reporting limit												
J = estimated value R = rejected												
D = result from a dilution analysis												

TABLE 2 - RESULTS SUMMARY  
SDG 09K0085  
DATA USABILITY SUMMARY REPORT  
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		Sample Delivery Group	09K0085		09K0085		09K0085		09K0085		09K0085	
		Location	GW-16		GW-16		GW-3		GW-3		GW-4	
		Sample Date	11/3/2009		11/3/2009		11/3/2009		11/3/2009		11/3/2009	
		Sample ID	ACGW0161201XX		ACGW0160701XX		ACGW0031201XX		ACGW0030601XX		ACGW0041201XX	
		Qc Code	FS		FS		FS		FS		FS	
		Units	UG/L		UG/L		UG/L		UG/L		UG/L	
Analysis	Fraction	Param Name	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	1,1,1,2-Tetrachloroethane	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	1,1,1-Trichloroethane	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	1,1,2,2-Tetrachloroethane	50	UD	5	UJD	50	UD	0.5	UJ	50	UD
SW8260	N	1,1,2-Trichloro-1,2,2-Trifluoroethane	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	1,1,2-Trichloroethane	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	1,1-Dichloroethane	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	1,1-Dichloroethene	100	UD	10	UJD	100	UD	1.8	J	100	U
SW8260	N	1,1-Dichloropropene	200	UD	20	UJD	200	UD	2	UJ	200	UD
SW8260	N	1,2,3-Trichlorobenzene	500	UD	50	UJD	500	UD	5	UJ	500	UD
SW8260	N	1,2,3-Trichloropropane	200	UD	20	UJD	200	UD	2	UJ	200	UD
SW8260	N	1,2,4-Trichlorobenzene	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	1,2,4-Trimethylbenzene	100	UD	10	UJD	100	UD	1	UJ	100	U
SW8260	N	1,2-Dibromo-3-chloropropane	500	UJD	50	UJD	500	UJD	5	UJ	500	UJD
SW8260	N	1,2-Dibromoethane	50	UD	5	UJD	50	UD	0.5	UJ	50	UD
SW8260	N	1,2-Dichlorobenzene	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	1,2-Dichloroethane	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	1,2-Dichloropropane	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	1,3,5-Trichlorobenzene	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	1,3,5-Trimethylbenzene	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	1,3-Dichlorobenzene	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	1,3-Dichloropropane	50	UD	5	UJD	50	UD	0.5	UJ	50	UD
SW8260	N	1,4-Dichlorobenzene	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	1,4-Dioxane		R		R		R		R		R
SW8260	N	2,2-Dichloropropane	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	2-Butanone	2000	UD	200	UJD	2000	UD	20	UJ	2000	UD
SW8260	N	2-Chlorotoluene	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	2-Hexanone	1000	UD	100	UJD	1000	UD	10	UJ	1000	UD
SW8260	N	4-Chlorotoluene	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	4-iso-Propyltoluene	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	4-Methyl-2-pentanone	1000	UD	100	UJD	1000	UD	10	UJ	1000	UD
SW8260	N	Acetone		R	500	UJD		R	50	UJ		R
SW8260	N	Acrylonitrile	500	UD	50	UJD	500	UD	5	UJ	500	UD
SW8260	N	Benzene	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	Bromobenzene	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	Bromochloromethane	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	Bromodichloromethane	50	UD	5	UJD	50	UD	0.5	UJ	50	UD
SW8260	N	Bromoform	500	UJD	50	UJD	500	UJD	5	UJ	500	UJD
SW8260	N	Bromomethane	500	UJD	20	UJD	500	UJD	2	UJ	500	UD
SW8260	N	Butane, 2-methoxy-2-methyl-	50	UD	5	UJD	50	UD	0.5	UJ	50	UD
SW8260	N	Carbon disulfide	300	UD	30	UJD	300	UD	3	UJ	300	UD
SW8260	N	Carbon tetrachloride	100	UJD	10	UJD	100	UJD	1	UJ	100	UJD
SW8260	N	Chlorobenzene	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	Chlorodibromomethane	50	UD	50	UJD	50	UD	5	UJ	50	UD
SW8260	N	Chloroethane	200	UD	20	UJD	200	UD	2	UJ	200	UD
SW8260	N	Chloroform	200	U	20	UJD	200	U	2	UJ	200	U
SW8260	N	Chloromethane	500	UD	20	UJD	500	UD	2	UJ	500	UD
SW8260	N	Cis-1,2-Dichloroethene	280	D	10	UJD	100	UD	34	J	1000	D
SW8260	N	cis-1,3-Dichloropropene	50	UD	5	UJD	50	UD	0.5	UJ	50	UD
SW8260	N	Dibromomethane	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	Dichlorodifluoromethane	200	UJD	20	UJD	200	UD	2	UJ	200	UJD
SW8260	N	Diethyl ether	200	UD	20	UJD	200	UD	2	UJ	200	UD
SW8260	N	Diisopropylether	50	UD	5	UJD	50	UD	0.5	UJ	50	UD
SW8260	N	Ethyl benzene	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	Ethyl-t-Butyl Ether	50	UD	5	UJD	50	UD	0.5	UJ	50	UD
SW8260	N	Hexachlorobutadiene	50	UD	5	UJD	50	UD	0.5	UJ	50	UD
SW8260	N	Isopropylbenzene	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	Methyl Tertbutyl Ether	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	Methylene chloride	500	UD		R	500	UD	5	UJ	500	UD
SW8260	N	n-Butylbenzene	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	Naphthalene	500	UD	50	UJD	500	UD	5	UJ	500	UD
SW8260	N	Propylbenzene	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	sec-Butylbenzene	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	Styrene	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	t-Butyl alcohol		R	200	UJD		R	20	UJ		R
SW8260	N	tert-Butylbenzene	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	Tetrachloroethene	9500	JD	63	JD	790	D	140	JD	20000	JD

TABLE 2 - RESULTS SUMMARY  
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		Sample Delivery Group	09K0085		09K0085		09K0085		09K0085		09K0085	
		Location	GW-16		GW-16		GW-3		GW-3		GW-4	
		Sample Date	11/3/2009		11/3/2009		11/3/2009		11/3/2009		11/3/2009	
		Sample ID	ACGW0161201XX		ACGW0160701XX		ACGW0031201XX		ACGW0030601XX		ACGW0041201XX	
		Qc Code	FS		FS		FS		FS		FS	
		Units	UG/L		UG/L		UG/L		UG/L		UG/L	
Analysis	Fraction	Param Name	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	Tetrahydrofuran	1000	UD	100	UJD	1000	UD	10	UJ	1000	UD
SW8260	N	Toluene	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	trans-1,2-Dichloroethene	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW8260	N	trans-1,3-Dichloropropene	50	UD	5	UJD	50	UD	0.5	UJ	50	UD
SW8260	N	trans-1,4-Dichloro-2-butene	200	UJD	20	UJD	200	UJD	2	UJ	200	UJD
SW8260	N	Trichloroethene	250	D	10	UJD	100	UD	11	J	820	D
SW8260	N	Trichlorofluoromethane	200	UD	20	UJD	200	UD	2	UJ	200	UD
SW8260	N	Vinyl chloride	210	JD	20	UJD	200	UJD	65	J	700	UJD
SW8260	N	Xylene, m/p	200	UD	20	UJD	200	UD	2	UJ	200	UD
SW8260	N	Xylene, o	100	UD	10	UJD	100	UD	1	UJ	100	UD
SW9060	N	Total Organic Carbon										
SM2540G	N	Percent Solids										
Notes:												
mg/kg = milligrams per kilogram												
ug/L = micrograms per liter												
QC Code: FS = Field Sample FD = Field Duplicate												
TB = Trip Blank EB = Equipment Rinse Blank												
Qualifiers: U = not detected at the reporting limit												
J = estimated value R = rejected												
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		Sample Delivery Group	09K0085		09K0085		09K0085		09K0085		09K0085	
		Location	GW-4		GW-4		GW-5		GW-5		GW-6	
		Sample Date	11/3/2009		11/3/2009		11/3/2009		11/3/2009		11/3/2009	
		Sample ID	ACGW0040601XD		ACGW0040601XX		ACGW0051201XX		ACGW0050601XX		ACGW0061401XX	
		Qc Code	FD		FS		FS		FS		FS	
		Units	UG/L		UG/L		UG/L		UG/L		UG/L	
Analysis	Fraction	Param Name	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	1,1,1,2-Tetrachloroethane	100	UJD	100	UD	100	UD	100	UD	100	UD
SW8260	N	1,1,1-Trichloroethane	100	UJD	100	UD	100	UD	100	UD	100	UD
SW8260	N	1,1,2,2-Tetrachloroethane	50	UJD	50	UD	50	UD	50	UD	0.5	UJ
SW8260	N	1,1,2-Trichloro-1,2,2-Trifluoroethane	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	1,1,2-Trichloroethane	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	1,1-Dichloroethane	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	1,1-Dichloroethene	100	UJD	100	U	100	UD	100	UD	3.1	J
SW8260	N	1,1-Dichloropropene	200	UJD	200	UD	200	UD	200	UD	2	UJ
SW8260	N	1,2,3-Trichlorobenzene	500	UJD	500	UD	500	UD	500	UD	5	UJ
SW8260	N	1,2,3-Trichloropropane	200	UJD	200	UD	200	UD	200	UD	2	UJ
SW8260	N	1,2,4-Trichlorobenzene	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	1,2,4-Trimethylbenzene	100	UJD	100	U	100	UD	100	UD	1	UJ
SW8260	N	1,2-Dibromo-3-chloropropane	500	UJD	500	UJD	500	UJD	500	UJD	5	UJ
SW8260	N	1,2-Dibromoethane	50	UJD	50	UD	50	UD	50	UD	0.5	UJ
SW8260	N	1,2-Dichlorobenzene	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	1,2-Dichloroethane	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	1,2-Dichloropropane	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	1,3,5-Trichlorobenzene	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	1,3,5-Trimethylbenzene	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	1,3-Dichlorobenzene	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	1,3-Dichloropropane	50	UJD	50	UD	50	UD	50	UD	0.5	UJ
SW8260	N	1,4-Dichlorobenzene	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	1,4-Dioxane		R		R		R		R		R
SW8260	N	2,2-Dichloropropane	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	2-Butanone	2000	UJD	2000	UD	2000	UD	2000	UD	20	UJ
SW8260	N	2-Chlorotoluene	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	2-Hexanone	1000	UJD	1000	UD	1000	UD	1000	UD	10	UJ
SW8260	N	4-Chlorotoluene	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	4-iso-Propyltoluene	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	4-Methyl-2-pentanone	1000	UJD	1000	UD	1000	UD	1000	UD	10	UJ
SW8260	N	Acetone	5000	UJD		R		R		R	50	UJ
SW8260	N	Acrylonitrile	500	UJD	500	UD	500	UD	500	UD	5	UJ
SW8260	N	Benzene	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	Bromobenzene	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	Bromochloromethane	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	Bromodichloromethane	50	UJD	50	UD	50	UD	50	UD	0.5	UJ
SW8260	N	Bromoform	500	UJD	500	UJD	500	UJD	500	UJD	5	UJ
SW8260	N	Bromomethane	200	UJD	500	UJD	500	UD	500	UD	2	UJ
SW8260	N	Butane, 2-methoxy-2-methyl-	50	UJD	50	UD	50	UD	50	UD	0.5	UJ
SW8260	N	Carbon disulfide	300	UJD	300	UD	300	UD	300	UD	3	UJ
SW8260	N	Carbon tetrachloride	100	UJD	100	UJD	100	UJD	100	UJD	1	UJ
SW8260	N	Chlorobenzene	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	Chlorodibromomethane	500	UJD	50	UD	50	UD	50	UD	5	UJ
SW8260	N	Chloroethane	200	UJD	200	UD	200	UD	200	UD	2	UJ
SW8260	N	Chloroform	200	UJD	200	U	200	U	200	U	2	UJ
SW8260	N	Chloromethane	200	UJD	500	UD	500	UD	500	UD	2	UJ
SW8260	N	Cis-1,2-Dichloroethene	330	JD	320	D	100	UD	200	D	800	JD
SW8260	N	cis-1,3-Dichloropropene	50	UJD	50	UD	50	UD	50	UD	0.5	UJ
SW8260	N	Dibromomethane	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	Dichlorodifluoromethane	200	UJD	200	UJD	200	UJD	200	UJD	2	UJ
SW8260	N	Diethyl ether	200	UJD	200	UD	200	UD	200	UD	2	UJ
SW8260	N	Diisopropylether	50	UJD	50	UD	50	UD	50	UD	0.5	UJ
SW8260	N	Ethyl benzene	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	Ethyl-t-Butyl Ether	50	UJD	50	UD	50	UD	50	UD	0.5	UJ
SW8260	N	Hexachlorobutadiene	50	UJD	50	UD	50	UD	50	UD	0.5	UJ
SW8260	N	Isopropylbenzene	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	Methyl Tertbutyl Ether	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	Methylene chloride		R	500	UD	500	UD	500	UD		R
SW8260	N	n-Butylbenzene	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	Naphthalene	500	UJD	500	UD	500	UD	500	UD	5	UJ
SW8260	N	Propylbenzene	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	sec-Butylbenzene	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	Styrene	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	t-Butyl alcohol	2000	UJD		R		R		R	20	UJ
SW8260	N	tert-Butylbenzene	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	Tetrachloroethene	7500	JD	7500	D	2600	D	27000	JD	220	JD

TABLE 2 - RESULTS SUMMARY  
SDG 09K0085  
DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009 SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

		Sample Delivery Group	09K0085		09K0085		09K0085		09K0085		09K0085	
		Location	GW-4		GW-4		GW-5		GW-5		GW-6	
		Sample Date	11/3/2009		11/3/2009		11/3/2009		11/3/2009		11/3/2009	
		Sample ID	ACGW0040601XD		ACGW0040601XX		ACGW0051201XX		ACGW0050601XX		ACGW0061401XX	
		Qc Code	FD		FS		FS		FS		FS	
		Units	UG/L		UG/L		UG/L		UG/L		UG/L	
Analysis	Fraction	Param Name	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	Tetrahydrofuran	1000	UJD	1000	UD	1000	UD	1000	UD	10	UJ
SW8260	N	Toluene	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW8260	N	trans-1,2-Dichloroethene	100	UJD	100	UD	100	UD	100	UD	9.2	J
SW8260	N	trans-1,3-Dichloropropene	50	UJD	50	UD	50	UD	50	UD	0.5	UJ
SW8260	N	trans-1,4-Dichloro-2-butene	200	UJD	200	UJD	200	UJD	200	UJD	2	UJ
SW8260	N	Trichloroethene	570	JD	560	D	100	U	300	D	96	JD
SW8260	N	Trichlorofluoromethane	200	UJD	200	UD	200	UD	200	UD	2	UJ
SW8260	N	Vinyl chloride	360	UJD	280	UJD	200	UJD	200	UJD	2	UJ
SW8260	N	Xylene, m/p	200	UJD	200	UD	200	UD	200	UD	2	UJ
SW8260	N	Xylene, o	100	UJD	100	UD	100	UD	100	UD	1	UJ
SW9060	N	Total Organic Carbon										
SM2540G	N	Percent Solids										
Notes:												
mg/kg = milligrams per kilogram												
ug/L = micrograms per liter												
QC Code: FS = Field Sample FD = Field Duplicate												
TB = Trip Blank EB = Equipment Rinse Blank												
Qualifiers: U = not detected at the reporting limit												
J = estimated value R = rejected												
D = result from a dilution analysis												

TABLE 2 - RESULTS SUMMARY  
SDG 09K0085  
DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009 SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

		Sample Delivery Group	09K0085		09K0085		09K0085		09K0085		09K0085	
		Location	GW-6		QC		QC		SD-2		SD-2	
		Sample Date	11/3/2009		11/3/2009		11/3/2009		11/3/2009		11/3/2009	
		Sample ID	ACGW0060601XX		ACQT001XXX01XX		ACQT002XXX01XX		ACSD00200001XX		ACSD00200001XX	
		Qc Code	FS		TB		TB		FS		FS	
		Units	UG/L		UG/L		mg/Kg		mg/Kg		PERCENT	
Analysis	Fraction	Param Name	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	1,1,1,2-Tetrachloroethane	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	1,1,1-Trichloroethane	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	1,1,2,2-Tetrachloroethane	0.5	UJ	0.5	U	0.001	U	0.00071	U		
SW8260	N	1,1,2-Trichloro-1,2,2-Trifluoroethane	1	UJ	1	U	0.01	U	0.0071	U		
SW8260	N	1,1,2-Trichloroethane	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	1,1-Dichloroethane	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	1,1-Dichloroethene	1	UJ	1	U	0.004	U	0.0028	U		
SW8260	N	1,1-Dichloropropene	2	UJ	2	U	0.002	U	0.0014	U		
SW8260	N	1,2,3-Trichlorobenzene	5	UJ	5	U	0.01	U	0.0071	UJ		
SW8260	N	1,2,3-Trichloropropane	2	UJ	2	U	0.002	U	0.0014	U		
SW8260	N	1,2,4-Trichlorobenzene	1	UJ	1	U	0.01	U	0.0071	UJ		
SW8260	N	1,2,4-Trimethylbenzene	1	UJ	1	U	0.002	U	0.0014	UJ		
SW8260	N	1,2-Dibromo-3-chloropropane	5	UJ	5	UJ	0.002	U	0.0014	U		
SW8260	N	1,2-Dibromoethane	0.5	UJ	0.5	U	0.001	U	0.00071	U		
SW8260	N	1,2-Dichlorobenzene	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	1,2-Dichloroethane	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	1,2-Dichloropropane	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	1,3,5-Trichlorobenzene	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	1,3,5-Trimethylbenzene	1	UJ	1	U	0.002	U	0.0014	UJ		
SW8260	N	1,3-Dichlorobenzene	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	1,3-Dichloropropane	0.5	UJ	0.5	U	0.001	U	0.00071	U		
SW8260	N	1,4-Dichlorobenzene	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	1,4-Dioxane		R		R		R		R		
SW8260	N	2,2-Dichloropropane	1	UJ	1	UJ	0.002	U	0.0014	U		
SW8260	N	2-Butanone	20	UJ	20	U	0.04	U	0.028	U		
SW8260	N	2-Chlorotoluene	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	2-Hexanone	10	UJ	10	U	0.02	U	0.014	U		
SW8260	N	4-Chlorotoluene	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	4-iso-Propyltoluene	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	4-Methyl-2-pentanone	10	UJ	10	U	0.02	U	0.014	U		
SW8260	N	Acetone	50	UJ	50	UJ		R	0.071	U		
SW8260	N	Acrylonitrile	5	UJ	5	UJ	0.006	U	0.0043	U		
SW8260	N	Benzene	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	Bromobenzene	1	UJ	1	U	0.002	UJ	0.0014	U		
SW8260	N	Bromochloromethane	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	Bromodichloromethane	0.5	UJ	0.5	U	0.002	U	0.0014	U		
SW8260	N	Bromoform	5	UJ	5	UJ	0.002	U	0.0014	U		
SW8260	N	Bromomethane	2	UJ	2	UJ	0.01	UJ	0.0071	UJ		
SW8260	N	Butane, 2-methoxy-2-methyl-	0.5	UJ	0.5	U	0.001	U	0.00071	U		
SW8260	N	Carbon disulfide	3	UJ	3	U	0.006	U	0.0043	U		
SW8260	N	Carbon tetrachloride	1	UJ	1	U	0.01	U	0.0071	U		
SW8260	N	Chlorobenzene	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	Chlorodibromomethane	5	UJ	5	U	0.001	U	0.00071	U		
SW8260	N	Chloroethane	2	UJ	2	U	0.02	U	0.014	U		
SW8260	N	Chloroform	2	UJ	2	U	0.004	U	0.0028	U		
SW8260	N	Chloromethane	2	UJ	2	U	0.01	U	0.0071	U		
SW8260	N	Cis-1,2-Dichloroethene	31	J	1	U	0.002	U	0.0014	U		
SW8260	N	cis-1,3-Dichloropropene	0.5	UJ	0.5	U	0.01	U	0.0071	U		
SW8260	N	Dibromomethane	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	Dichlorodifluoromethane	2	UJ	2	U	0.02	UJ	0.014	UJ		
SW8260	N	Diethyl ether	2	UJ	2	U	0.02	U	0.014	U		
SW8260	N	Diisopropylether	0.5	UJ	0.5	U	0.001	U	0.00071	U		
SW8260	N	Ethyl benzene	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	Ethyl-t-Butyl Ether	0.5	UJ	0.5	U	0.001	U	0.00071	U		
SW8260	N	Hexachlorobutadiene	0.5	UJ	0.5	U	0.002	U	0.0014	U		
SW8260	N	Isopropylbenzene	1	UJ	1	U	0.01	U	0.0071	UJ		
SW8260	N	Methyl Tertbutyl Ether	1	UJ	1	U	0.004	U	0.0028	U		
SW8260	N	Methylene chloride		R		R	0.02	U	0.014	U		
SW8260	N	n-Butylbenzene	1	UJ	1	U	0.01	UJ	0.0071	UJ		
SW8260	N	Naphthalene	5	UJ	5	UJ	0.02	UJ	0.014	UJ		
SW8260	N	Propylbenzene	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	sec-Butylbenzene	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	Styrene	1	UJ	1	U	0.01	U	0.0071	U		
SW8260	N	t-Butyl alcohol	20	UJ	20	UJ		R		R		
SW8260	N	tert-Butylbenzene	1	UJ	1	U	0.01	U	0.0071	U		
SW8260	N	Tetrachloroethene	1.4	J	1	U	0.002	U	0.0014	U		



TABLE 2 - RESULTS SUMMARY  
SDG 09K0085  
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ACE CLEANERS  
BROCKPORT, NY

		Sample Delivery Group	09K0085		09K0085		09K0085		09K0085		09K0085	
		Location	GW-6		QC		QC		SD-2		SD-2	
		Sample Date	11/3/2009		11/3/2009		11/3/2009		11/3/2009		11/3/2009	
		Sample ID	ACGW0060601XX		ACQT001XXX01XX		ACQT002XXX01XX		ACSD00200001XX		ACSD00200001XX	
		Qc Code	FS		TB		TB		FS		FS	
		Units	UG/L		UG/L		mg/Kg		mg/Kg		PERCENT	
Analysis	Fraction	Param Name	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	Tetrahydrofuran	10	UJ	10	U	0.01	U		R		
SW8260	N	Toluene	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	trans-1,2-Dichloroethene	24	J	1	U	0.002	U	0.0014	U		
SW8260	N	trans-1,3-Dichloropropene	0.5	UJ	0.5	U	0.001	U	0.00071	U		
SW8260	N	trans-1,4-Dichloro-2-butene	2	UJ	2	U	0.004	U	0.0028	U		
SW8260	N	Trichloroethene	1	UJ	1	U	0.002	U	0.0014	U		
SW8260	N	Trichlorofluoromethane	2	UJ	2	U	0.01	U	0.0071	U		
SW8260	N	Vinyl chloride	2	UJ	2	U	0.01	UJ	0.0071	UJ		
SW8260	N	Xylene, m/p	2	UJ	2	U	0.004	U	0.0028	U		
SW8260	N	Xylene, o	1	UJ	1	U	0.002	U	0.0014	U		
SW9060	N	Total Organic Carbon										
SM2540G	N	Percent Solids									75.9	
Notes:												
mg/kg = milligrams per kilogram												
ug/L = micrograms per liter												
QC Code: FS = Field Sample FD = Field Duplicate												
TB = Trip Blank EB = Equipment Rinse Blank												
Qualifiers: U = not detected at the reporting limit												
J = estimated value R = rejected												
D = result from a dilution analysis												

TABLE 2 - RESULTS SUMMARY  
SDG 09K0085  
DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009 SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

Sample Delivery Group			09K0085		09K0085		09K0085		09K0085	
Location			SD-3		SD-3		SW-2		SW-3	
Sample Date			11/3/2009		11/3/2009		11/3/2009		11/3/2009	
Sample ID			ACSD00300001XX		ACSD00300001XX		ACSW00200001XX		ACSW00300001XX	
Qc Code			FS		FS		FS		FS	
Units			mg/Kg		PERCENT		UG/L		UG/L	
Analysis	Fraction	Param Name	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	1,1,1,2-Tetrachloroethane	0.0016	U			1	UJ	1	UJ
SW8260	N	1,1,1-Trichloroethane	0.0016	U			1	U	1	U
SW8260	N	1,1,2,2-Tetrachloroethane	0.0008	U			0.5	U	0.5	U
SW8260	N	1,1,2-Trichloro-1,2,2-Trifluoroethane	0.008	U			1	U	1	U
SW8260	N	1,1,2-Trichloroethane	0.0016	U			1	U	1	U
SW8260	N	1,1-Dichloroethane	0.0016	U			1	U	1	U
SW8260	N	1,1-Dichloroethene	0.0032	U			1	U	1	U
SW8260	N	1,1-Dichloropropene	0.0016	U			2	U	2	U
SW8260	N	1,2,3-Trichlorobenzene	0.008	UJ			5	U	5	U
SW8260	N	1,2,3-Trichloropropane	0.0016	U			2	U	2	U
SW8260	N	1,2,4-Trichlorobenzene	0.008	UJ			1	U	1	U
SW8260	N	1,2,4-Trimethylbenzene	0.0016	UJ			1	U	1	U
SW8260	N	1,2-Dibromo-3-chloropropane	0.0016	U			5	UJ	5	UJ
SW8260	N	1,2-Dibromoethane	0.0008	U			0.5	U	0.5	U
SW8260	N	1,2-Dichlorobenzene	0.0016	U			1	U	1	U
SW8260	N	1,2-Dichloroethane	0.0016	U			1	U	1	U
SW8260	N	1,2-Dichloropropane	0.0016	U			1	U	1	U
SW8260	N	1,3,5-Trichlorobenzene	0.0016	U			1	U	1	U
SW8260	N	1,3,5-Trimethylbenzene	0.0016	UJ			1	U	1	U
SW8260	N	1,3-Dichlorobenzene	0.0016	U			1	U	1	U
SW8260	N	1,3-Dichloropropane	0.0008	U			0.5	U	0.5	U
SW8260	N	1,4-Dichlorobenzene	0.0016	U			1	U	1	U
SW8260	N	1,4-Dioxane		R				R		R
SW8260	N	2,2-Dichloropropane	0.0016	U			1	U	1	U
SW8260	N	2-Butanone	0.032	U			20	U	20	U
SW8260	N	2-Chlorotoluene	0.0016	U			1	U	1	U
SW8260	N	2-Hexanone	0.016	U			10	U	10	U
SW8260	N	4-Chlorotoluene	0.0016	U			1	U	1	U
SW8260	N	4-iso-Propyltoluene	0.0016	U			1	U	1	U
SW8260	N	4-Methyl-2-pentanone	0.016	U			10	U	10	U
SW8260	N	Acetone	0.08	U				R		R
SW8260	N	Acrylonitrile	0.0048	U			5	U	5	U
SW8260	N	Benzene	0.0016	U			1	U	1	U
SW8260	N	Bromobenzene	0.0016	U			1	U	1	U
SW8260	N	Bromochloromethane	0.0016	U			1	U	1	U
SW8260	N	Bromodichloromethane	0.0016	U			0.5	U	0.5	U
SW8260	N	Bromoform	0.0016	U			5	UJ	5	UJ
SW8260	N	Bromomethane	0.008	UJ			5	UJ	5	UJ
SW8260	N	Butane, 2-methoxy-2-methyl-	0.0008	U			0.5	U	0.5	U
SW8260	N	Carbon disulfide	0.0048	U			3	U	3	U
SW8260	N	Carbon tetrachloride	0.008	U			1	UJ	1	UJ
SW8260	N	Chlorobenzene	0.0016	U			1	U	1	U
SW8260	N	Chlorodibromomethane	0.0008	U			0.5	U	0.5	U
SW8260	N	Chloroethane	0.016	U			2	U	2	U
SW8260	N	Chloroform	0.0032	U			2	U	2	U
SW8260	N	Chloromethane	0.008	U			5	U	5	U
SW8260	N	Cis-1,2-Dichloroethene	0.0016	U			5.4		3.4	
SW8260	N	cis-1,3-Dichloropropene	0.008	U			0.5	U	0.5	U
SW8260	N	Dibromomethane	0.0016	U			1	U	1	U
SW8260	N	Dichlorodifluoromethane	0.016	UJ			2	UJ	2	UJ
SW8260	N	Diethyl ether	0.016	U			2	U	2	U
SW8260	N	Diisopropylether	0.0008	U			0.5	U	0.5	U
SW8260	N	Ethyl benzene	0.0016	U			1	U	1	U
SW8260	N	Ethyl-t-Butyl Ether	0.0008	U			0.5	U	0.5	U
SW8260	N	Hexachlorobutadiene	0.0016	U			0.5	U	0.5	U
SW8260	N	Isopropylbenzene	0.008	UJ			1	U	1	U
SW8260	N	Methyl Tertbutyl Ether	0.0032	U			1	U	1	U
SW8260	N	Methylene chloride	0.016	U			5	U	5	U
SW8260	N	n-Butylbenzene	0.008	UJ			1	U	1	U
SW8260	N	Naphthalene	0.016	UJ			5	U	5	U
SW8260	N	Propylbenzene	0.0016	UJ			1	U	1	U
SW8260	N	sec-Butylbenzene	0.0016	U			1	U	1	U
SW8260	N	Styrene	0.008	U			1	U	1	U
SW8260	N	t-Butyl alcohol		R				R		R
SW8260	N	tert-Butylbenzene	0.008	U			1	U	1	U
SW8260	N	Tetrachloroethene	0.0016	U			1	U	1.2	

TABLE 2 - RESULTS SUMMARY  
SDG 09K0085  
DATA USABILITY SUMMARY REPORT  
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ACE CLEANERS  
BROCKPORT, NY

		Sample Delivery Group	09K0085		09K0085		09K0085		09K0085	
		Location	SD-3		SD-3		SW-2		SW-3	
		Sample Date	11/3/2009		11/3/2009		11/3/2009		11/3/2009	
		Sample ID	ACSD00300001XX		ACSD00300001XX		ACSW00200001XX		ACSW00300001XX	
		Qc Code	FS		FS		FS		FS	
		Units	mg/Kg		PERCENT		UG/L		UG/L	
Analysis	Fraction	Param Name	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	Tetrahydrofuran		R			10	U	10	U
SW8260	N	Toluene	0.0016	U			1	U	1	U
SW8260	N	trans-1,2-Dichloroethene	0.0016	U			1	U	1	U
SW8260	N	trans-1,3-Dichloropropene	0.0008	U			0.5	U	0.5	U
SW8260	N	trans-1,4-Dichloro-2-butene	0.0032	U			2	UJ	2	UJ
SW8260	N	Trichloroethene	0.0016	U			1	U	1	U
SW8260	N	Trichlorofluoromethane	0.008	U			2	U	2	U
SW8260	N	Vinyl chloride	0.008	UJ			2	UJ	2	UJ
SW8260	N	Xylene, m/p	0.0032	U			2	U	2	U
SW8260	N	Xylene, o	0.0016	U			1	U	1	U
SW9060	N	Total Organic Carbon	22650							
SM2540G	N	Percent Solids			81.6					
Notes:										
mg/kg = milligrams per kilogram										
ug/L = micrograms per liter										
QC Code: FS = Field Sample FD = Field Duplicate										
TB = Trip Blank EB = Equipment Rinse Blank										
Qualifiers: U = not detected at the reporting limit										
J = estimated value R = rejected										
D = result from a dilution analysis										

Table 3 - TIC's  
SDG 09K0085  
DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009  
SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

SDG	Field Sample ID	Sample Date	Lab Sample ID	Sample Type	Chemical Name	Concentration	Units	Qualifier
09K0085	ACGS0040601XX	11/3/2009	09K0085-07	FS	Benzene, 1,2,4,5-tetramethyl-	4.1	mg/Kg	JDN
09K0085	ACGS0040601XX	11/3/2009	09K0085-07	FS	Benzene, 1-methyl-4-propyl-	1.7	mg/Kg	JDN
09K0085	ACGS0040601XX	11/3/2009	09K0085-07	FS	Decane, 4-methyl-	1.5	mg/Kg	JDN
09K0085	ACGS0040601XX	11/3/2009	09K0085-07	FS	Dodecane, 2,6,10-trimethyl-	1.5	mg/Kg	JDN
09K0085	ACGS0040601XX	11/3/2009	09K0085-07	FS	Dodecane, 6-methyl-	4.9	mg/Kg	JDN
09K0085	ACGS0040601XX	11/3/2009	09K0085-07	FS	1H-Indene, 2,3-dihydro-1,2-dim (03)	2.9	mg/Kg	JDN
09K0085	ACGS0040601XX	11/3/2009	09K0085-07	FS	Benzene, 1-methyl-3-(1-methyl-	2.7	mg/Kg	JDN
09K0085	ACGS0040601XX	11/3/2009	09K0085-07	FS	Cyclohexane, 2-butyl-1,1,3-tri	2.4	mg/Kg	JDN
09K0085	ACGS0040601XX	11/3/2009	09K0085-07	FS	Naphthalene, 2-methyl-	1.8	mg/Kg	JDN
09K0085	ACGS0051001XX	11/3/2009	09K0085-08	FS	Naphthalene, 2,7-dimethyl-	1.2	mg/Kg	JDN
09K0085	ACGS0051001XX	11/3/2009	09K0085-08	FS	1H-Indene, 2,3-dihydro-5,6-dim	1.4	mg/Kg	JDN
09K0085	ACGS0051001XX	11/3/2009	09K0085-08	FS	Decane, 4-methyl-	1.1	mg/Kg	JDN
09K0085	ACGS0051001XX	11/3/2009	09K0085-08	FS	Dodecane, 2,6,10-trimethyl-	1.9	mg/Kg	JDN
09K0085	ACGS0051001XX	11/3/2009	09K0085-08	FS	Dodecane, 6-methyl-	3.3	mg/Kg	JDN
09K0085	ACGS0051001XX	11/3/2009	09K0085-08	FS	Decane, 3,7-dimethyl-	0.87	mg/Kg	JDN
09K0085	ACGS0051001XX	11/3/2009	09K0085-08	FS	Cyclohexane, 2-butyl-1,1,3-tri	1.4	mg/Kg	JDN
09K0085	ACGS0150701XX	11/3/2009	09K0085-09	FS	Naphthalene, 1-methyl-	0.91	mg/Kg	JDN
09K0085	ACGS0150701XX	11/3/2009	09K0085-09	FS	Benzene, 1,2,4,5-tetramethyl-	0.65	mg/Kg	JDN
09K0085	ACGS0150701XX	11/3/2009	09K0085-09	FS	Naphthalene, 2,7-dimethyl-	0.6	mg/Kg	JDN
09K0085	ACGS0150701XX	11/3/2009	09K0085-09	FS	Naphthalene, 2-methyl-	0.86	mg/Kg	JDN
09K0085	ACGW0060601XX	11/3/2009	09K0085-19	FS	1-Propene, 2-methyl-	4.6	µg/L	JN
09K0085	ACGW0060601XX	11/3/2009	09K0085-19	FS	Propene	12	µg/L	JN

**DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009 SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NEW YORK**

**1.0 Introduction:**

**Soil, Sediment and Water Volatile Organic Analyses by SW846 Method 8260B**

**Sediment Total Organic Carbon Analysis by SW846 Method 9060**

**Samples Collected: November 4, 2009**

**Samples Received at Con-Test Analytical Laboratory on November 5, 2009**

**Sample Delivery Group: 09K0130**

**Laboratory Reference Numbers:**

<b>Field Sample ID</b>	<b>Laboratory Sample ID</b>	<b>Matrix</b>
ACSW00100001XX	09K0130-01	Water
ACSW00100001XD	09K0130-02	Water
ACSW00100001MS	09K0130-02 MS	Water
ACSW00100001MD	09K0130-02 MSD	Water
ACSD00100001XX	09K0130-03	Sediment
ACSD00100001XD	09K0130-04	Sediment
ACSD00100001MS	09K0130-04 MS	Sediment MS
ACSD00100001MD	09K0130-04 MSD	Sediment MSD
ACSD00200001XX	09K0130-05	Sediment TOC Only
ACGW0121201XD	09K0130-06 1X	Water
ACGW0121201XD	09K0130-06 100X	Water
ACGW0100601XX	09K0130-07	Water
ACGW0101201XX	09K0130-08	Water
ACGW0101201MS	09K0130-08 MS	Water
ACGW0101201MD	09K0130-08 MSD	Water
ACGW0111601XX	09K0130-09 10X	Water
ACQS001XXX01XX	09K0130-10	Equipment Rinse Blank
ACQS002XXX01XX	09K0130-11	Equipment Rinse Blank
ACGW0110601XX	09K0130-12 100X	Water
ACGW0120701XX	09K0130-13	Water
ACGW0121201XX	09K0130-14 1X	Water
ACGW0121201XX	09K0130-14 100X	Water
ACQT004XXX01XX	09K0130-16	Trip Blank Soil

Note: The laboratory's case narrative notes that "Due to log-in error, sample 09K0130-15 (water trip blank) was not analyzed for this batch."

Deliverables for the off-site laboratory analyses included a Category B deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 2005) for SDG 09K0130. The analysis of sediment samples for total organic carbon (TOC) by SW846 Method 9060 was performed by First Light Power lab in West Springfield, Massachusetts. Results for TOC were not reported in a Category B deliverable and were not validated. TOC results are reported as received from the laboratory.

A project chemist review was completed based on NYSDEC Division of Environmental Remediation guidance for Data Usability Summary Reports (NYSDEC, 2002) for SDG 09K0130. Soil and water samples were reviewed using criteria in the US EPA Region II checklist, Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B (SOP # HW-24, Revision #2, October 2006). The following parameters were reviewed.

- \* - Data Completeness
- \* - GC/MS Tuning
  - Holding Times
  - Calibrations
  - Laboratory Blanks
  - Trip Blank
- \* - Surrogate Compound Recoveries
- \* - Internal Standard Recoveries
  - Matrix Spike
  - Laboratory Control Sample
- \* - Compound Identification
- \* - Compound Quantitation

\* - Indicates that all criteria were met for this parameter.

## 2.0 DATA VALIDATION SUMMARY

It was not possible to correlate the quality control summary data with the raw data because the laboratory used two different file numbers which could not be correlated. The laboratory supplied an email which correlated the two file numbers. Original copies of laboratory logs showing the correlation were not provided.

Raw data for extraction logs were not received from the laboratory.

### Holding Times

Sample ACQT004XXX01XX (09K0130-16), the soil trip blank was analyzed 7 days beyond the 14 day holding time.

Sample ACGW0121201XD (09K0130-06) had a pH greater than 2 and was analyzed 5 days past the 7 day holding time for unpreserved samples

The data for these samples were flagged with the "J" qualifier and are estimated values.

All other soil and preserved water samples were analyzed within 14 days of collection.

### Tunes

No problems were detected with the tunes associated with the samples of this delivery group. The NYS DEC ASP FORM V was not included in the data package.

### Surrogate Compound Recoveries

All surrogate compound recoveries were within the 70% - 130% quality assurance limits.

### Calibrations

The 11/12/2009 initial calibration (page 228, C110902) is associated with samples:

ACSW00100001XD	09K0130-02	Water
ACGW0100601XX	09K0130-07	Water
ACGW0101201XX	09K0130-08	Water
ACGW0111601XX	09K0130-09 10X	Water
ACQS001XXX01XX	09K0130-10	Water
ACQS002XXX01XX	09K0130-11	Water
ACGW0110601XX	09K0130-12 100X	Water
ACGW0120701XX	09K0130-13	Water
ACGW0121201XX	09K0130-14 1X	Water
ACGW0121201XX	09K0130-14 100X	Water

All of the %RSDs were less than 20% with the exceptions of methylene chloride (107%), bromoform (24%) 1,2,4-trichlorobenzene (34%), naphthalene (45%) and 1,2,3-trichlorobenzene (36%)

All of the relative response factors (rrfs) were greater than 0.05 with the exception of 1,4-dioxane (0.002).

All of the percent differences in the 11/13/2009 continuing calibration (C111307, page 531) associated with the following samples were less than 20% with the exceptions of methylene chloride (83%), 1,2-dibromo-3-chloropropane (34%) and naphthalene (30%).

ACGW0100601XX	09K0130-07	Water
ACGW0101201XX	09K0130-08	Water
ACGW0111601XX	09K0130-09 10X	Water
ACQS001XXX01XX	09K0130-10	Water
ACQS002XXX01XX	09K0130-11	Water
ACGW0110601XX	09K0130-12 100X	Water
ACGW0120701XX	09K0130-13	Water
ACGW0121201XX	09K0130-14 1X	Water

All of the percent differences in the 11/12/2009 continuing calibration (C110930, page 502) associated with the following samples were less than 20% with the exceptions of bromomethane (21%), methylene chloride (85%) and bromoform (22%).

ACSW00100001XD	09K0130-02	Water
ACGW0121201XX	09K0130-14 100X	Water

The 11/11/2009 initial calibration (B1111002) associated is associated with samples:

ACSW00100001XX	09K0130-01	Water
ACGW0121201XD	09K0130-06	Water
ACGW0121201XD	09K0130-06 100X	Water

All of the %RSDs were less than 20% with the exceptions acetone (48%), acrylonitrile (59%), methylene chloride (116%), bromoform (36%), 1,2-dibromo-3-chloropropane (26%) and naphthalene (25%)

All of the relative response factors (rrfs) were greater than 0.05 with the exception of 1,4-dioxane (0.005).

All of the percent differences in the 11/16/2009 continuing calibration (B116002, page 594) associated with the following samples were less than 20% with the exceptions of dichlorodifluoromethane (39%), chloromethane (31%), bromomethane (49%), acetone (27%), acrylonitrile (24%), methylene chloride (59%), bromoform (72%), carbon disulfide (32%), 2,2-dichloropropane (26%), bromodichloromethane (25%), and bromoform (45%).

ACGW0121201XD	09K0130-06	Water
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The 11/9/2009 initial calibration (D1106004) is associated is associated with samples:

ACSD00100001XX	09K0130-03	Sediment
ACSD00100001XD	09K0130-04	Sediment
ACQT004XXX01XX	09K0130-16	Trip Blank Soil

All %RSDs were less than 20% with the exceptions of isopropylbenzene (34%), n-propylbenzene (26%), 1,3,5-trimethylbenzene (22%), 1,2,4-trimethylbenzene (25%), n-butylbenzene (32%), 1,2,4-trichlorobenzene (35%), naphthalene (53%) and 1,2,3-trichlorobenzene (36%).

All relative response factors were greater than 0.05 with the exceptions of t-butyl alcohol (0.035), tetrahydrofuran (0.033) and 1,4-dioxane (0.003)

All of the percent differences in the 11/9/2009 continuing calibration (D1109002, page 431) associated with the following samples were less than 20% with the exceptions of 1,4-dioxane (35%) and n-butylbenzene (25%).

ACSD00100001XX	09K0130-03	Sediment
ACSD00100001XD	09K0130-04	Sediment

All of the percent differences in the 11/9/2009 continuing calibration (D1109002, page 431) associated with the following samples were less than 20% with the exceptions of dichlorodifluoromethane (48%), chloromethane (22%), acetone (22%), t-butyl alcohol (23%), 2-butanone (25%) and 2-hexanone (31%).

ACQT004XXX01XX	09K0130-16	Trip Blank Soil
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Compounds with %RSDs or percent differences above 20% were flagged with the "J" qualifier and are estimated values.

Compounds with %RSDs or percent differences above 90% were flagged with the "J" qualifier when they were detected in a sample and flagged with the "R" qualifier and technically rejected when undetected.

Compounds with relative response factors less than 0.05 were flagged with the "J" qualifier when they were detected in a sample and flagged with the "R" qualifier and technically rejected when not detected.

### Matrix Spike

Sample ACSD00100001XD (09K0130-04) was used as the sediment matrix spike and matrix spike duplicate. All recoveries and RPDs were within the required limits with the following exceptions:

Compound	MS % Rec	MSD % Rec.	RPD
Acetone	138%	142%	
Bromomethane	64%	66%	
Dichlorodifluoromethane	48%	49%	
Naphthalene	50%	56%	
1,2,3-Trichlorobenzene	62%	65%	
1,2,4-Trichlorobenzene	61%	64%	
Vinyl Chloride	58%	59%	

Sample ACGW0101201XX (09K0130-08) was used as the water matrix spike and matrix spike duplicate. All recoveries and RPDs were within the required limits with the following exceptions:

Compound	MS % Rec	MSD % Rec.	RPD
Carbon Disulfide	136%	140%	
1,2-Dibromo-3-chloropropane	65%	(ok)	
Dichlorodifluoromethane	55%	64%	
Diethyl ether	(ok)	134%	
Diisopropyl ether	(ok)	131%	
Methylene Chloride	58%	50%	
Naphthalene	143%	(ok)	56%
1,2,3-Trichlorobenzene	66%	67%	
1,1,2-Trichloro-1,2,2-trifluoroethane	133%	140%	

Sample ACSW00100001XD (09K0130-02) was used as the water matrix spike and matrix spike duplicate. All recoveries and RPDs were within the required limits with the following exceptions:

Compound	MS % Rec	MSD % Rec.	RPD
1,2-Dibromo-3-chloropropane	69%	(ok)	
Dichlorodifluoromethane	39%	42%	
Naphthalene	63%	(ok)	
1,2,3-Trichlorobenzene	60%	(ok)	
1,2,4-Trichlorobenzene	60%	(ok)	

1,1,1-Trichloroethane	160%	138%
Vinyl Chloride	58%	62%

The data for these compounds with low recoveries in water samples ACSW00100001XX (09K0130-01) and ACSW00100001XD (09K0130-02) were flagged with the "J" qualifier and are estimated values.

The data for compounds with low recoveries were flagged with the "J" qualifier and are estimated values.

Compounds with high recoveries were only qualified when they were detected in a sample since high recoveries do not affect undetected data.

### Laboratory Control Sample

The laboratory's in-house QC limits noted on their summary forms were often wider than the 70% - 130% Region 2 limits. The data were validated on the basis of the Region 2 limits.

All of the laboratory control samples were within the 70% - 130% limits in the LCS pair B1111029 / B007003 analyzed on 11/11/2009 and associated with the analyses of the following samples with the exception of tert- butyl alcohol (66%),

ACSW00100001XX	09K0130-01	Water
ACGW0121201XD	09K0130-06 100X	Water

All of the laboratory control samples were within the 70% - 130% limits in the LCS pair D1109003 / B007006 analyzed on 11/09/2009 and associated with the analyses of the following samples with the exceptions of bromomethane (54%), dichlorodifluoromethane (47%), vinyl chloride (57%), tert-butyl ethyl ether (134% Dup only), trans-1,3-dichloropropene (139%) and 1,3,5-trichlorobenzene (132%).

ACSD00100001XX	09K0130-03	Sediment
ACSD00100001XD	09K0130-04	Sediment

All of the laboratory control samples were within the 70% - 130% limits in the LCS pair C111308 / B007019 analyzed on 11/13/2009 and associated with the analyses of the following samples with the exceptions of methylene chloride (33%), naphthalene (63%), 1,2,3-trichlorobenzene (67%), carbon disulfide (137% dup), 1,2-dibromo-3-chloropropane (69% Dup), 2,2-dichloropropane (68%) and 1,2,4-trichlorobenzene (59% dup). The RPD of methylene chloride was 54%.

ACGW0100601XX	09K0130-07	Water
ACGW0101201XX	09K0130-08	Water
ACGW0111601XX	09K0130-09 10X	Water
ACQS001XXX01XX	09K0130-10	Water
ACQS002XXX01XX	09K0130-11	Water
ACGW0110601XX	09K0130-12 100X	Water
ACGW0120701XX	09K0130-13	Water
ACGW0121201XX	09K0130-14 1X	Water

All of the laboratory control samples were within the 70% - 130% limits in the LCS pair C110931 / B007122 analyzed on 11/12/2009 and associated with the analyses of the following samples with the exceptions of methylene chloride (46%), naphthalene (66%), dichlorodifluoromethane (69.6% OK) and 1,4-dioxane (37%). The RPD of 1,4-dioxane was 84%.

ACSW00100001XD	09K0130-02	Water
ACGW0121201XX	09K0130-14 100X	Water

All of the laboratory control samples were within the 70% - 130% limits in the LCS pair B1116003 / B007292 analyzed on 11/16/2009 and associated with the analyses of the following samples with the exceptions of dichlorodifluoromethane (41%), hexachlorobutadiene (69%), naphthalene (61%), 1,2,4-trichlorobenzene (61%), vinyl chloride (61%), carbon disulfide (146% dup) and 1,1,2-trichloro-1,2,2-trifluoroethane (138%). The RPDs of acetone (29%), chloromethane (35%), dichlorodifluoromethane (67%), hexachlorobutadiene (46%), methylene chloride (45%), naphthalene (43%), 1,2,3-trichlorobenzene (29%), 1,2,4-trichlorobenzene (45%) and vinyl chloride (30%).

ACGW0121201XD	09K0130-06	Water
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All of the laboratory control samples were within the 70% - 130% limits in the LCS pair D1124005/ B007772 analyzed on 11/24/2009 and associated with the analyses of the following samples with the exceptions of acetone (146%), bromomethane (56%), chloromethane (67%), dichlorodifluoromethane (20%) and vinyl chloride (50%).

ACQT004XXX01XX	09K0130-16	Trip Blank Soil
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The data for the compounds associated with laboratory control samples with low recoveries were flagged with the "J" qualifier and are estimated values.

Compounds with high recoveries or RPDs were only qualified if they were detected in a sample since high recoveries do not affect undetected data.

### Method Blanks

Low concentrations of naphthalene (6.6 ug/kg), 1,2,3-trichlorobenzene (3.1 ug/kg), and 1,2,4-trichlorobenzene (3.4 ug/kg) were detected in the soil method blank D1124005/ B007772 analyzed on 11/24/2009 which was associated with the soil trip blank, ACQT004XXX01XX.

All of these compounds were detected in the trip blank (ACQT004XXX01XX).

No other compounds were detected in the other method blanks.

### Trip Blank

Low concentrations of naphthalene (6.3 ug/kg), 1,2,3-trichlorobenzene (2.8 ug/kg), and 1,2,4-trichlorobenzene (3.2 ug/kg) were detected in the soil trip blank ACQT004XXX01XX.

None of these compounds were detected in either of the two soil samples and the blank contamination does not affect the use of the data.

The "Sample Extraction Data" on page 54 (hard copy) seems to indicate that the trip blank was analyzed at a 2X dilution. The concentrations in the raw data (page 649 PDF) have to be multiplied by 2 to obtain the concentrations reported by the lab, but a dilution was not noted in the raw data.

### **Internal Standard Areas and Retention Times**

The areas and retention times of all internal standards were within the required quality control limits.

### **Sample Results**

#### **Sample ACGW0121201XD (09K0130-06)**

cis-1,2-Dichloroethene was detected in the undiluted analysis at a concentration of 122E ug/L. The reported concentration in the 100x dilution (96 ug/l) was less than the reporting limit. Professional judgment was used to report cis-1,2-dichloroethene from the undiluted analysis at 122E ug/L and qualify the result estimated "EJ".

Validated results are presented in Table 2.

### **Tentatively Identified Compounds (TICs)**

Tentatively identified compounds (TICs) were reported by the laboratory. TICs reported in samples are presented in Table 3. Only samples that had TICs reported are included on Table 3. If a sample is not listed, no TICs were reported.

No other problems were found with the reported results of any of the samples in SDG09K0130.

### **References:**

New York State Department of Environmental Conservation (NYSDEC), 2005. "Analytical Services Protocols"; July 2005.

New York State Department of Environmental Conservation (NYSDEC), 2002. "Technical Guidance for Site Investigation and Remediation-Appendix 2B"; Draft DER-10; Division of Environmental Remediation; December 2002.

Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B (SOP # HW-24, Revision #2, October 2006).

Validated by Nancy Potak

January 28, 2010



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Reviewed by Tige Cunningham (Mactec)


 4/26/10

TABLE 2 - RESULTS SUMMARY  
SDG 09K0130  
DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009 SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

		Sample Delivery Group	09K0130		09K0130		09K0130		09K0130		09K0130	
		Location	GW-10		GW-10		GW-11		GW-11		GW-12	
		Sample Date	11/4/2009		11/4/2009		11/4/2009		11/4/2009		11/4/2009	
		Sample ID	ACGW0101201XX		ACGW0100601XX		ACGW0111601XX		ACGW0110601XX		ACGW0121201XD	
		Qc Code	FS		FS		FS		FS		FD	
		Units	UG/L		UG/L		UG/L		UG/L		UG/L	
Analysis	Fraction	Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	1,1,1,2-Tetrachloroethane	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	1,1,1-Trichloroethane	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	1,1,2,2-Tetrachloroethane	0.5	U	0.5	U	5	UD	50	UD	0.5	UJ
SW8260	N	1,1,2-Trichloro-1,2,2-Trifluoroethane	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	1,1,2-Trichloroethane	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	1,1-Dichloroethane	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	1,1-Dichloroethene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	1,1-Dichloropropene	2	U	2	U	20	UD	200	UD	2	UJ
SW8260	N	1,2,3-Trichlorobenzene	5	UJ	5	UJ	50	UJD	500	UJD	5	UJ
SW8260	N	1,2,3-Trichloropropane	2	U	2	U	20	UD	200	UD	2	UJ
SW8260	N	1,2,4-Trichlorobenzene	5	UJ	5	UJ	50	UJD	500	UJD	1	UJ
SW8260	N	1,2,4-Trimethylbenzene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	1,2-Dibromo-3-chloropropane	5	UJ	5	UJ	50	UJD	500	UJD	5	UJ
SW8260	N	1,2-Dibromoethane	0.5	U	0.5	U	5	UD	50	UD	0.5	UJ
SW8260	N	1,2-Dichlorobenzene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	1,2-Dichloroethane	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	1,2-Dichloropropane	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	1,3,5-Trichlorobenzene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	1,3,5-Trimethylbenzene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	1,3-Dichlorobenzene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	1,3-Dichloropropane	0.5	U	0.5	U	5	UD	50	UD	0.5	UJ
SW8260	N	1,4-Dichlorobenzene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	1,4-Dioxane	R		R		R		R		R	
SW8260	N	2,2-Dichloropropane	1	UJ	1	UJ	10	UJD	100	UJD	1	UJ
SW8260	N	2-Butanone	20	U	20	U	200	UD	2000	UD	20	UJ
SW8260	N	2-Chlorotoluene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	2-Hexanone	10	U	10	U	100	UD	1000	UD	10	UJ
SW8260	N	4-Chlorotoluene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	4-iso-Propyltoluene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	4-Methyl-2-pentanone	10	U	10	U	100	UD	1000	UD	10	UJ
SW8260	N	Acetone	50	U	50	U	500	UD	5000	UD	50	UJ
SW8260	N	Acrylonitrile	5	U	5	U	50	UD	500	UD	5	UJ
SW8260	N	Benzene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	Bromobenzene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	Bromochloromethane	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	Bromodichloromethane	1	U	1	U	10	UD	100	UD	0.5	UJ
SW8260	N	Bromoform	5	UJ	5	UJ	50	UJD	500	UJD	5	UJ
SW8260	N	Bromomethane	5	U	5	U	50	UD	500	UD	2	UJ
SW8260	N	Butane, 2-methoxy-2-methyl-	0.5	U	0.5	U	5	UD	50	UD	0.5	UJ
SW8260	N	Carbon disulfide	3	U	3	U	30	UD	300	UD	3	UJ
SW8260	N	Carbon tetrachloride	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	Chlorobenzene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	Chlorodibromomethane	1	U	1	U	10	UD	100	UD	5	UJ
SW8260	N	Chloroethane	2	U	2	U	20	UD	200	UD	2	UJ
SW8260	N	Chloroform	2	U	2	U	20	UD	200	UD	2	UJ
SW8260	N	Chloromethane	2	U	2	U	20	UD	200	UD	2	UJ
SW8260	N	Cis-1,2-Dichloroethene	1	U	1	U	290	D	760	D	96	JD
SW8260	N	cis-1,3-Dichloropropene	0.5	U	0.5	U	5	UD	50	UD	0.5	UJ
SW8260	N	Dibromomethane	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	Dichlorodifluoromethane	2	UJ	2	UJ	20	UJD	200	UJD	2	UJ
SW8260	N	Diethyl ether	2	U	2	U	20	UD	200	UD	2	UJ
SW8260	N	Diisopropylether	0.5	U	0.5	U	5	UD	50	UD	0.5	UJ
SW8260	N	Ethyl benzene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	Ethyl-t-Butyl Ether	0.5	U	0.5	U	5	UD	50	UD	0.5	UJ
SW8260	N	Hexachlorobutadiene	0.5	U	0.5	U	5	UD	50	UD	0.5	UJ
SW8260	N	Isopropylbenzene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	Methyl Tertbutyl Ether	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	Methylene chloride	R		R		R		R		R	
SW8260	N	n-Butylbenzene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	Naphthalene	2	UJ	2	UJ	20	UJD	200	UJD	5	UJ
SW8260	N	Propylbenzene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	sec-Butylbenzene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	Styrene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	t-Butyl alcohol	50	U	50	U	500	UD	5000	UD	20	UJ
SW8260	N	tert-Butylbenzene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	Tetrachloroethene	1	U	1	U	480	D	2000	D	24	J

TABLE 2 - RESULTS SUMMARY  
SDG 09K0130  
DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009 SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

		Sample Delivery Group	09K0130		09K0130		09K0130		09K0130		09K0130	
		Location	GW-10		GW-10		GW-11		GW-11		GW-12	
		Sample Date	11/4/2009		11/4/2009		11/4/2009		11/4/2009		11/4/2009	
		Sample ID	ACGW0101201XX		ACGW0100601XX		ACGW0111601XX		ACGW0110601XX		ACGW0121201XD	
		Qc Code	FS		FS		FS		FS		FD	
		Units	UG/L		UG/L		UG/L		UG/L		UG/L	
Analysis	Fraction	Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	Tetrahydrofuran	10	U	10	U	100	UD	1000	UD	10	UJ
SW8260	N	Toluene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	trans-1,2-Dichloroethene	1	U	1	U	10	UD	100	UD	1	UJ
SW8260	N	trans-1,3-Dichloropropene	0.5	U	0.5	U	5	UD	50	UD	0.5	UJ
SW8260	N	trans-1,4-Dichloro-2-butene	2	U	2	U	20	UD	200	UD	2	UJ
SW8260	N	Trichloroethene	1	U	1	U	98	D	190	D	21	J
SW8260	N	Trichlorofluoromethane	2	U	2	U	20	UD	200	UD	2	UJ
SW8260	N	Vinyl chloride	2	U	2	U	20	U	200	U	2	UJ
SW8260	N	Xylene, m/p	2	U	2	U	20	UD	200	UD	2	UJ
SW8260	N	Xylene, o	1	U	1	U	10	UD	100	UD	1	UJ
SW9060	N	Total Organic Carbon										
SM2540G	N	Percent Solids										
Notes:												
mg/kg = milligrams per kilogram												
ug/L = micrograms per liter												
QC Code: FS = Field Sample FD = Field Duplicate												
TB = Trip Blank EB = Equipment Rinse Blank												
Qualifiers: U = not detected at the reporting limit												
J = estimated value R = rejected												
D = result from a dilution analysis												

TABLE 2 - RESULTS SUMMARY  
SDG 09K0130  
DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009 SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

		Sample Delivery Group	09K0130		09K0130		09K0130		09K0130		09K0130	
		Location	GW-12		GW-12		QC		QC		QC	
		Sample Date	11/4/2009		11/4/2009		11/4/2009		11/5/2009		11/5/2009	
		Sample ID	ACGW0121201XX		ACGW0120701XX		ACQT004XXX01XX		ACQS001XXX01XX		ACQS002XXX01XX	
		Qc Code	FS		FS		TB		EB		EB	
		Units	UG/L		UG/L		mg/Kg		UG/L		UG/L	
Analysis	Fraction	Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	1,1,1,2-Tetrachloroethane	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	1,1,1-Trichloroethane	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	1,1,2,2-Tetrachloroethane	0.5 U		0.5 U		0.001 UJ		0.5 U		0.5 U	
SW8260	N	1,1,2-Trichloro-1,2,2-Trifluoroethane	1 U		1 U		0.01 UJ		1 U		1 U	
SW8260	N	1,1,2-Trichloroethane	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	1,1-Dichloroethane	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	1,1-Dichloroethene	1 U		1 U		0.004 UJ		1 U		1 U	
SW8260	N	1,1-Dichloropropene	2 U		2 U		0.002 UJ		2 U		2 U	
SW8260	N	1,2,3-Trichlorobenzene	5 UJ		5 UJ		0.0028 JB		5 UJ		5 UJ	
SW8260	N	1,2,3-Trichloropropane	2 U		2 U		0.002 UJ		2 U		2 U	
SW8260	N	1,2,4-Trichlorobenzene	5 UJ		5 UJ		0.0032 JB		5 UJ		5 UJ	
SW8260	N	1,2,4-Trimethylbenzene	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	1,2-Dibromo-3-chloropropane	5 UJ		5 UJ		0.002 UJ		5 UJ		5 UJ	
SW8260	N	1,2-Dibromoethane	0.5 U		0.5 U		0.001 UJ		0.5 U		0.5 U	
SW8260	N	1,2-Dichlorobenzene	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	1,2-Dichloroethane	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	1,2-Dichloropropane	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	1,3,5-Trichlorobenzene	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	1,3,5-Trimethylbenzene	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	1,3-Dichlorobenzene	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	1,3-Dichloropropane	0.5 U		0.5 U		0.001 UJ		0.5 U		0.5 U	
SW8260	N	1,4-Dichlorobenzene	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	1,4-Dioxane	R		R		R		R		R	
SW8260	N	2,2-Dichloropropane	1 UJ		1 UJ		0.002 UJ		1 UJ		1 UJ	
SW8260	N	2-Butanone	20 U		20 U		0.04 UJ		20 U		20 U	
SW8260	N	2-Chlorotoluene	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	2-Hexanone	10 U		10 U		0.02 UJ		10 U		10 U	
SW8260	N	4-Chlorotoluene	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	4-iso-Propyltoluene	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	4-Methyl-2-pentanone	10 UJ		10 U		0.02 UJ		10 U		10 U	
SW8260	N	Acetone	50 U		50 U		0.1 UJ		50 U		50 U	
SW8260	N	Acrylonitrile	5 U		5 U		0.006 UJ		5 U		5 U	
SW8260	N	Benzene	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	Bromobenzene	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	Bromochloromethane	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	Bromodichloromethane	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	Bromoform	5 UJ		5 UJ		0.002 UJ		5 UJ		5 UJ	
SW8260	N	Bromomethane	5 U		5 U		0.01 UJ		5 U		5 U	
SW8260	N	Butane, 2-methoxy-2-methyl-	0.5 U		0.5 U		0.001 UJ		0.5 U		0.5 U	
SW8260	N	Carbon disulfide	3 U		3 U		0.006 UJ		3 U		3 U	
SW8260	N	Carbon tetrachloride	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	Chlorobenzene	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	Chlorodibromomethane	1 U		1 U		0.001 UJ		1 U		1 U	
SW8260	N	Chloroethane	2 U		2 U		0.02 UJ		2 U		2 U	
SW8260	N	Chloroform	2 U		2 U		0.004 UJ		2 U		2 U	
SW8260	N	Chloromethane	2 U		2 U		0.01 UJ		2 U		2 U	
SW8260	N	Cis-1,2-Dichloroethene	160 D		54		0.002 UJ		1 U		1 U	
SW8260	N	cis-1,3-Dichloropropene	0.5 U		0.5 U		0.001 UJ		0.5 U		0.5 U	
SW8260	N	Dibromomethane	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	Dichlorodifluoromethane	2 UJ		2 UJ		0.02 UJ		2 UJ		2 UJ	
SW8260	N	Diethyl ether	2 U		2 U		0.02 UJ		2 U		2 U	
SW8260	N	Diisopropylether	0.5 U		0.5 U		0.001 UJ		0.5 U		0.5 U	
SW8260	N	Ethyl benzene	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	Ethyl-t-Butyl Ether	0.5 U		0.5 U		0.001 UJ		0.5 U		0.5 U	
SW8260	N	Hexachlorobutadiene	0.5 U		0.5 U		0.002 UJ		0.5 U		0.5 U	
SW8260	N	Isopropylbenzene	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	Methyl Tertbutyl Ether	1 U		1 U		0.004 UJ		1 U		1 U	
SW8260	N	Methylene chloride	R		R		0.02 UJ		R		R	
SW8260	N	n-Butylbenzene	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	Naphthalene	2 UJ		2 UJ		0.0063 JB		2 UJ		2 UJ	
SW8260	N	Propylbenzene	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	sec-Butylbenzene	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	Styrene	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	t-Butyl alcohol	50 U		50 U		R		50 U		50 U	
SW8260	N	tert-Butylbenzene	1 U		1 U		0.002 UJ		1 U		1 U	
SW8260	N	Tetrachloroethene	24		32		0.002 UJ		1 U		1 U	



TABLE 2 - RESULTS SUMMARY  
SDG 09K0130  
DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009 SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

		Sample Delivery Group	09K0130		09K0130		09K0130		09K0130		09K0130	
		Location	GW-12		GW-12		QC		QC		QC	
		Sample Date	11/4/2009		11/4/2009		11/4/2009		11/5/2009		11/5/2009	
		Sample ID	ACGW0121201XX		ACGW0120701XX		ACQT004XXX01XX		ACQS001XXX01XX		ACQS002XXX01XX	
		Qc Code	FS		FS		TB		EB		EB	
		Units	UG/L		UG/L		mg/Kg		UG/L		UG/L	
Analysis	Fraction	Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	Tetrahydrofuran	10	U	10	U	0.01	UJ	10	U	10	U
SW8260	N	Toluene	1	U	1	U	0.002	UJ	1	U	1	U
SW8260	N	trans-1,2-Dichloroethene	1	U	1	U	0.002	UJ	1	U	1	U
SW8260	N	trans-1,3-Dichloropropene	0.5	U	0.5	U	0.001	UJ	0.5	U	0.5	U
SW8260	N	trans-1,4-Dichloro-2-butene	2	U	2	U	0.004	UJ	2	U	2	U
SW8260	N	Trichloroethene	20		15		0.002	UJ	1	U	1	U
SW8260	N	Trichlorofluoromethane	2	U	2	U	0.01	UJ	2	U	2	U
SW8260	N	Vinyl chloride	2	U	2.8		0.01	UJ	2	U	2	U
SW8260	N	Xylene, m/p	2	U	2	U	0.004	UJ	2	U	2	U
SW8260	N	Xylene, o	1	U	1	U	0.002	UJ	1	U	1	U
SW9060	N	Total Organic Carbon										
SM2540G	N	Percent Solids										
Notes:												
mg/kg = milligrams per kilogram												
ug/L = micrograms per liter												
QC Code: FS = Field Sample FD = Field Duplicate												
TB = Trip Blank EB = Equipment Rinse Blank												
Qualifiers: U = not detected at the reporting limit												
J = estimated value R = rejected												
D = result from a dilution analysis												

TABLE 2 - RESULTS SUMMARY  
SDG 09K0130  
DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009 SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

		Sample Delivery Group	09K0130		09K0130		09K0130		09K0130		09K0130	
		Location	SD-1		SD-1		SD-1		SD-1		SD-2	
		Sample Date	11/4/2009		11/4/2009		11/4/2009		11/4/2009		11/3/2009	
		Sample ID	ACSD00100001XD		ACSD00100001XD		ACSD00100001XX		ACSD00100001XX		ACSD00200001XX	
		Qc Code	FD		FD		FS		FS		FS	
		Units	mg/Kg		PERCENT		mg/Kg		PERCENT		mg/Kg	
Analysis	Fraction	Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	1,1,1,2-Tetrachloroethane	0.0015	U			0.0015	U				
SW8260	N	1,1,1-Trichloroethane	0.0015	U			0.0015	U				
SW8260	N	1,1,2,2-Tetrachloroethane	0.00074	U			0.00075	U				
SW8260	N	1,1,2-Trichloro-1,2,2-Trifluoroethane	0.0074	U			0.0075	U				
SW8260	N	1,1,2-Trichloroethane	0.0015	U			0.0015	U				
SW8260	N	1,1-Dichloroethane	0.0015	U			0.0015	U				
SW8260	N	1,1-Dichloroethene	0.003	U			0.003	U				
SW8260	N	1,1-Dichloropropene	0.0015	U			0.0015	U				
SW8260	N	1,2,3-Trichlorobenzene	0.0074	UJ			0.0075	UJ				
SW8260	N	1,2,3-Trichloropropane	0.0015	U			0.0015	U				
SW8260	N	1,2,4-Trichlorobenzene	0.0074	UJ			0.0075	UJ				
SW8260	N	1,2,4-Trimethylbenzene	0.0015	UJ			0.0015	UJ				
SW8260	N	1,2-Dibromo-3-chloropropane	0.0015	U			0.0015	U				
SW8260	N	1,2-Dibromoethane	0.00074	U			0.00075	U				
SW8260	N	1,2-Dichlorobenzene	0.0015	U			0.0015	U				
SW8260	N	1,2-Dichloroethane	0.0015	U			0.0015	U				
SW8260	N	1,2-Dichloropropane	0.0015	U			0.0015	U				
SW8260	N	1,3,5-Trichlorobenzene	0.0015	U			0.0015	U				
SW8260	N	1,3,5-Trimethylbenzene	0.0015	UJ			0.0015	UJ				
SW8260	N	1,3-Dichlorobenzene	0.0015	U			0.0015	U				
SW8260	N	1,3-Dichloropropane	0.00074	U			0.00075	U				
SW8260	N	1,4-Dichlorobenzene	0.0015	U			0.0015	U				
SW8260	N	1,4-Dioxane		R				R				
SW8260	N	2,2-Dichloropropane	0.0015	U			0.0015	U				
SW8260	N	2-Butanone	0.03	U			0.03	U				
SW8260	N	2-Chlorotoluene	0.0015	U			0.0015	U				
SW8260	N	2-Hexanone	0.074	U			0.075	U				
SW8260	N	4-Chlorotoluene	0.0015	U			0.0015	U				
SW8260	N	4-iso-Propyltoluene	0.0015	U			0.0015	U				
SW8260	N	4-Methyl-2-pentanone	0.074	U			0.075	U				
SW8260	N	Acetone	0.074	U			0.075	U				
SW8260	N	Acrylonitrile	0.0045	U			0.0045	U				
SW8260	N	Benzene	0.0015	U			0.0015	U				
SW8260	N	Bromobenzene	0.0015	U			0.0015	U				
SW8260	N	Bromochloromethane	0.0015	U			0.0015	U				
SW8260	N	Bromodichloromethane	0.0015	U			0.0015	U				
SW8260	N	Bromoform	0.0015	U			0.0015	U				
SW8260	N	Bromomethane	0.0074	UJ			0.0075	UJ				
SW8260	N	Butane, 2-methoxy-2-methyl-	0.00074	U			0.00075	U				
SW8260	N	Carbon disulfide	0.0045	U			0.0045	U				
SW8260	N	Carbon tetrachloride	0.0074	U			0.0075	U				
SW8260	N	Chlorobenzene	0.0015	U			0.0015	U				
SW8260	N	Chlorodibromomethane	0.00074	U			0.00075	U				
SW8260	N	Chloroethane	0.015	U			0.015	U				
SW8260	N	Chloroform	0.003	U			0.003	U				
SW8260	N	Chloromethane	0.0074	U			0.0075	U				
SW8260	N	Cis-1,2-Dichloroethene	0.0015	U			0.0015	U				
SW8260	N	cis-1,3-Dichloropropene	0.0074	U			0.0075	U				
SW8260	N	Dibromomethane	0.0015	U			0.0015	U				
SW8260	N	Dichlorodifluoromethane	0.015	UJ			0.015	UJ				
SW8260	N	Diethyl ether	0.015	U			0.015	U				
SW8260	N	Diisopropylether	0.00074	U			0.00075	U				
SW8260	N	Ethyl benzene	0.0015	U			0.0015	U				
SW8260	N	Ethyl-t-Butyl Ether	0.00074	U			0.00075	U				
SW8260	N	Hexachlorobutadiene	0.0015	U			0.0015	U				
SW8260	N	Isopropylbenzene	0.0074	UJ			0.0075	UJ				
SW8260	N	Methyl Tertbutyl Ether	0.003	U			0.003	U				
SW8260	N	Methylene chloride	0.015	U			0.015	U				
SW8260	N	n-Butylbenzene	0.0074	UJ			0.0075	UJ				
SW8260	N	Naphthalene	0.015	UJ			0.015	UJ				
SW8260	N	Propylbenzene	0.0015	U			0.0015	U				
SW8260	N	sec-Butylbenzene	0.0015	U			0.0015	U				
SW8260	N	Styrene	0.0074	U			0.0075	U				
SW8260	N	t-Butyl alcohol		R				R				
SW8260	N	tert-Butylbenzene	0.0074	U			0.0075	U				
SW8260	N	Tetrachloroethene	0.0015	U			0.0015	U				

TABLE 2 - RESULTS SUMMARY  
SDG 09K0130  
DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009 SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

		Sample Delivery Group	09K0130		09K0130		09K0130		09K0130		09K0130	
		Location	SD-1		SD-1		SD-1		SD-1		SD-2	
		Sample Date	11/4/2009		11/4/2009		11/4/2009		11/4/2009		11/3/2009	
		Sample ID	ACSD00100001XD		ACSD00100001XD		ACSD00100001XX		ACSD00100001XX		ACSD00200001XX	
		Qc Code	FD		FD		FS		FS		FS	
		Units	mg/Kg		PERCENT		mg/Kg		PERCENT		mg/Kg	
Analysis	Fraction	Parameter	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	Tetrahydrofuran		R				R				
SW8260	N	Toluene	0.0015	U			0.0015	U				
SW8260	N	trans-1,2-Dichloroethene	0.0015	U			0.0015	U				
SW8260	N	trans-1,3-Dichloropropene	0.00074	U			0.00075	U				
SW8260	N	trans-1,4-Dichloro-2-butene	0.003	U			0.003	U				
SW8260	N	Trichloroethene	0.0015	U			0.0015	U				
SW8260	N	Trichlorofluoromethane	0.0074	U			0.0075	U				
SW8260	N	Vinyl chloride	0.0074	UJ			0.0075	UJ				
SW8260	N	Xylene, m/p	0.003	U			0.003	U				
SW8260	N	Xylene, o	0.0015	U			0.0015	U				
SW9060	N	Total Organic Carbon	36200				27110				24770	
SM2540G	N	Percent Solids			80.9				74.1			
Notes:												
mg/kg = milligrams per kilogram												
ug/L = micrograms per liter												
QC Code: FS = Field Sample FD = Field Duplicate												
TB = Trip Blank EB = Equipment Rinse Blank												
Qualifiers: U = not detected at the reporting limit												
J = estimated value R = rejected												
D = result from a dilution analysis												

TABLE 2 - RESULTS SUMMARY  
SDG 09K0130  
DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009 SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

		Sample Delivery Group	09K0130		09K0130	
		Location	SW-1		SW-1	
		Sample Date	11/4/2009		11/4/2009	
		Sample ID	ACSW00100001XD		ACSW00100001XX	
		Qc Code	FD		FS	
		Units	UG/L		UG/L	
Analysis	Fraction	Parameter	Result	Qualifier	Result	Qualifier
SW8260	N	1,1,1,2-Tetrachloroethane	1	U	1	U
SW8260	N	1,1,1-Trichloroethane	1	U	1	U
SW8260	N	1,1,2,2-Tetrachloroethane	0.5	U	0.5	U
SW8260	N	1,1,2-Trichloro-1,2,2-Trifluoroethane	1	U	1	U
SW8260	N	1,1,2-Trichloroethane	1	U	1	U
SW8260	N	1,1-Dichloroethane	1	U	1	U
SW8260	N	1,1-Dichloroethene	1	U	1	U
SW8260	N	1,1-Dichloropropene	2	U	2	U
SW8260	N	1,2,3-Trichlorobenzene	5	UJ	5	UJ
SW8260	N	1,2,3-Trichloropropane	2	U	2	U
SW8260	N	1,2,4-Trichlorobenzene	1	UJ	1	UJ
SW8260	N	1,2,4-Trimethylbenzene	1	U	1	U
SW8260	N	1,2-Dibromo-3-chloropropane	5	UJ	5	UJ
SW8260	N	1,2-Dibromoethane	0.5	U	0.5	U
SW8260	N	1,2-Dichlorobenzene	1	U	1	U
SW8260	N	1,2-Dichloroethane	1	U	1	U
SW8260	N	1,2-Dichloropropane	1	U	1	U
SW8260	N	1,3,5-Trichlorobenzene	1	U	1	U
SW8260	N	1,3,5-Trimethylbenzene	1	U	1	U
SW8260	N	1,3-Dichlorobenzene	1	U	1	U
SW8260	N	1,3-Dichloropropane	0.5	U	0.5	U
SW8260	N	1,4-Dichlorobenzene	1	U	1	U
SW8260	N	1,4-Dioxane		R		R
SW8260	N	2,2-Dichloropropane	1	U	1	U
SW8260	N	2-Butanone	20	U	20	U
SW8260	N	2-Chlorotoluene	1	U	1	U
SW8260	N	2-Hexanone	10	U	10	U
SW8260	N	4-Chlorotoluene	1	U	1	U
SW8260	N	4-iso-Propyltoluene	1	U	1	U
SW8260	N	4-Methyl-2-pentanone	10	U	10	U
SW8260	N	Acetone	50	U	50	UJ
SW8260	N	Acrylonitrile	5	U	5	UJ
SW8260	N	Benzene	1	U	1	U
SW8260	N	Bromobenzene	1	U	1	U
SW8260	N	Bromochloromethane	1	U	1	U
SW8260	N	Bromodichloromethane	0.5	U	0.5	U
SW8260	N	Bromoform	1	UJ	1	UJ
SW8260	N	Bromomethane	2	UJ	2	UJ
SW8260	N	Butane, 2-methoxy-2-methyl-	0.5	U	0.5	U
SW8260	N	Carbon disulfide	3	U	3	U
SW8260	N	Carbon tetrachloride	1	U	1	U
SW8260	N	Chlorobenzene	1	U	1	U
SW8260	N	Chlorodibromomethane	0.5	U	0.5	U
SW8260	N	Chloroethane	2	U	2	U
SW8260	N	Chloroform	2	U	2	U
SW8260	N	Chloromethane	2	U	2	U
SW8260	N	Cis-1,2-Dichloroethene	1	U	1	U
SW8260	N	cis-1,3-Dichloropropene	0.5	U	0.5	U
SW8260	N	Dibromomethane	1	U	1	U
SW8260	N	Dichlorodifluoromethane	2	UJ	2	UJ
SW8260	N	Diethyl ether	2	U	2	U
SW8260	N	Diisopropylether	0.5	U	0.5	U
SW8260	N	Ethyl benzene	1	U	1	U
SW8260	N	Ethyl-t-Butyl Ether	0.5	U	0.5	U
SW8260	N	Hexachlorobutadiene	0.5	U	0.5	U
SW8260	N	Isopropylbenzene	1	U	1	U
SW8260	N	Methyl Tertbutyl Ether	1	U	1	U
SW8260	N	Methylene chloride		R		R
SW8260	N	n-Butylbenzene	1	U	1	U
SW8260	N	Naphthalene	2	UJ	2	UJ
SW8260	N	Propylbenzene	1	U	1	U
SW8260	N	sec-Butylbenzene	1	U	1	U
SW8260	N	Styrene	1	U	1	U
SW8260	N	t-Butyl alcohol	20	U	20	UJ
SW8260	N	tert-Butylbenzene	1	U	1	U
SW8260	N	Tetrachloroethene	1	U	1	U

TABLE 2 - RESULTS SUMMARY  
SDG 09K0130  
DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009 SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

		Sample Delivery Group	09K0130		09K0130	
		Location	SW-1		SW-1	
		Sample Date	11/4/2009		11/4/2009	
		Sample ID	ACSW00100001XD		ACSW00100001XX	
		Qc Code	FD		FS	
		Units	UG/L		UG/L	
Analysis	Fraction	Parameter	Result	Qualifier	Result	Qualifier
SW8260	N	Tetrahydrofuran	10	U	10	U
SW8260	N	Toluene	1	U	1	U
SW8260	N	trans-1,2-Dichloroethene	1	U	1	U
SW8260	N	trans-1,3-Dichloropropene	0.5	U	0.5	U
SW8260	N	trans-1,4-Dichloro-2-butene	2	U	2	U
SW8260	N	Trichloroethene	1	U	1	U
SW8260	N	Trichlorofluoromethane	2	U	2	U
SW8260	N	Vinyl chloride	2	UJ	2	UJ
SW8260	N	Xylene, m/p	2	U	2	U
SW8260	N	Xylene, o	1	U	1	U
SW9060	N	Total Organic Carbon				
SM2540G	N	Percent Solids				
Notes:						
mg/kg = milligrams per kilogram						
ug/L = micrograms per liter						
QC Code: FS = Field Sample FD = Field Duplicate						
TB = Trip Blank EB = Equipment Rinse Blank						
Qualifiers: U = not detected at the reporting limit						
J = estimated value R = rejected						
D = result from a dilution analysis						

Table 3 - TIC's  
SDG 09K0130  
DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009  
SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

SDG	Field Sample ID	Sample Date	Lab Sample ID	Sample Type	Chemical Name	Concentration	Units	Qualifier
09K0130	ACGW0121201XD	11/4/2009	09K0130-06	FD	Propene	6	µg/L	JN

**DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009 SOIL AND WATER SAMPLING PROGRAM  
ACE CLEANERS SITE  
Brockport, New York**

**1.0 Introduction:**

**Water Volatile Organic Analyses by SW846 Method 8260B**

**Samples Collected: November 2, 2009**

**Samples Received at Con-Test Laboratory on November 5, 2009**

**Sample Delivery Group: 09K0152**

**Laboratory Reference Numbers:**

<b>Field Sample ID</b>	<b>Laboratory Sample ID</b>
ACGW0011601XX	09K0152-01
ACGW0010801XX	09K0152-02
ACGW0010801MS	09K0152-02 MS
ACGW0010801MD	09K0152-02 MSD
ACGW0020801XX	09K0152-03
ACGW0021601XX	09K0152-04 50X
ACGW0071001XX	09K0152-05 10X
ACGW0070501XX	09K0152-06
ACGW0070501XX	09K0152-06 100X
ACGW0080601XX	09K0152-07
ACGW0091201XX	09K0152-08
ACGW0091201XX	09K0152-08 100X
ACGW0090601XX	09K0152-09
ACGW0090601XX	09K0152-09 100X
ACGW0141201XX	09K0152-10 10X
ACGW0141201XX	09K0152-10 100X

Deliverables for the off-site laboratory analyses included a Category B deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 2005) for SDG 09K0152.

A project chemist review was completed based on NYSDEC Division of Environmental Remediation guidance for Data Usability Summary Reports (NYSDEC, 2002) for SDG09K0085. Soil and water samples were reviewed using criteria in the US EPA Region II checklist, Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B (SOP # HW-24, Revision #2, October 2006). The following parameters were reviewed.

- \* - Data Completeness
- \* - GC/MS Tuning
- \* - Holding Times
  - Calibrations
- \* - Laboratory Blanks
  - Trip Blank
- \* - Surrogate Compound Recoveries
- \* - Internal Standard Recoveries
  - Matrix Spike
  - Laboratory Control Sample
- \* - Compound Identification
- \* - Compound Quantitation

\* - Indicates that all criteria were met for this parameter.

## 2.0 DATA VALIDATION SUMMARY

### Spectra illegible

It was not possible to correlate the quality control summary data with the raw data because the laboratory used two different file numbers which could not be correlated. The laboratory supplied an email which correlated the two file numbers. Original copies of laboratory logs showing the correlation were not provided.

Raw data for extraction logs were not received from the laboratory.

### Holding Times

The laboratory's case narrative notes that the pH of several samples were greater than 2, which is the required limit for the 14 day holding time.

The following samples had a pH greater than 2 and were analyzed 7 days beyond the 7 day holding time for non-preserved water samples.

ACGW0091201XX	09K0152-08
ACGW0090601XX	09K0152-09
ACGW0141201XX 10X	09K0152-10 10X

The data for the 100X dilution of sample ACGW0141201XX 10X (09K0152-10) were analyzed 3 days beyond the 7 day holding time.

The data for these compounds were flagged with the "J" qualifier and are estimated values.

All other preserved water samples were analyzed within 14 days of collection.



## Tunes

No problems were detected with the tunes associated with the samples of this delivery group. The NYS DEC ASP FORM V was not included in the data package.

## Surrogate Compound Recoveries

All surrogate compound recoveries were within the 70% - 130% quality assurance limits.

## Calibrations

The 11/12/2009 initial calibration (C110902) is associated with samples:

ACGW0011601XX	09K0152-01	11/12
ACGW0010801XX	09K0152-02	11/12
ACGW0020801XX	09K0152-03	11/12
ACGW0021601XX 50X	09K0152-04 50X	11/12
ACGW0071001XX 10X	09K0152-05 10X	11/12
ACGW0070501XX	09K0152-06	11/12
ACGW0070501XX 100X	09K0152-06 100X	11/12
ACGW0080601XX	09K0152-07	11/13
ACGW0141201XX 100X	09K0152-10 100X	11/12

All of the %RSDs were less than 20% with the exceptions of methylene chloride (107%), bromoform (24%), 1,2,4-trichlorobenzene (34%), naphthalene (45%) and 1,2,3-trichlorobenzene (36%).

All of the relative response factors (rrfs) were greater than 0.05 with the exception of 1,4-dioxane (0.002).

All of the percent differences in the 11/13/2009 continuing calibration (C111307) associated with the following samples were less than 20% with the exceptions of methylene chloride (83%), 1,2-dibromo-3-chloropropane (34%) and naphthalene (30%).

ACGW0011601XX	09K0152-01	11/12
ACGW0010801XX	09K0152-02	11/12
ACGW0020801XX	09K0152-03	11/12
ACGW0021601XX 50X	09K0152-04 50X	11/12
ACGW0071001XX 10X	09K0152-05 10X	11/12
ACGW0070501XX	09K0152-06	11/12
ACGW0080601XX	09K0152-07	11/13

All of the percent differences in the 11/12/2009 continuing calibration (C110930, page 502) associated with the following samples were less than 20% with the exceptions of bromomethane (21%), methylene chloride (85%) and bromoform (22%).

ACGW0070501XX 100X	09K0152-06 100X	11/12
ACGW0141201XX 100X	09K0152-10 100X	11/12

The 11/11/2009 initial calibration (B1111002) associated is associated with samples:

ACGW0091201XX	09K0152-08	11/16
ACGW0090601XX	09K0152-09	11/16
ACGW0141201XX 10X	09K0152-10 10X	11/16

All of the %RSDs were less than 20% with the exceptions acetone (48%), acrylonitrile (59%), methylene chloride (116%), bromoform (36%), 1,2-dibromo-3-chloropropane (26%) and naphthalene (25%).

All of the relative response factors (rrfs) were greater than 0.05 with the exception of 1,4-dioxane (0.005).

All of the percent differences in the 11/16/2009 continuing calibration (B116002) associated with the above samples were less than 20% with the exceptions of dichlorodifluoromethane (39%), chloromethane (31%), bromomethane (49%), acetone (27%), acrylonitrile (24%), methylene chloride (72%), carbon disulfide (32%), 2,2-dichloropropane (26%), bromodichloromethane (25%), and bromoform (45%).

Compounds with %RSDs or percent differences above 20% were flagged with the "J" qualifier and are estimated values.

Compounds with %RSDs or percent differences above 90% were flagged with the "J" qualifier when they were detected in a sample and flagged with the "R" qualifier and technically rejected when undetected.

Compounds with relative response factors less than 0.05 were flagged with the "J" qualifier when they were detected in a sample and flagged with the "R" qualifier and technically rejected when undetected.

### Matrix Spike

Sample ACGW0010801XX (09K0152-02)) was used as the water matrix spike and matrix spike duplicate. All recoveries and RPDs were within the required limits with the following exceptions:

Compound	MS % Rec	MSD % Rec.	RPD
Carbon Disulfide	(ok)	135%	
1,2-Dibromo-3-chloropropane	66%	64%	
Dichlorodifluoromethane	52%	51%	
Methylene Chloride	50%	57%	
Naphthalene	60%	55%	
Tetrachloroethylene	146%	132%	
1,2,3-Trichlorobenzene	56%	58%	
1,2,4-Trichlorobenzene	61%	63%	
Trichloroethylene	144%	(ok)	

The data for these compounds with low recoveries were flagged with the "J" qualifier and are estimated values.

Compounds with high recoveries were only qualified when they were detected in a sample since high recoveries do not affect undetected data.

### Laboratory Control Sample

The laboratory's in-house QC limits noted on their summary forms were often wider than the 70% - 130% Region 2 limits. The data were validated on the basis of the Region 2 limits.

All of the laboratory control samples were within the 70% - 130% limits in the LCS pair C111308 / B007019 analyzed on 11/13/2009 and associated with the analyses of the following samples with the exceptions of methylene chloride (33%), naphthalene (63%), 1,2,3-trichlorobenzene (67%), carbon disulfide (137% dup), 1,2-dibromo-3-chloropropane (69% Dup), 2,2-dichloropropane (68%) and 1,2,4-trichlorobenzene (59% dup). The RPD of methylene chloride was 54%.

ACGW0011601XX	09K0152-01	11/12
ACGW0010801XX	09K0152-02	11/12
ACGW0020801XX	09K0152-03	11/12
ACGW0021601XX 50X	09K0152-04 50X	11/12
ACGW0071001XX 10X	09K0152-05 10X	11/12
ACGW0070501XX	09K0152-06	11/12
ACGW0080601XX	09K0152-07	11/13

All of the laboratory control samples were within the 70% - 130% limits in the LCS pair C110931 / B007122 analyzed on 11/12/2009 and associated with the analyses of the following samples with the exceptions of methylene chloride (46%), naphthalene (66%), dichlorodifluoromethane (69.6% OK) and 1,4-dioxane (37%). The RPD of 1,4-dioxane was 84%.

ACGW0070501XX 100X	09K0152-06 100X	11/12
ACGW0141201XX 100X	09K0152-10 100X	11/12

All of the laboratory control samples were within the 70% - 130% limits in the LCS pair B1116003 / B007292 analyzed on 11/16/2009 and associated with the analyses of the following samples with the exceptions of dichlorodifluoromethane (41%), hexachlorobutadiene (69%), naphthalene (61%), 1,2,4-trichlorobenzene (61%), vinyl chloride (61%), carbon disulfide (146% dup) and 1,1,2-trichloro-1,2,2-trifluoroethane (138%). The RPDs of acetone (28%), chloromethane (35%), dichlorodifluoromethane (67%), hexachlorobutadiene (46%), methylene chloride (45%), naphthalene (43%), 1,2,3-trichlorobenzene (29%), 1,2,4-trichlorobenzene (45%) and vinyl chloride (30%).

ACGW0091201XX	09K0152-08	11/16
ACGW0090601XX	09K0152-09	11/16
ACGW0141201XX 10X	09K0152-10 10X	11/16

The data for the compounds associated with laboratory control samples with low recoveries were flagged with the "J" qualifier and are estimated values.

Compounds with high recoveries or RPDs were only qualified if they were detected in a sample since high recoveries do not affect undetected data.

**Method Blanks**

No compounds were detected in the method blanks.

**Trip Blank**

Trip blanks were not analyzed with this sample delivery group.

**Internal Standard Areas and Retention Times**

The areas and retention times of all internal standards were within the required quality control limits.

**Sample Results****Samples ACGW0091201XX (09K0152-08) and ACGW0090601XX (09K0152-09)**

The data summary for these samples (page 28) lists each compound twice – the first at the 1X dilution, the second at the 100X dilution. Only the data from the 1X dilution was used in the final data set. No compounds were detected in the sample.

**Sample ACGW0141201XX 10X (09K0152-10 10X)**

The data summary for this sample (page 38) lists each compound twice – the first at the 10X dilution, the second at the 100X dilution. The 100X dilution was not needed. Only the data from the 10X dilution was used in the final data set.

Validated results are presented in Table 2.

**Tentatively Identified Compounds (TICs)**

Tentatively identified compounds (TICs) were reported by the laboratory. TICs reported in samples are presented in Table 3. Only samples that had TICs reported are included on Table 3. If a sample is not listed, no TICs were reported.

No other problems were found with the reported results of any of the samples in SDG09K0152.

**References:**

New York State Department of Environmental Conservation (NYSDEC), 2005. "Analytical Services Protocols"; July 2005.

New York State Department of Environmental Conservation (NYSDEC), 2002. "Technical Guidance for Site Investigation and Remediation-Appendix 2B"; Draft DER-10; Division of Environmental Remediation; December 2002.

Validating Volatile Organic Compounds by Gas Chromatography/Mass Spectrometry SW-846 Method 8260B (SOP # HW-24, Revision #2, October 2006).

Validated by Nancy Potak

January 28, 2010



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Reviewed by Tige Cunningham (Mactec)

 4/20/10

TABLE 2 - RESULTS SUMMARY  
SDG 09K0152  
DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009 SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

Sample Delivery Group			09K0152	09K0152	09K0152	09K0152	09K0152
Location			GW-1	GW-1	GW-14	GW-2	GW-2
Sample Date			11/2/2009	11/2/2009	11/2/2009	11/2/2009	11/2/2009
Sample ID			ACGW0011601XX	ACGW0010801XX	ACGW0141201XX	ACGW0021601XX	ACGW0020801XX
Qc Code			FS	FS	FS	FS	FS
Analysis	Fraction	Parameter	Units	Result	Qualifier	Result	Qualifier
SW8260	N	1,1,1,2-Tetrachloroethane	UG/L	1 U		10 UJD	
SW8260	N	1,1,1-Trichloroethane	UG/L	1 U		10 UJD	
SW8260	N	1,1,2,2-Tetrachloroethane	UG/L	0.5 U		5 UJD	
SW8260	N	1,1,2-Trichloro-1,2,2-Trifluoroethane	UG/L	1 U		10 UJD	
SW8260	N	1,1,2-Trichloroethane	UG/L	1 U		10 UJD	
SW8260	N	1,1-Dichloroethane	UG/L	1 U		10 UJD	
SW8260	N	1,1-Dichloroethene	UG/L	1 U		10 UJD	
SW8260	N	1,1-Dichloropropene	UG/L	2 U		20 UJD	
SW8260	N	1,2,3-Trichlorobenzene	UG/L	5 UJ		50 UJD	
SW8260	N	1,2,3-Trichloropropane	UG/L	2 U		20 UJD	
SW8260	N	1,2,4-Trichlorobenzene	UG/L	5 UJ		10 UJD	
SW8260	N	1,2,4-Trimethylbenzene	UG/L	1 U		10 UJD	
SW8260	N	1,2-Dibromo-3-chloropropane	UG/L	5 UJ		50 UJD	
SW8260	N	1,2-Dibromoethane	UG/L	0.5 U		5 UJD	
SW8260	N	1,2-Dichlorobenzene	UG/L	1 U		10 UJD	
SW8260	N	1,2-Dichloroethane	UG/L	1 U		10 UJD	
SW8260	N	1,2-Dichloropropane	UG/L	1 U		10 UJD	
SW8260	N	1,3,5-Trichlorobenzene	UG/L	1 U		10 UJD	
SW8260	N	1,3,5-Trimethylbenzene	UG/L	1 U		10 UJD	
SW8260	N	1,3-Dichlorobenzene	UG/L	1 U		10 UJD	
SW8260	N	1,3-Dichloropropane	UG/L	0.5 U		5 UJD	
SW8260	N	1,4-Dichlorobenzene	UG/L	1 U		10 UJD	
SW8260	N	1,4-Dioxane	UG/L	R		R	
SW8260	N	2,2-Dichloropropane	UG/L	1 UJ		10 UJD	
SW8260	N	2-Butanone	UG/L	20 U		200 UJD	
SW8260	N	2-Chlorotoluene	UG/L	1 U		10 UJD	
SW8260	N	2-Hexanone	UG/L	10 U		100 UJD	
SW8260	N	4-Chlorotoluene	UG/L	1 U		10 UJD	
SW8260	N	4-iso-Propyltoluene	UG/L	1 U		10 UJD	
SW8260	N	4-Methyl-2-pentanone	UG/L	10 U		100 UJD	
SW8260	N	Acetone	UG/L	50 U		500 UJD	
SW8260	N	Acrylonitrile	UG/L	5 U		50 UJD	
SW8260	N	Benzene	UG/L	1 U		10 UJD	
SW8260	N	Bromobenzene	UG/L	1 U		10 UJD	
SW8260	N	Bromochloromethane	UG/L	1 U		10 UJD	
SW8260	N	Bromodichloromethane	UG/L	1 U		5 UJD	
SW8260	N	Bromoform	UG/L	5 UJ		50 UJD	
SW8260	N	Bromomethane	UG/L	5 UJ		20 UJD	
SW8260	N	Butane, 2-methoxy-2-methyl-	UG/L	0.5 U		5 UJD	
SW8260	N	Carbon disulfide	UG/L	3 UJ		30 UJD	
SW8260	N	Carbon tetrachloride	UG/L	1 U		10 UJD	
SW8260	N	Chlorobenzene	UG/L	1 U		10 UJD	
SW8260	N	Chlorodibromomethane	UG/L	1 U		50 UJD	
SW8260	N	Chloroethane	UG/L	2 U		20 UJD	
SW8260	N	Chloroform	UG/L	2 U		20 UJD	
SW8260	N	Chloromethane	UG/L	2 U		20 UJD	
SW8260	N	Cis-1,2-Dichloroethene	UG/L	15		36 JD	
SW8260	N	cis-1,3-Dichloropropene	UG/L	0.5 U		5 UJD	
SW8260	N	Dibromomethane	UG/L	1 U		10 UJD	
SW8260	N	Dichlorodifluoromethane	UG/L	2 UJ		20 UJD	
SW8260	N	Diethyl ether	UG/L	2 U		20 UJD	
SW8260	N	Diisopropylether	UG/L	0.5 U		5 UJD	
SW8260	N	Ethyl benzene	UG/L	1 U		10 UJD	
SW8260	N	Ethyl-t-Butyl Ether	UG/L	0.5 U		5 UJD	
SW8260	N	Hexachlorobutadiene	UG/L	0.5 U		5 UJD	
SW8260	N	Isopropylbenzene	UG/L	1 U		10 UJD	
SW8260	N	Methyl Tertbutyl Ether	UG/L	1 U		10 UJD	
SW8260	N	Methylene chloride	UG/L	R		R	
SW8260	N	n-Butylbenzene	UG/L	1 U		10 UJD	
SW8260	N	Naphthalene	UG/L	2 UJ		50 UJD	
SW8260	N	Propylbenzene	UG/L	1 U		10 UJD	
SW8260	N	sec-Butylbenzene	UG/L	1 U		10 UJD	
SW8260	N	Styrene	UG/L	1 U		10 UJD	
SW8260	N	t-Butyl alcohol	UG/L	50 U		200 UJD	
SW8260	N	tert-Butylbenzene	UG/L	1 U		10 UJD	
SW8260	N	Tetrachloroethene	UG/L	1 U		390 JD	
SW8260	N	Tetrahydrofuran	UG/L	10 U		100 UJD	

TABLE 2 - RESULTS SUMMARY  
SDG 09K0152  
DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009 SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

Sample Delivery Group			09K0152		09K0152			09K0152				09K0152			
Location			GW-1		GW-1			GW-14				GW-2			
Sample Date			11/2/2009		11/2/2009			11/2/2009				11/2/2009			
Sample ID			ACGW0011601XX		ACGW0010801XX			ACGW0141201XX				ACGW0021601XX		ACGW0020801XX	
Qc Code			FS		FS			FS				FS		FS	
Analysis	Fraction	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	Toluene	UG/L	1	U	1	U	10	UJD	50	UD	1	U		
SW8260	N	trans-1,2-Dichloroethene	UG/L	1	U	2		10	UJD	50	UD	1	U		
SW8260	N	trans-1,3-Dichloropropene	UG/L	0.5	U	0.5	U	5	UJD	25	UD	0.5	U		
SW8260	N	trans-1,4-Dichloro-2-butene	UG/L	2	U	2	U	20	UJD	100	UD	2	U		
SW8260	N	Trichloroethene	UG/L	1	U	36	J	33	JD	54	JD	6	J		
SW8260	N	Trichlorofluoromethane	UG/L	2	U	2	U	20	UJD	100	UD	2	U		
SW8260	N	Vinyl chloride	UG/L	5.4		2	U	20	UJD	100	UD	2	U		
SW8260	N	Xylene, m/p	UG/L	2	U	2	U	20	UJD	100	UD	2	U		
SW8260	N	Xylene, o	UG/L	1	U	1	U	10	UJD	50	UD	1	U		
Notes:															
ug/L = micrograms per liter															
QC Code: FS = Field Sample FD = Field Duplicate															
TB = Trip Blank EB = Equipment Rinse Blank															
Qualifiers: U = not detected at the reporting limit															
J = estimated value R = rejected															
D = result from a dilution analysis															

TABLE 2 - RESULTS SUMMARY  
SDG 09K0152  
DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009 SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

Sample Delivery Group			09K0152		09K0152			09K0152		09K0152			
Location			GW-7		GW-7			GW-8		GW-9		GW-9	
Sample Date			11/2/2009		11/2/2009			11/2/2009		11/2/2009		11/2/2009	
Sample ID			ACGW0071001XX		ACGW0070501XX			ACGW0080601XX		ACGW0091201XX		ACGW0090601XX	
Qc Code			FS		FS			FS		FS		FS	
Analysis	Fraction	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	1,1,1,2-Tetrachloroethane	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	1,1,1-Trichloroethane	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	1,1,2,2-Tetrachloroethane	UG/L	5	UD	0.5	U	0.5	U	0.5	UJ	0.5	UJ
SW8260	N	1,1,2-Trichloro-1,2,2-Trifluoroethane	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	1,1,2-Trichloroethane	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	1,1-Dichloroethane	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	1,1-Dichloroethene	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	1,1-Dichloropropene	UG/L	20	UD	2	U	2	U	2	UJ	2	UJ
SW8260	N	1,2,3-Trichlorobenzene	UG/L	50	UJD	5	UJ	5	UJ	5	UJ	5	UJ
SW8260	N	1,2,3-Trichloropropane	UG/L	20	UD	2	U	2	U	2	UJ	2	UJ
SW8260	N	1,2,4-Trichlorobenzene	UG/L	50	UJD	5	UJ	5	UJ	5	UJ	5	UJ
SW8260	N	1,2,4-Trimethylbenzene	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	1,2-Dibromo-3-chloropropane	UG/L	50	UJD	5	UJ	5	UJ	5	UJ	5	UJ
SW8260	N	1,2-Dibromoethane	UG/L	5	UD	0.5	U	0.5	U	0.5	UJ	0.5	UJ
SW8260	N	1,2-Dichlorobenzene	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	1,2-Dichloroethane	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	1,2-Dichloropropane	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	1,3,5-Trichlorobenzene	UG/L	10	UD	1	UJ	1	U	1	UJ	1	UJ
SW8260	N	1,3,5-Trimethylbenzene	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	1,3-Dichlorobenzene	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	1,3-Dichloropropane	UG/L	5	UD	0.5	U	0.5	U	0.5	UJ	0.5	UJ
SW8260	N	1,4-Dichlorobenzene	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	1,4-Dioxane	UG/L		R		R		R		R		R
SW8260	N	2,2-Dichloropropane	UG/L	10	UJD	1	UJ	1	UJ	1	UJ	1	UJ
SW8260	N	2-Butanone	UG/L	200	UD	20	U	20	U	20	UJ	20	UJ
SW8260	N	2-Chlorotoluene	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	2-Hexanone	UG/L	100	UD	10	U	10	U	10	UJ	10	UJ
SW8260	N	4-Chlorotoluene	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	4-iso-Propyltoluene	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	4-Methyl-2-pentanone	UG/L	100	UD	10	U	10	U	10	UJ	10	UJ
SW8260	N	Acetone	UG/L	500	U	50	U	50	U	50	UJ	50	UJ
SW8260	N	Acrylonitrile	UG/L	50	UD	5	U	5	U	5	UJ	5	UJ
SW8260	N	Benzene	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	Bromobenzene	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	Bromochloromethane	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	Bromodichloromethane	UG/L	10	UD	1	U	1	U	0.5	UJ	0.5	UJ
SW8260	N	Bromoform	UG/L	50	UJD	5	UJ	5	UJ	5	UJ	5	UJ
SW8260	N	Bromomethane	UG/L	50	UJD	5	UJ	5	UJ	2	UJ	2	UJ
SW8260	N	Butane, 2-methoxy-2-methyl-	UG/L	5	UD	0.5	U	0.5	U	0.5	UJ	0.5	UJ
SW8260	N	Carbon disulfide	UG/L	30	UD	3	U	3	U	3	UJ	3	UJ
SW8260	N	Carbon tetrachloride	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	Chlorobenzene	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	Chlorodibromomethane	UG/L	10	UD	1	U	1	U	5	UJ	5	UJ
SW8260	N	Chloroethane	UG/L	20	UD	2	U	2	U	2	UJ	2	UJ
SW8260	N	Chloroform	UG/L	20	UD	2	U	2	U	2	UJ	2	UJ
SW8260	N	Chloromethane	UG/L	20	UD	2	U	2	U	2	UJ	2	UJ
SW8260	N	Cis-1,2-Dichloroethene	UG/L	10	U	18		1	U	1	UJ	1	UJ
SW8260	N	cis-1,3-Dichloropropene	UG/L	5	UD	0.5	U	0.5	U	0.5	UJ	0.5	UJ
SW8260	N	Dibromomethane	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	Dichlorodifluoromethane	UG/L	20	UJD	2	UJ	2	UJ	2	UJ	2	UJ
SW8260	N	Diethyl ether	UG/L	20	UD	2	U	2	U	2	UJ	2	UJ
SW8260	N	Diisopropylether	UG/L	5	UD	0.5	U	0.5	U	0.5	UJ	0.5	UJ
SW8260	N	Ethyl benzene	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	Ethyl-t-Butyl Ether	UG/L	5	UD	0.5	U	0.5	U	0.5	UJ	0.5	UJ
SW8260	N	Hexachlorobutadiene	UG/L	5	UD	0.5	U	0.5	U	0.5	UJ	0.5	UJ
SW8260	N	Isopropylbenzene	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	Methyl Tertbutyl Ether	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	Methylene chloride	UG/L		R		R		R		R		R
SW8260	N	n-Butylbenzene	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	Naphthalene	UG/L	20	UJD	2	UJ	2	UJ	5	UJ	5	UJ
SW8260	N	Propylbenzene	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	sec-Butylbenzene	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	Styrene	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	t-Butyl alcohol	UG/L	500	UD	50	U	50	U	20	UJ	20	UJ
SW8260	N	tert-Butylbenzene	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	Tetrachloroethene	UG/L	250	JD	240	D	1	U	1	UJ	1	UJ
SW8260	N	Tetrahydrofuran	UG/L	100	UD	10	U	10	U	10	UJ	10	UJ



TABLE 2 - RESULTS SUMMARY  
SDG 09K0152  
DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009 SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

		Sample Delivery Group		09K0152		09K0152		09K0152		09K0152		09K0152	
			Location	GW-7		GW-7		GW-8		GW-9		GW-9	
			Sample Date	11/2/2009		11/2/2009		11/2/2009		11/2/2009		11/2/2009	
			Sample ID	ACGW0071001XX		ACGW0070501XX		ACGW0080601XX		ACGW0091201XX		ACGW0090601XX	
			Qc Code	FS		FS		FS		FS		FS	
Analysis	Fraction	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
SW8260	N	Toluene	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	trans-1,2-Dichloroethene	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
SW8260	N	trans-1,3-Dichloropropene	UG/L	5	UD	0.5	U	0.5	U	0.5	UJ	0.5	UJ
SW8260	N	trans-1,4-Dichloro-2-butene	UG/L	20	UD	2	U	2	U	2	UJ	2	UJ
SW8260	N	Trichloroethene	UG/L	11	JD	23	J	1	U	1	UJ	1	UJ
SW8260	N	Trichlorofluoromethane	UG/L	20	UD	2	U	2	U	2	UJ	2	UJ
SW8260	N	Vinyl chloride	UG/L	20	UD	2	U	2	U	2	UJ	2	UJ
SW8260	N	Xylene, m/p	UG/L	20	UD	2	U	2	U	2	UJ	2	UJ
SW8260	N	Xylene, o	UG/L	10	UD	1	U	1	U	1	UJ	1	UJ
Notes:													
ug/L = micrograms per liter													
QC Code: FS = Field Sample    FD = Field Duplicate													
TB = Trip Blank    EB = Equipment Rinse Blank													
Qualifiers: U = not detected at the reporting limit													
J = estimated value    R = rejected													
D = result from a dilution analysis													

Table 3 - TIC's  
SDG 09K0152  
DATA USABILITY SUMMARY REPORT  
NOVEMBER 2009  
SOIL, SEDIMENT AND WATER SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

SDG	Field Sample ID	Sample Date	Lab Sample ID	Sample Type	Chemical Name	Concentration	Units	Qualifier
09K0152	ACGW0090601XX	11/2/2009	09K0152-09	FS	1-Propene, 2-methyl-	4.3	µg/L	JN
09K0152	ACGW0090601XX	11/2/2009	09K0152-09	FS	Propene	10	µg/L	JN

**SUMMARY OF THE ANALYTICAL DATA USABILITY  
NOVEMBER 2009 SOIL GAS SAMPLING PROGRAM  
ACE CLEANERS  
Brockport, New York**

**1.0 Introduction:**

**Soil Gas Volatile Organic Analyses by Method TO-15**

**Samples Collected: November 3<sup>rd</sup> & 4<sup>th</sup>, 2009**

**Samples Received: November 5, 2009**

**Sample Delivery Group: 09K0173**

**Laboratory Reference Numbers:**

<u>Field sample ID</u>	<u>Laboratory Sample ID</u>
ACGV0010401XX	09K0173-01 20X
ACGV0010401XX	09K0173-01 2000X
ACGV0020401XX	09K0173-02 20X
ACGV0020401XX	09K0173-02 20X LAB DUP
ACGV0020401XX	09K0173-02 40X
ACGV0020401XX	09K0173-02 40X
ACGV0030401XX	09K0173-03 20X
ACGV0040401XX	09K0173-04 20X
ACGV0040401XX	09K0173-04 400X

Deliverables for the off-site laboratory analyses included a Category B deliverable as defined in the New York State Department of Environmental Conservation (NYSDEC) Analytical Services Protocols (NYSDEC, 2005) for SDG 09K0173.

A project chemist review was completed based on NYSDEC Division of Environmental Remediation guidance for Data Usability Summary Reports (NYSDEC, 2002) for SDG 09K0173. Soil Gas samples were reviewed using criteria in the US EPA Region II checklist, Validating Volatile Organic Analysis of Ambient Air in canister by Method TO-15, SOP HW-31 Revision 4 (USEPA, 2006). The following parameters were reviewed.

- \* - Data Completeness
- \* - GC/MS Tuning
- \* - Holding Times
  - Calibrations
  - Laboratory Blanks
- \* - Laboratory Duplicate
- \* - Surrogate Compound Recoveries
- \* - Internal Standard Recoveries
- \* - Laboratory Control Sample
- \* - Compound Identification
- \* - Compound Quantitation

\* - Indicates that all criteria were met for this parameter.

## **2.0 DATA VALIDATION SUMMARY**

### **Holding Times**

All samples were analyzed within 30 days of collection.

### **Tunes**

No problems were detected with the tunes associated with the samples of this delivery group. The NYS DEC ASP FORM V was not included in the data package.

### **Surrogate Compound Recoveries**

All surrogate compound recoveries were within the 70% - 130% quality assurance limits.

### **Calibrations**

All %RSDs in the initial calibration were less than 30% with the exceptions of ethanol (34%), methylene chloride (62%), 1,2,4-trichlorobenzene (32%) and hexachlorobutadiene (32%)

All %Ds in the continuing calibrations were less than 30% with the exception of chloroethane (34%).

Data for these compounds were flagged with the "J" qualifier and are estimated values.

All RRF's were greater than the required limits.

### **Laboratory Control Sample**

All of the laboratory control samples were within the required 70% - 130% limits.

### **Laboratory Duplicate**

Sample ACGV0020401XX (09K0173-02 20X) was used as the laboratory duplicate. All RPDs which could be accurately calculated were less than 20%

### **Method Blanks**

Methylene chloride (0.28 ug/m<sup>3</sup>/ 0.555 ppbv) was detected in the method blank associated with the analyses of all of the samples.

An action level was calculated at five times the concentration in the blank and compared to sample results.

Only low concentrations of methylene chloride approximately equal to the concentration in the method blank were found in all of the samples.

All of the methylene chloride data were flagged with the "U" qualifier.

### Internal Standard Areas and Retention Times

The areas and retention times of all internal standards were within the required quality control limits (+40% - 40%).

### Sample Results

Validated results are presented in Table 2.

No other problems were found with the reported results of any of the samples in SDG 09K0173.

### References:

New York State Department of Environmental Conservation (NYSDEC), 2005. "Analytical Services Protocols"; July 2005.

New York State Department of Environmental Conservation (NYSDEC), 2002. "Technical Guidance for Site Investigation and Remediation-Appendix 2B"; Draft DER-10; Division of Environmental Remediation; December 2002.

USEP Hazardous Waste Support Branch – Validation Air Samples – Volatile Organic Analysis of Ambient Air in Canister By Method TO-15 (SOP #HW-31, Revision #4, October 2006)

Validated by Nancy Potak

January 28, 2010



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*Reviewed by Tige Cunningham (Mactec)*

*Tige Cunningham 4-20-10*

TABLE 2 - RESULTS SUMMARY  
SDG 09K0173  
SUMMARY OF THE ANALYTICAL DATA USABILITY  
NOVEMBER 2009 SOIL GAS SAMPLING PROGRAM  
ACE CLEANERS  
BROCKPORT, NY

Sample Delivery Group				09K0173		09K0173		09K0173		09K0173	
Location				GV-1		GV-2		GV-3		GV-4	
Sample Date				11/4/2009		11/4/2009		11/4/2009		11/4/2009	
Sample ID				ACGV0010401XX		ACGV0020401XX		ACGV0030401XX		ACGV0040401XX	
QC Code				FS		FS		FS		FS	
Analysis	Fraction	Parameter	Units	Result	Qualifier	Result	Qualifier	Result	Qualifier	Result	Qualifier
TO15	N	1,1,1-Trichloroethane	UG/M3	5.5	UD	5.5	UD	5.5	UD	5.5	UD
TO15	N	1,1,2,2-Tetrachloroethane	UG/M3	6.9	UD	6.9	UD	6.9	UD	6.9	UD
TO15	N	1,1,2-Trichloro-1,2,2-Trifluoroethane	UG/M3	7.7	UD	7.7	UD	7.7	UD	7.7	UD
TO15	N	1,1,2-Trichloroethane	UG/M3	5.5	UD	5.5	UD	5.5	UD	5.5	UD
TO15	N	1,1-Dichloroethane	UG/M3	4	UD	4	UD	4	UD	4	UD
TO15	N	1,1-Dichloroethene	UG/M3	50	D	4	UD	4	UD	4	UD
TO15	N	1,2,4-Trichlorobenzene	UG/M3	15	UDJ	15	JUD	15	UDJ	15	UDJ
TO15	N	1,2,4-Trimethylbenzene	UG/M3	14	D	4.9	UD	4.9	UD	10	D
TO15	N	1,2-Dibromoethane	UG/M3	7.7	UD	7.7	UD	7.7	UD	7.7	UD
TO15	N	1,2-Dichloro-1,1,2,2-tetrafluoroethane	UG/M3	7	UD	7	UD	7	UD	7	UD
TO15	N	1,2-Dichlorobenzene	UG/M3	6	UD	6	UD	6	UD	6	UD
TO15	N	1,2-Dichloroethane	UG/M3	4	UD	4	UD	4	UD	4	UD
TO15	N	1,2-Dichloropropane	UG/M3	4.6	UD	4.6	UD	4.6	UD	4.6	UD
TO15	N	1,3,5-Trimethylbenzene	UG/M3	9	D	4.9	UD	4.9	UD	4.9	UD
TO15	N	1,3-Butadiene	UG/M3	2.2	UD	52	D	150	D	290	D
TO15	N	1,3-Dichlorobenzene	UG/M3	6	UD	6	UD	6	UD	6	UD
TO15	N	1,4-Dichlorobenzene	UG/M3	6	UD	6	UD	6	UD	6	UD
TO15	N	2-Butanone	UG/M3	44	D	65	D	41	D	82	D
TO15	N	2-Hexanone	UG/M3	4.1	UD	8.6	D	4.1	UD	4.1	UD
TO15	N	2-Propanol	UG/M3	4.9	UD	4.9	UD	4.9	UD	4.9	UD
TO15	N	4-Ethyltoluene	UG/M3	4.9	UD	4.9	UD	4.9	UD	4.9	UD
TO15	N	4-Methyl-2-pentanone	UG/M3	4.1	UD	5.5	D	4.1	UD	4.1	UD
TO15	N	Acetone	UG/M3	85	D	250	D	170	D	330	D
TO15	N	Benzene	UG/M3	31	D	18	D	56	D	180	D
TO15	N	Benzyl chloride	UG/M3	5.2	UD	5.2	UD	5.2	UD	5.2	UD
TO15	N	Bromodichloromethane	UG/M3	6.7	UD	6.7	UD	6.7	UD	6.7	UD
TO15	N	Bromoform	UG/M3	10	UD	10	UD	10	UD	10	UD
TO15	N	Bromomethane	UG/M3	3.9	UD	3.9	UD	3.9	UD	3.9	UD
TO15	N	Carbon disulfide	UG/M3	9	D	10	D	7.4	D	57	D
TO15	N	Carbon tetrachloride	UG/M3	6.3	UD	6.3	UD	6.3	UD	6.3	UD
TO15	N	Chlorobenzene	UG/M3	4.6	UD	4.6	UD	4.6	UD	4.6	UD
TO15	N	Chlorodibromomethane	UG/M3	8.5	UD	8.5	UD	8.5	UD	8.5	UD
TO15	N	Chloroethane	UG/M3	16	JD	2.6	UDJ	2.6	UDJ	2.6	UDJ
TO15	N	Chloroform	UG/M3	4.9	UD	4.9	UD	4.9	UD	5.7	D
TO15	N	Chloromethane	UG/M3	2.1	UD	2.1	UD	6.5	D	33	D
TO15	N	Cis-1,2-Dichloroethene	UG/M3	2,100	D	170	D	4	UD	130	D
TO15	N	cis-1,3-Dichloropropene	UG/M3	4.5	UD	4.5	UD	4.5	UD	4.5	UD
TO15	N	Cyclohexane	UG/M3	36	D	3.4	UD	9.3	D	27	D
TO15	N	Dichlorodifluoromethane	UG/M3	4.9	UD	4.9	UD	4.9	UD	4.9	UD
TO15	N	Ethanol	UG/M3	37	JD	75	JD	65	JD	100	JD
TO15	N	Ethyl acetate	UG/M3	3.6	UD	3.6	UD	3.6	UD	3.6	UD
TO15	N	Ethyl benzene	UG/M3	6.1	D	4.9	D	6.9	D	15	D
TO15	N	Heptane	UG/M3	420	D	18	D	37	D	120	D
TO15	N	Hexachlorobutadiene	UG/M3	21	UDJ	21	UDJ	21	UDJ	21	UDJ
TO15	N	Hexane	UG/M3	970	D	29	D	69	D	190	D
TO15	N	Methyl Tertbutyl Ether	UG/M3	3.6	UD	3.6	UD	3.6	UD	3.6	UD
TO15	N	Methylene chloride	UG/M3	47	UBDJ	38	UBDJ	38	UBDJ	46	UJBD
TO15	N	Propylene	UG/M3	2,500	D	290	D	870	D	1,200	D
TO15	N	Styrene	UG/M3	4.3	UD	6.7	D	5.6	D	16	D
TO15	N	Tetrachloroethene	UG/M3	110,000	D	8,000	D	21	D	24,000	D
TO15	N	Tetrahydrofuran	UG/M3	2.9	UD	2.9	UD	2.9	UD	2.9	UD
TO15	N	Toluene	UG/M3	57	D	21	D	35	D	100	D
TO15	N	trans-1,2-Dichloroethene	UG/M3	54	D	4	UD	4	UD	4	UD
TO15	N	trans-1,3-Dichloropropene	UG/M3	4.5	UD	4.5	UD	4.5	UD	4.5	UD
TO15	N	Trichloroethene	UG/M3	1,700	D	380	D	5	UD	250	D
TO15	N	Trichlorofluoromethane	UG/M3	5.6	UD	5.6	UD	5.6	UD	5.6	UD
TO15	N	Vinyl acetate	UG/M3	7	UD	7	UD	7	UD	7	UD
TO15	N	Vinyl chloride	UG/M3	41,000	D	3	UD	3	UD	6	D
TO15	N	Xylene, m/p	UG/M3	13	D	8.7	U	11	D	29	D
TO15	N	Xylene, o	UG/M3	7.4	D	4.3	UD	5.9	D	14	D
Notes:											
UG/M3 = micrograms per cubic meter											
QC Code: FS = Field Sample FD = Field Duplicate											
Qualifiers: U = not detected at the reporting limit											
J = estimated value R = rejected											
D = result from a dilution analysis											
B = analyte detected in associated method blank											