Sheilla Paige - Revised Brandywine Report

From: "Stephen Phelps" <sphelps@precisionenvironmentalny.com>
To: "'Sheilla Paige'" <srpaige@gw.dec.state.ny.us>
Date: 4/8/2010 12:06 PM
Subject: Revised Brandywine Report
Attachments: 4.8.10 REV2 Brandywine Plume Track Down Rpt.pdf

Sheilla – Per your previous correspondence regarding the error in section 4.1 of the Brandywine report I have attached a completed revised report. Figures 5,6,7 and Attachment D have remained unchanged so I wasn't going to re-email them over unless you specifically would like them resent. They were previously sent under separate email due to file sizes.

****Please note that our mailing address has changed... see signature below for new address****
Feel free to call if you have any questions.
Regards, Stephen
Stephen M. Phelps
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~Certified Women-Owned Business Enterprise (WBE)~

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CERTIFIED WOMEN-OWNED BUSINESS ENTERPRISE

Supplemental Subsurface Investigation Report of Findings

Brandywine Avenue Plume Track Down
NYSDEC Spill No.: 9706794

Brandywine Avenue and State Street
City of Schenectady, Schenectady County, New York

Report Completed:
April 8, 2010

Prepared For:

MS. SHEILLA R. PAIGE
Environmental Engineer
New York State Department of Environmental Conservation
Division of Environmental Remediation; Region 4
1130 North Westcott Road
Schenectady, New York 12306-2014

Prepared By:

PRECISION ENVIRONMENTAL SERVICES, INC.
Curtis Industrial Park, Lot 28C
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1.0 Introduction:

Precision Environmental Services, Inc. (PES), has prepared this report to document the findings of the supplemental subsurface investigative work performed at Brandywine Avenue and State Street in the City of Schenectady, Schenectady County, NY (see Attachment A, Figures 1 and 2 for location detail). The work described within this report was initiated pursuant to a directive from the New York State Department of Environmental Conservation (NYSDEC) and is based on PES' April 29, 2009 Proposed Supplemental Subsurface Investigation Work Plan. Work tasks completed and documented within this report include ①- installation of thirty-seven (37) soil borings; ②- installation of thirty (30) temporary groundwater monitoring wells; ③- acquisition of soil samples; ④- performance of a survey to determine top of casing elevations of newly installed wells; and ⑤- development and sampling of newly installed and select existing groundwater monitoring wells. All work performed was completed pursuant to NYSDEC prime contract number C100906.

1.1 Background:

Please Note: *The following discussion is limited to PESs findings as they relate solely to the limits of the authorized scope of work. Specifically, information presented will address only those areas where PES performed subsurface investigative work (i.e. – installed soil boring locations) see Attachment A for detail.*

Previous investigative work completed in conjunction with the subject spill number by others has documented the existence of volatile organic compounds (VOC's) that are associated with solvents typically utilized for dry cleaning and petroleum related VOCs. Historical findings and conclusions have suggested that there were two suspected sources for the chlorinated VOC impacts observed as well as several potential sources for the petroleum related contaminants identified. The two chlorinated solvent related sources were a former Tuxedo Shop known as Marlou Formal Wear, which was located at 23 Brandywine Avenue at property that is currently occupied by Rite Aid, and Mid Towne Laundry, which is located at 1124 State Street. Several possible sources for petroleum impacts were noted. The most notable being a former gasoline service station and Muffler shop located at the northeast corner of the intersection of Brandywine Ave. and State Street and a Stewart's Shop located southwest of the focus area at 100 Brandywine Ave.

The primary objective of the investigative work completed by PES was to supplement the previously completed investigative work, obtain new data with respect to contaminant occurrence and concentration in soil and groundwater, provide for further delineation of the contaminant plume(s) and to better identify the source(s) for the documented petroleum and chlorinated solvent impacts.

In May 2009 PES's work plan was approved. Investigative efforts took place in June and July 2009. The results of this work have been detailed below.

1.2 Location Description:

The focus area of the investigative efforts encompasses an entire block in the City of Schenectady, Schenectady County, New York. The location has been identified by Schenectady Real Property Tax Services as Section 049.50, Block 4. The area is bound by State Street to the north, Albany Street to the south, Kelton Avenue to the east and Brandywine Avenue to the west (see Attachment A, Figure 2 for detail). Figure 1, provided in Attachment A, is an annotated United States Geological Survey Map (USGS 1995) depicting location detail and local topography. In general, the land surfaces are covered with asphalt, gravel or consist of lawn area. The area of study is relatively flat and possesses little surface relief. Localized land use consists of mixed residential and commercial. Existing aboveground structures include concrete block and brick commercial buildings and brick or wooden residential, single and multi-

unit dwellings. Structures within the focus area are serviced by natural gas and municipally supplied water and sewer systems, however investigations at each individual property to identify petroleum or other chemical storage tanks and/or other potential environmental concerns were not completed as part of this investigation.

2.0 Subsurface Investigation:

From June 15 to July 10, 2009, PES performed the supplemental subsurface investigation predominantly in the public right-of-way within the focus area and adjacent properties by installing soil borings at 37 locations. The purpose of the soil borings is to provide for the acquisition of soil samples to be analyzed by qualified personnel to determine contaminant occurrence, concentration and migration, lithology and to facilitate the installation of temporary groundwater monitoring wells. Soil samples were collected at each boring location. Groundwater monitoring wells were installed at 30 soil boring locations. Following installation, monitoring wells were developed and sampled.

2.1 Soil Boring Installation:

The soil borings have been designated as SB-A to SB-AJ (See Attachment A, Figures 3 and 4, for relative locations). All soil borings were installed utilizing PES's limited access, direct push, 540B Geoprobe. Borings were advanced to depths ranging from 24 to 32-feet below grade in order to intersect the apparent water table, locate the suspected aquitard or to practical refusal. Continuous, discrete, core sampling was conducted at four (4)-foot intervals where possible during boring advancement. At select locations, a discrete horizon sampler was utilized to obtain specific samples where saturated, unstable conditions did not allow the borehole to remain open to facilitate conventional sample collection methods. Upon collection, each sample was examined for lithologic classification and screened with a Photo Ionization Detector (PID) to qualitatively determine the presence and amount of VOCs. Details regarding lithologic classification and PID readings have been recorded on respective boring logs, which have been included as Attachment B. Screening involved sealing representative portions of the acquired sample in clean plastic bags, allowing for equilibration and scanning the headspace with the PID. Decontamination procedures were performed on all soil sampling equipment prior to and between each sample acquisition.

2.2 Soil Sample Acquisition:

During the installation of the soil borings, PES obtained soil samples representative of affected soils and/or soils located at the water table interface. Select soil samples, which were discretely collected from the core samples, were secured in laboratory-supplied glassware, placed on ice and submitted via chain-of-custody protocol to Adirondack Environmental Services, Inc. to be analyzed under direct contract with the NYSDEC for VOCs via EPA analytical method 8260.

2.3 Monitoring Well Installation:

From June 15 to July 10, 2009, 30 of the 37 soil borings were converted into one (1)-inch diameter, temporary, groundwater-monitoring wells. The monitoring wells (MWs) have been designated as MW-A to MW-AJ (See Attachment A, Figure 5 for relative MW locations). The MWs have been constructed of schedule 40, PVC well screen and casing with flush threaded joints. Each MW was constructed such that the screened interval extends across the observed water table (refer to Attachment B: Boring Logs for well completion details). The annular space around the well screen was filled with #0 silica sand to approximately one (1) foot above the well screen. A bentonite seal was then placed above the sand to prevent the infiltration of surface water. The remaining annular space was filled with clean native material

(based on PID screening) to an elevation equal to the existing grade. The 30 wells were completed with flush-to-grade, bolt down, watertight, traffic-rated road boxes.

2.4 Monitoring and Surveying:

On July 20 and 21, 2009, top of well casing elevations were surveyed to determine groundwater elevation and/or groundwater gradient in the subsurface. All elevation data acquired was relative to USGS Bench Mark 38WSM, 1952 (342' above sea level), which is located adjacent to Trustco Bank at the southwest corner of the intersection of Brandywine Avenue and State Street. Depth to water *(gauging)* and the presence and/or thickness of light or dense non-aqueous phase liquid (LNAPL or DNAPL) was also determined for each data point using a sonic interface probe. The instrument utilized is capable of distinguishing the air/liquid interface to an accuracy of 0.01 feet. Table 1 included in Attachment C summarizes the top of casing elevations, the depth to groundwater and the corresponding groundwater elevation for the July monitoring event. Depth to groundwater data was coupled with the acquired survey data to produce the Groundwater Elevation and Gradient Map included as Attachment A, Figure 5.

2.5 Monitoring Well Sampling:

On July 21 and 22, 2009, groundwater samples were collected from the newly installed and select existing monitoring wells using dedicated, disposable, polyethylene bailers or a peristaltic pump and dedicated, disposable polyethylene tubing. Prior to sampling, each well was developed to promote the collection of a representative groundwater sample. Samples were secured in laboratory-supplied glassware, placed on ice and submitted via chain-of-custody protocol to Adirondack Environmental Services, Inc. to be analyzed under direct contract with the NYSDEC for VOCs via EPA analytical method 8260.

3.0 Geologic/Hydrogeologic Findings:

3.1 Regional Geology:

The investigation area is located within the Hudson Mohawk Lowland Physiographic Province. The overburden soils in the surrounding area have been characterized as Lacustrine Delta, which is composed of generally well sorted, stratified course to fine gravel and sand (Cadwell et al, 1987). The bedrock geology identified in the vicinity of the property is the Austin Glen Formation, which consists of graywacke and shale that is of Middle to Upper Ordovician origin (Fisher et al, 1970).

3.2 Local Geology:

Subsurface soils were investigated by utilizing the soil borings as previously discussed. The depth of overburden exploration reached a maximum of 32-feet below grade. Soils encountered were generally composed of fine to course brown sand underlain by an apparent confining or low permeability layer of dense, dry, gray, silty sand with little clay (see Attachment B for soil boring details). Bedrock was not encountered during the investigation.

3.3 Surface Water:

The nearest surface water body, Iroquois Lake, is located approximately 3,200-feet east relative to the focus area (see Attachment A, Figure 1 for detail).

3.4 Local Hydrogeology:

Groundwater was consistently encountered at approximately nine (9) to thirteen (13) feet below grade during the drilling work. An apparent aquitard or low permeability layer consisting of dry, dense, gray, silt with little clay was evident in most borings at 25 to 32-feet below relative ground surface. The elevation data depicted in Figure 5 indicates that the local groundwater was flowing generally in a south-southwesterly direction at the time of the gauging event, which is consistent with historical data collected by others.

4.0 Laboratory Analytical Testing Results:

4.1 Soil Sampling Results:

As Table 2 in Attachment C indicates, constituents of concern were detected above the laboratory's detection limits in 22 of the 37 submitted soil samples from the respective soil borings. The soil sample collected at boring SB/MW-A contained VOCs at concentrations above the recommended guidance values established in NYSDEC Regulation 6 NYCRR Subpart 375; Unrestricted Use Soil Cleanup Objectives (Part 375). The VOCs detected at this location as well as at SB/MW-AD are indicative of petroleum-related impacts (Toluene, Ethylbenzene, Xylene, Isopropylbenzene, etc.). Soil samples collected from borings/wells SB/MW-Q, -R, -W, -X and -Z contained VOCs that are associated with chlorinated solvents, such as Tetrachloroethene (PCE) and Trichloroethene (TCE).

Methylene Chloride and Acetone were identified in soil samples collected from borings SB-D, -E, -F, -H, -J, -K, -L, -M, -V, -W, -X, -Y, -Z, -AA, -AB, -AD, -AE, -AF and -AK at concentrations ranging from 5 to 18 parts per billion (ppb), which are within the guidance values established in Part 375. No laboratory qualifiers were noted with respect to the detections and the reported concentrations of Methylene Chloride or Acetone, nevertheless, it should be noted that both of these solvents are utilized in the laboratory and have at times been identified as laboratory artifacts in the reporting of similar VOC results.

Concentrations of chlorinated VOCs and petroleum-related VOCs in subsurface soils have been presented in Attachment A, Figures 3 and 4 respectively. A copy of the laboratory's analytical report for the submitted soil samples has been included in Attachment D.

4.2 Groundwater Sampling Results:

As Table 3 in Attachment C indicates, constituents of concern were detected above the standards established in the NYSDEC - *Division of Water Resources, Classes, and Quality Standards for Groundwater*, Chapter 10 of Title 6, Article 2, Part 703.5 in 17 of the 34 sampled monitoring wells. Petroleum–related VOCs were detected in Monitoring wells MW-A, -K, -N, -O, -AB, -AD, and -9. Groundwater samples collected from monitoring wells MW-Q, -R, -S, -W, -X, -Z, -AB, -AH, -AJ and -AK contained VOCs that are associated with chlorinated solvents; specifically PCE, TCE, and cis-1,2-Dichloroethene (DCE).

Methylene Chloride was identified in the groundwater sample collected from monitoring well MW-S, however the result was flagged and qualified by the laboratory as this particular compound was also identified in the their corresponding method blank.

The total distribution of chlorinated solvent VOCs within the groundwater for the July 2009 sampling event is depicted in Attachment A, Figure 6. Petroleum related VOC distribution has been depicted in Figure 7. The analytical reports for the submitted groundwater samples have been included in Attachment D.

5.0 Conclusions:

As directed and as approved by the NYSDEC, 37 soil borings and 30 temporary groundwater-monitoring wells were installed to varying depths to further investigate the subsurface and delineate the previously documented VOC impacts. Soil screening and sampling took place during boring installation procedures. Elevated PID levels were observed during soil screening procedures at several soil boring locations. Select soil samples were submitted for laboratory analysis. The results of the soil boring installation procedures and soil sampling indicate that chlorinated solvent and petroleum related VOCs remain at the focus area and adjacent properties.

Subsequent to their installation, newly installed groundwater monitoring wells were gauged and sampled. The results of the well monitoring event indicate that the water table resides at approximately 10 to 15-feet beneath grade and that the general flow is to the south-southwest. Data collected during the installation of the soil borings (as presented in the boring logs included in Attachment B) suggests that an aquitard or layer of low permeability exists beneath the shallow aquifer identified at an approximate depth of 24 to 32-feet below relative ground surface.

Laboratory analytical results from groundwater samples collected from newly installed and select existing groundwater monitoring wells indicate that significant dissolved phase petroleum-related VOCs remain within the groundwater regime at and in the vicinity of monitoring well MW-A (see Figure 7 for detail). This particular well is located immediately down-gradient of a previously identified source and petroleum spill associated with USTs, piping and/or dispensing equipment that is currently or formerly located to the north of State Street at 14 North Brandywine Avenue. Findings by others indicate that this location was previously utilized as a gasoline service station and later an automobile repair/muffler shop. Based on empirical data obtained in the field, results of soil and groundwater sampling and analysis and PESs review of previous investigation reports and data collected by others, PES believes that this suspect location is the most likely source for the documented petroleum impacts found at MW-A.

The source for the petroleum-related impacts detected at well MW-9 are most likely related to the documented petroleum spill (NYSDEC Spill no.: 9112016) associated with Stewart's Shops #182 that is located immediately up-gradient at 100 Brandywine Avenue. No identifiable source was evident to PES to explain the occurrence of Toluene in groundwater at monitoring wells MW-K, -O and –N, located east of the focus area along Kelton Avenue, however a complete environmental review of adjacent properties was not completed as part of this investigation.

Soil and groundwater sample results from borings and monitoring wells installed immediately adjacent to and down gradient of the two previously identified, suspect source properties for the chlorinated solvent impacts at the focus area provide further indication that these two properties are the source for the observed impacts. As depicted on the Attached Figure 6, two distinct chlorinated solvent (PCE, TCE and DCE) plumes have been identified immediately down gradient of property previously identified as Marlou's Formal Wear (#14 Brandywine Avenue) and existing property occupied by Mid Towne Laundry (#1124 State Street), both of which historically performed dry cleaning services on their respective premises. Due to the volatile nature of these particular chlorinated solvents, their ability to vaporize and affect the quality of soil gas and the local lithology, which consists predominately of well sorted and what is likely highly

permeable fine to course sand, PES believes there is a high risk for vapor intrusion to occur at locations within and adjacent to the two documented chlorinated solvent plumes.

6.0 Recommendations:

Based on the results of the recently completed investigative work, conclusions stated herein and historical data reviewed, PES recommends the following:

1. Installation of additional groundwater monitoring wells located down-gradient of the two documented chlorinated solvent plumes. Currently, the full extent of impacts are unknown and additional assessment will be needed to complete delineation of the plumes and to allow for additional, comprehensive plume monitoring.

2. Soil gas samples were not collected by PES as part of this investigation. Thus, current data does not exist to determine if soil vapor intrusion is occurring within structures located above or adjacent to the solvent plumes. PES therefore recommends that a soil vapor intrusion study be completed at the focus area and perceived down-gradient, affected properties. Specifically, PES recommends installing exterior soil gas collection points and performing structure sampling (indoor and subslab air samples) at properties located within and immediately adjacent to the plumes as identified on Attached Figure 6.

3. Installation of additional groundwater monitoring wells to provide for further delineation and assessment of petroleum impacts documented at SB/MW-A and -AD. Given the current lack of data available with respect to these impacts, it is not possible to determine if pursuing remediation of the documented contaminants is feasible or necessary. Consideration should be given to the handling of affected soils should subsurface utility or other excavation work ensue in this area and/or beneath State Street.

4. Additional investigative work, including the installation of soil borings and groundwater monitoring wells will be necessary to further define and identify the source of the Toluene impacts observed in groundwater samples collected from monitoring wells MW-K, -N and -O.

5. At a minimum, PES recommends performing quarterly groundwater monitoring to track trends and contaminant fluctuations over time as well as natural attenuation. Inclusion of all wells should be considered for the initial year of monitoring to establish accurate baseline data and to monitor water quality at locations where historical data collected has suggested impacts exist, such as wells currently located to the north of State Street adjacent to McClellen Street.

7.0 Disclaimer:

Any statement or opinion contained in this Report prepared by Precision Environmental Services, Inc. (PES) shall not be construed to create any warranty or representation that the real or personal property on which the investigation was conducted is free of pollution or complies with any or all applicable regulatory or statutory requirements, or that the property is fit for any particular purpose. Unless otherwise indicated in this Report, PES did not independently determine the compliance of present or past owners of the site with federal, state or local laws and regulations. The conclusions presented in this Report were based upon the services described, within the time and budgetary constraints imposed by the client, and not on scientific tasks or procedures beyond the scope of those described services. PES shall not be responsible for conditions or consequences arising from any facts that were concealed, withheld or not fully disclosed by any person at the time the evaluation was performed.

Any person or entity considering the acquisition, use or other involvement or activity concerning the property that is the subject of this Report shall be solely responsible for determining the adequacy of the property for any and all such purposes. The person or entity should enter into any such acquisition or use relying solely on its own judgment and personal investigation of the property, and not upon reliance of any representation by PES regarding the property or the character, quality or value thereof.

Should you have any questions regarding the above report, please feel free to contact the undersigned at 518-885-4399.

Sincerely;
PRECISION ENVIRONMENTAL SERVICES, INC.

Stephen M. Phelps
Project Manager

Daniel R. Nierenberg
Geologist

Enclosures:
- Attachment A: Figures 1-7
- Attachment B: Boring Logs
- Attachment C: Summary Tables 1-5
- Attachment D: Laboratory Analytical Reports

Attachment A:
Figures

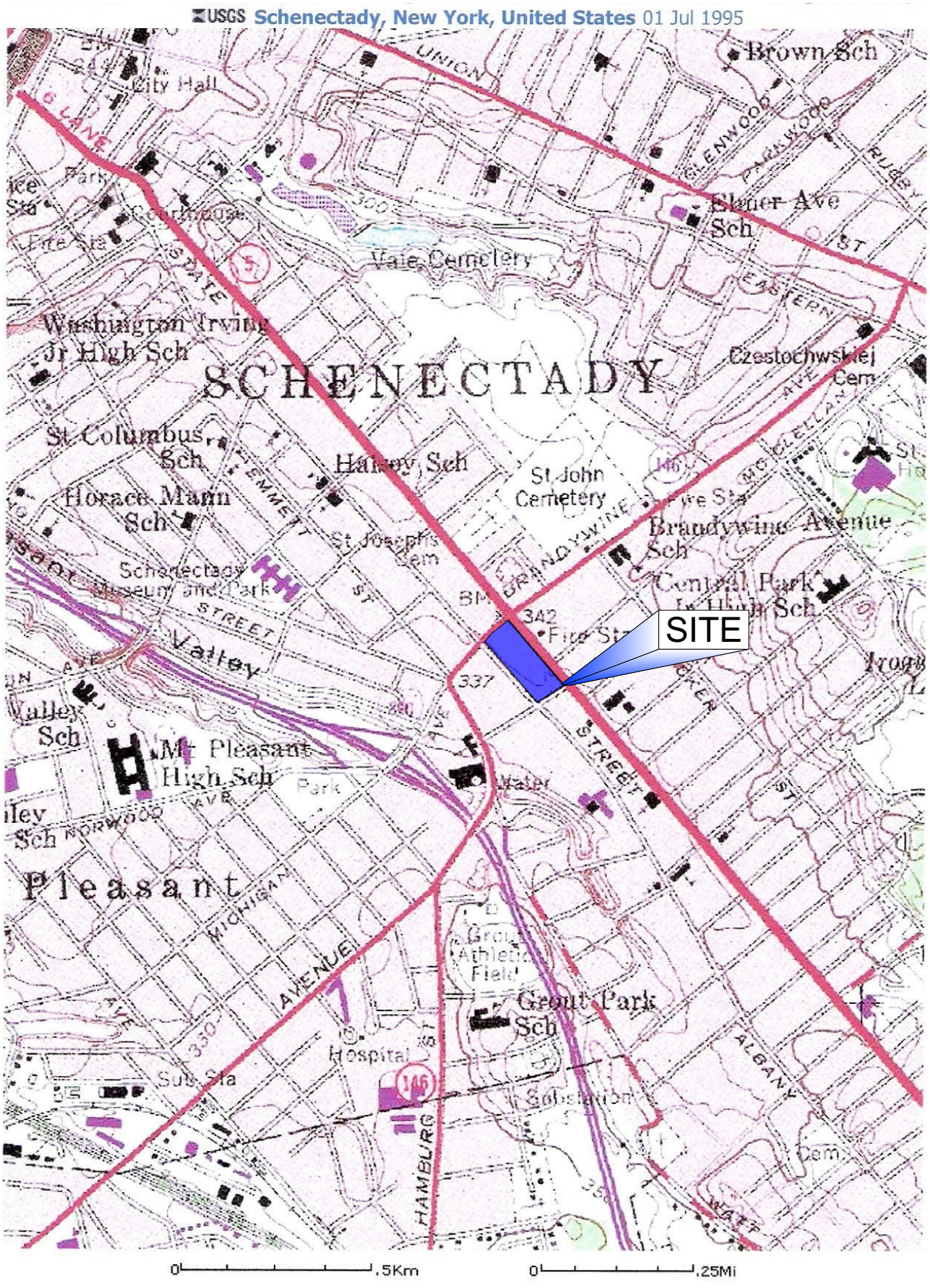

IMAGE COURTESY OF THE U.S. GEOLOGICAL SURVEY

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CERTIFIED WBE

BRANDYWINE AVENUE
PLUME TRACK DOWN
SITE LOCATION DETAIL

Location: Brandywine & Albany Ave.'s & State St., Schenectady, NY

Project No.: NYSDEC Spill No.: 9706794 | **Scale:** As Shown

Date: November 17, 2009 | **Figure:** 1

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CERTIFIED WOMEN-OWNED BUSINESS ENTERPRISE

SITE PLAN

BRANDYWINE AVE. PLUME TRACK DOWN

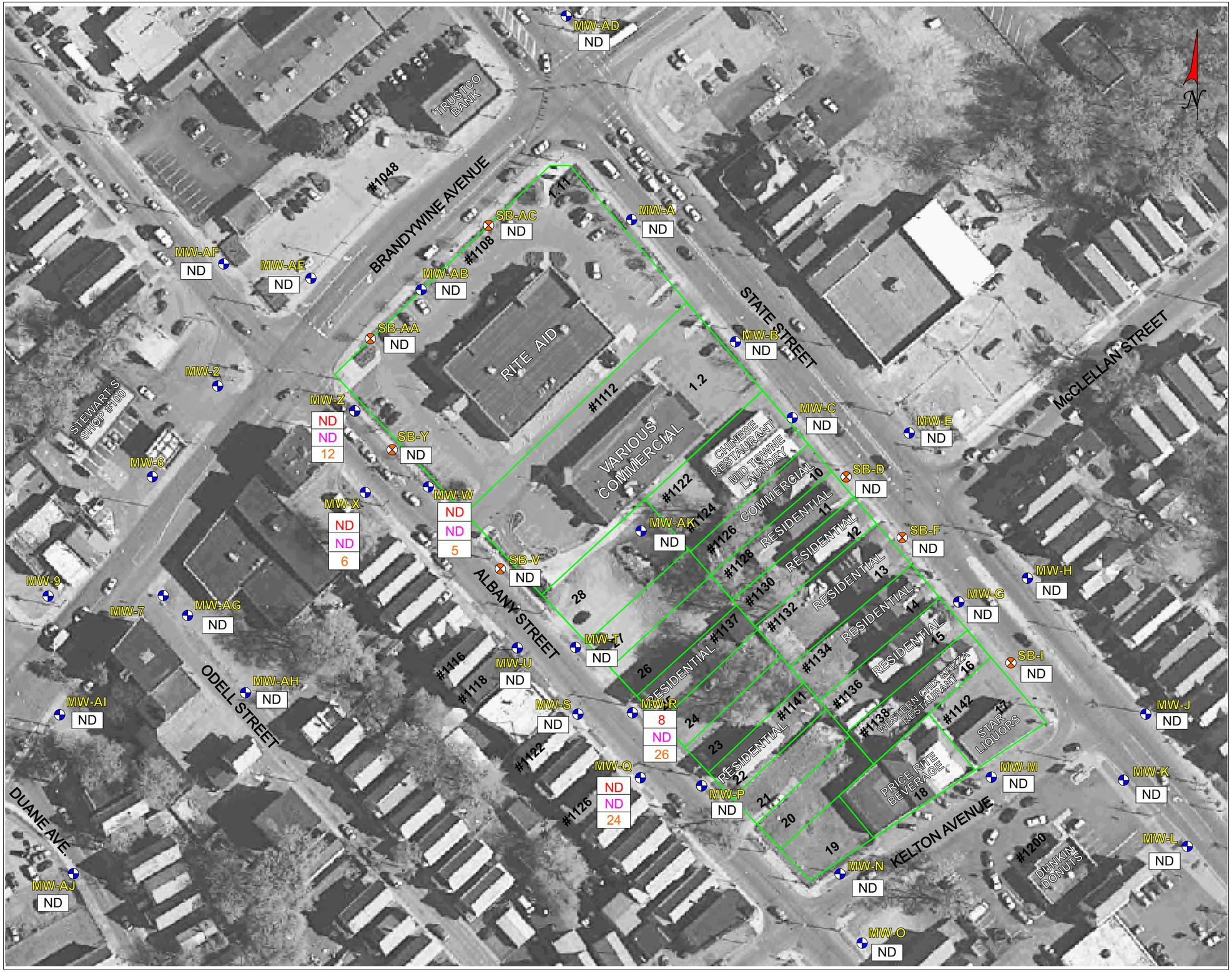
PROJECT #: NYSDEC SITE NO.: 4-47-040	
LOCATION: SCHENECTADY, NY	
DATE: NOVEMBER 2009	**REVISED BY:** SMP
FIGURE: 2	**SCALE:** NTS

LEGEND

- GROUNDWATER MONITORING WELL
- SITE BOUNDARY
- APPROXIMATE LOT BOUNDARY

NOTES:

- 2007 AERIAL IMAGERY PROVIDED COURTESY OF NEW YORK STATE GIS CLEARING HOUSE
- TAX MAP PROVIDED BY SCHENECTADY COUNTY REAL PROPERTY



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CERTIFIED WOMEN-OWNED BUSINESS ENTERPRISE

SUBSURFACE SOIL CHLORINATED VOC CONCENTRATIONS

BRANDYWINE AVE. PLUME TRACK DOWN

PROJECT #: NYSDEC SITE NO.: 4-47-040	
LOCATION: SCHENECTADY, NY	
DATE: NOVEMBER 2009	**REVISED BY:** SMP
FIGURE: 3	**SCALE:** NTS

LEGEND

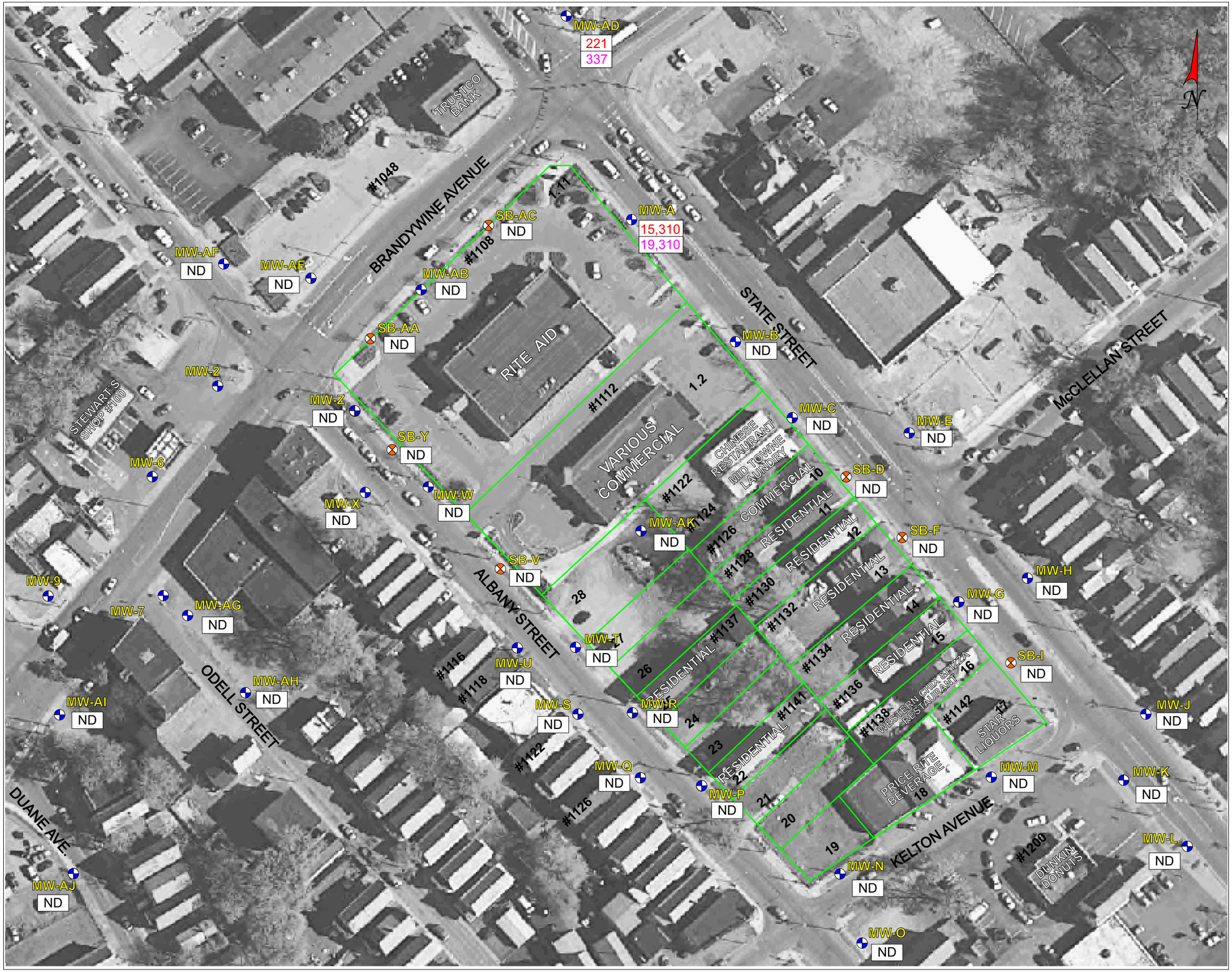
- GROUNDWATER MONITORING WELL
- SOIL BORING
- APPROXIMATE LOT BOUNDARY

TCE	TRICHLOROETHENE
DCE	1,1-DICHLOROETHENE TRANS-1,2-DICHLOROETHENE CIS-1,2-DICHLOROETHENE
PCE	TETRACHLOROETHENE

ND NON DETECT

NOTES:

- ALL CONCENTRATION REPORTED IN PARTS PER BILLION (ppb)
- 2007 AERIAL IMAGERY PROVIDED COURTESY OF NEW YORK STATE GIS CLEARING HOUSE
- TAX MAP PROVIDED BY SCHENECTADY COUNTY REAL PROPERTY



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CERTIFIED WOMEN-OWNED BUSINESS ENTERPRISE

SUBSURFACE SOIL PETROLEUM RELATED VOC CONCENTRATIONS

BRANDYWINE AVE. PLUME TRACK DOWN

PROJECT #: NYSDEC SITE NO.: 4-47-040

LOCATION: SCHENECTADY, NY

DATE: NOVEMBER 2009	**REVISED BY:** SMP
FIGURE: 4	**SCALE:** NTS

LEGEND

- GROUNDWATER MONITORING WELL
- SOIL BORING
- APPROXIMATE LOT BOUNDARY

BTEX	SUM OF BENZENE, TOLUENE, ETHYLBENZENE AND XYLENE
TVOC	SUM OF TOTAL PETROLEUM RELATED VOCS

ND NON DETECT

NOTES:

- ALL CONCENTRATION REPORTED IN PARTS PER BILLION (ppb)
- 2007 AERIAL IMAGERY PROVIDED COURTESY OF NEW YORK STATE GIS CLEARING HOUSE
- TAX MAP PROVIDED BY SCHENECTADY COUNTY REAL PROPERTY

Attachment B:
Boring Logs

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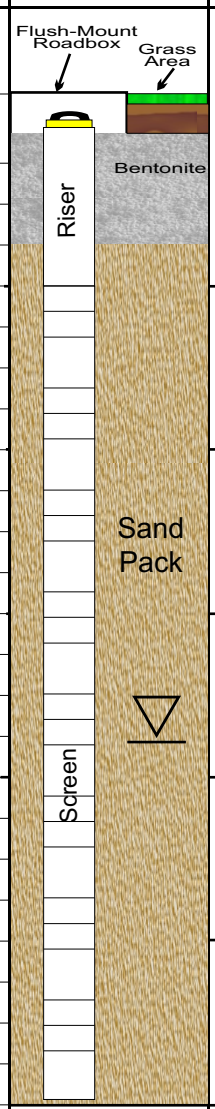
FAX: 518 885-4416

DRILLING LOG

Well/ Boring No.: SB-A/MW-A

Project: Brandywine Plume Delineation
Client: NYSDEC - Region 4
Spill No: 97-06794
Location: Schenectady, NY
Driller: Mike Dudley
Logged by: Dan Nierenberg
Drilling Contractor: PES
Drilling Method: Geoprobe/Direct Push
Date Drilled: 6/18/2009
Date Developed: N/A
TOC Elevation: 341.03'
Total Depth of Hole: 24'
Boring Diameter: 2.25"
Screen Diameter: 1"
Length: 24' - 4'
Slot Size: 0.010
Riser Diameter: 1"
Length: 4' - G
Type: SB/MW
Sand Pack: 24' - 3'
Bentonite Seal: 3' - G
Protective Casing: Road Box

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade)		75% Recov.		750	0-2': GRASS, SANDY LOAM and organics; changing to brown medium/coarse SAND, poorly sorted
1				892	2-4': brown medium/coarse/fine SAND, poorly sorted; changing to brown/orange coarse/medium SAND, well sorted, moist
2		90% Recov.		1,200	4-6': brown/orange medium/coarse SAND, poorly sorted; changing to brown coarse/medium SAND, well sorted, moist
3				1,475	6-8': brown coarse/medium SAND, well sorted, moist
4		90% Recov.		1,050	8-10': brown/orange medium/coarse SAND, poorly sorted (~7"); changing to brown coarse/medium SAND, well sorted, wet
5				1,420	10-12': brown coarse medium SAND, well sorted, wet
6		100% Recov.		1,450	(1' of cave-in, drove core to 20') 12-14': brown to tan/brown coarse SAND, well sorted, wet
7				475 ppm	14-16': brown coarse SAND, well sorted; changing to grey/black coarse/medium SAND, poorly sorted, petro odor, staining, sheen
8		100% Recov.	*	424 ppm	(4' of cave-in, drove core to 20') 16-18': orange/brown coarse SAND, well sorted; changing to black coarse/medium SAND, poorly sorted, saturated, sheen, odor
9				492 ppm	18-20': black coarse/medium SAND, poorly sorted; changing to grey to brown coarse SAND, well sorted, wet, saturated
10		100% Recov.		N/A	(3' of cave-in, drove core to 24' 20-22': same as 17' to 20'
11				4,736	22-24': brown coarse SAND, well sorted, sediment fining with depth
12					
13					**SB-A** COMPLETED AT 24'
14					MONITORING WELL **MW-A** INSTALLED
15					AMBIENT AIR READING = 104 ppb
16					
17					ND = No VOCs Detected By PID analysis
18					* = Sample Submitted for Laboratory Analysis
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					

PRECISION
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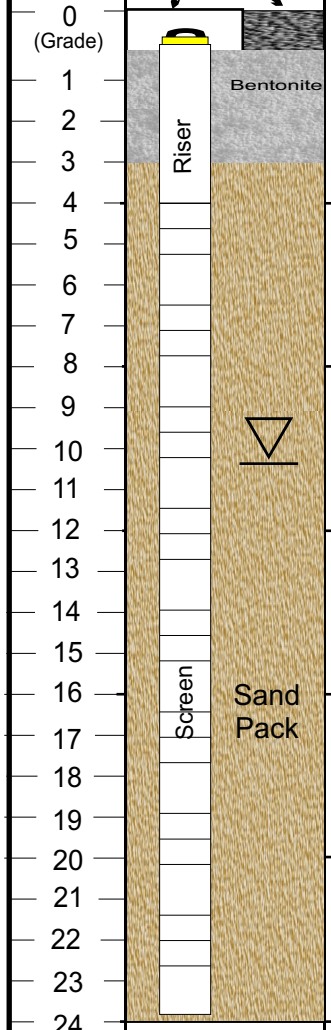
FAX: 518 885-4416

DRILLING LOG

Well/ Boring No.: SB-B/MW-B

Project: Brandywine Plume Delineation
Client: NYSDEC - Region 4
Spill No: 97-06794
Location: Schenectady, NY
Driller: Mike Dudley
Logged by: Dan Nierenberg
Drilling Contractor: PES
Drilling Method: Geoprobe/Direct Push
Date Drilled: 6/15/2009
Date Developed: N/A
TOC Elevation: 340.13'
Total Depth of Hole: 24'
Boring Diameter: 2.25"
Screen Diameter: 1"
Length: 24' - 4'
Slot Size: 0.010
Riser Diameter: 1"
Length: 4' - G
Type: SB/MW
Sand Pack: 24' - 3'
Bentonite Seal: 3' - G
Protective Casing: Road Box

See Site Map



Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppm)	Description / Soil Classification
0-4		50% Recov.		ND	0-2': ASPHALT, brown coarse/medium/fine SAND, poorly sorted; changing to brown/tan medium/coarse SAND, well sorted, moist
				ND	2-4': brown medium/coarse SAND, well sorted, with few fine/medium PEBBLES, moist
4-8		100% Recov.		ND	4-6': brown coarse/medium/fine SAND, poorly sorted, moist, very little SILT
				ND	6-8': brown coarse/medium/fine SAND, poorly sorted, moist; changing to brown medium SAND, well sorted, moist, wet (slight)
8-12		100% Recov.	*	ND	8-10': brown coarse/medium/fine SAND, poorly sorted, with SILT, moist; changing to brown medium SAND, well sorted, wet
				ND	10-12': brown medium SAND, well sorted, wet, moist
12-16		100% Recov.		ND	12-14': brown medium/fine SAND, poorly sorted, with SILT; changing to brown medium/coarse SAND, well sorted, wet, saturated, with few fine PEBBLES
				ND	14-16': brown to dark brown coarse/medium SAND, poorly sorted, with fine PEBBLES, wet, saturated
16-20		100% Recov.		ND	16-18': brown/dark brown coarse SAND, well sorted, wet, saturated
				ND	18-20': brown/dark brown coarse SAND, well sorted, wet, saturated
20-24		100% Recov.		N/A	20-22': lost interval in macrocore
				ND	22-24': grey/brown fine SAND and SILT, dry, mottled
24-29					**SB-B** COMPLETED AT 24' MONITORING WELL **MW-B** INSTALLED

ND = No VOCs Detected By PID analysis

* = Sample Submitted for Laboratory Analysis

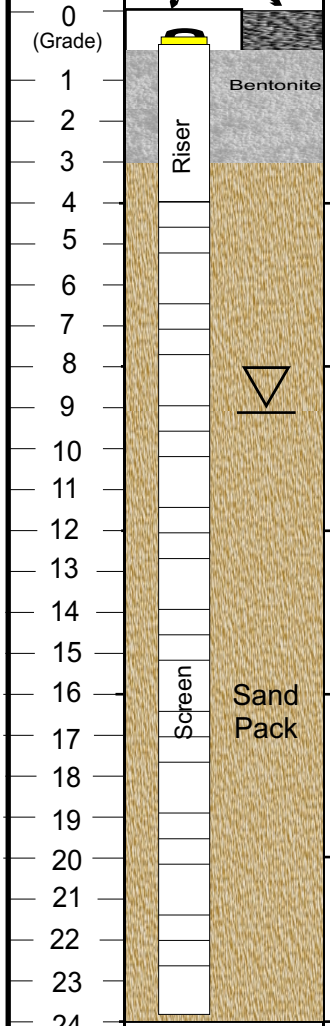
PRECISION
PES Environmental Services, Inc.
Lot 28C, Curtis Industrial Park
831 Route 67
Ballston Spa, NY 12020
TEL: 518 885-4399
FAX: 518 885-4416

DRILLING LOG

Well/ Boring No.: SB-C/MW-C

Project: Brandywine Plume Delineation
Client: NYSDEC - Region 4
Spill No: 97-06794
Location: Schenectady, NY
Driller: Mike Dudley
Logged by: Dan Nierenberg
Drilling Contractor: PES
Drilling Method: Geoprobe/Direct Push
Date Drilled: 6/15/2009
Date Developed: N/A
TOC Elevation: 340.89'
Total Depth of Hole: 24'
Boring Diameter: 2.25"
Screen Diameter: 1"
Length: 24' - 4'
Slot Size: 0.010
Riser Diameter: 1"
Length: 4' - G
Type: SB/MW
Sand Pack: 24' - 3'
Bentonite Seal: 3' - G
Protective Casing: Road Box

See Site Map



Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppm)	Description / Soil Classification
		90% Recov.		ND	0-2': ASPHALT, CRUSHER RUN, coarse/medium tan SAND, well sorted, slightly moist
				ND	2-4': medium/coarse tan SAND, well sorted; changing to tan/brown fine SAND and little SILT @ 4', moist
		100% Recov.		ND	4-6': tan/brown fine SAND and SILT, moist, wet (slight)
				ND	6-8': tan/grey to tan/brown fine SAND and SILT, very little CLAY, moist, wet (slight)
		75% Recov.	*	ND	8-10': brown to brown/red fine SAND with SILT; SILT and CLAY @ 9.5'; changing to coarse/medium red/brown SAND, well sorted, wet
				ND	10-12': red/brown coarse/medium SAND, well sorted, wet; fine GRAVEL and coarse SAND content increasing with depth
		90% Recov.		ND	12-14': dark brown coarse SAND with some fine GRAVEL, well sorted wet, saturated
				ND	14-16': dark brown coarse SAND with some fine GRAVEL, well sorted wet, saturated
		100% Recov.		ND	16-18': dark brown coarse SAND, well sorted, wet, saturated
				ND	18-20': dark brown coarse SAND, well sorted, wet, saturated
		100% Recov.		ND	20-22': brown coarse SAND, well sorted, wet, saturated
				ND	22-24': brown coarse SAND, well sorted, wet, saturated; 23.6' to 24' tan/grey fine SAND and SILT, dry, mottled
					SB-C COMPLETED AT 24' MONITORING WELL **MW-C** INSTALLED

ND = No VOCs Detected By PID analysis
* = Sample Submitted for Laboratory Analysis

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DRILLING LOG

Well/ Boring No.: SB-D

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4

Spill No: 97-06794 Location: Schenectady, NY

Driller: Mike Dudley Logged by: Dan Nierenberg

Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push

Date Drilled: 6/18/2009 Date Developed: N/A

TOC Elevation: - Total Depth of Hole: 24'

Boring Diameter: 2.25" Screen Diameter: N/A Length: N/A

Slot Size: N/A Riser Diameter: N/A Length: N/A

Type: Soil Boring Sand Pack: N/A Bentonite Seal: N/A

Protective Casing: N/A

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade)		75% Recov.		1,539	0-2': ASPHALT, CRUSHER RUN, orange/brown medium/fine SAND, well sorted; changing to brown/tan medium SAND, well sorted
1					
2				3,700	2-4': brown medium SAND, well sorted; changing to brown/grey fine/ medium SAND, poorly sorted, moist
3					
4					
5		90% Recov.		2,740	4-6': brown/tan coarse/medium SAND, poorly sorted; changing to tan fine/medium SAND, with some SILT, moist
6					
7				4,882	6-8': grey/tan fine SAND; changing to tan fine/medium SAND and SILT, wet at 8'
8					
9		75% Recov.		5,524	8-10': grey/tan fine SAND and SILT, wet; changing to grey/tan fine SAND, wet
10	▽				
11				4,592	10-12': grey/tan fine SAND; changing to orange/brown coarse SAND, well sorted, wet
12					
13		75% Recov.		4,617	12-14': brown medium/coarse SAND, well sorted, wet, increasing GRAVEL (medium/fine) with depth
14					
15				4,432	14-16': brown medium/coarse SAND, well sorted, wet; grey/brown medium SAND, well sorted, wet, saturated, petro odor
16					
17		50% Recov.			(1' of cave-in, drove core to 20')
18				N/A	16-18': lost in macrocore
19			*	3,984	18-20': brown medium/coarse SAND, well sorted; changing to medium fine/coarse SAND, well sorted, wet, saturated
20					
21		100% Recov.			(2' of cave-in, drove core to 24')
22				2,903	20-22': grey/tan coarse SAND, well sorted, wet, saturated; changing to grey/tan medium/fine SAND, well sorted, wet, saturated
23				2,342	22-24': grey/tan medium/fine SAND, well sorted, wet, saturated; grey fine SAND and SILT, dry, very little CLAY at 23 to 24'
24					
25					**SB-D** COMPLETED AT 24'
26					**SB-D** backfilled with bentonite and uncontaminated soil
27					AMBIENT AIR READING = 444 ppb
28					
29					ND = No VOCs Detected By PID analysis
					* = Sample Submitted for Laboratory Analysis

PRECISION
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831 Route 67
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DRILLING LOG

Well/ Boring No.: SB-E/MW-E

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4

Spill No: 97-06794 Location: Schenectady, NY

Driller: Mike Dudley Logged by: Dan Nierenberg

Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push

Date Drilled: 6/24/2009 Date Developed: N/A

TOC Elevation: 339.90' Total Depth of Hole: 22'

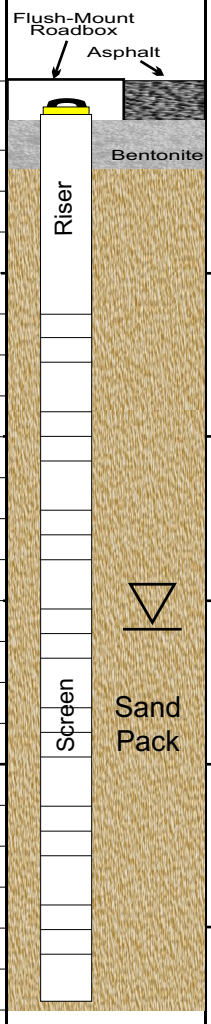
Boring Diameter: 2.25" Screen Diameter: 1" Length: 22' - 5'

Slot Size: 0.010 Riser Diameter: 1" Length: 5' - G

Type: SB/MW Sand Pack: 22' - 2' Bentonite Seal: 2' - G

Protective Casing: Road Box

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade) – 4		50% Recov.		ND 228	0-2': ASPHALT, CRUSHER RUN; changing to brown fine/medium SAND, poorly sorted 2-4': brown fine/medium SAND,poorly sorted; changing to brown fine SAND with some SILT, moist at 4'
5 – 8		50% Recov.	*	304 422	4-6': brown medium/fine SAND, well sorted, moist 6-8': brown coarse/medium SAND, well sorted, moist
9 – 12		75% Recov.		155 ND	8-10': brown coarse/medium SAND, well sorted, moist 10-12': brown medium/coarse SAND, well sorted, moist, wet at 12'
13 – 16		75% Recov.		ND ND	(2' of cave-in, drove core to 20') 12-14': brown coarse/medium SAND, well sorted, wet, saturated 14-16': dark brown medium/coarse SAND, well sorted, wet, saturated
17 – 20		100% Recov.		ND ND	(5' of cave-in, drove core to 20') 16-18': brown medium SAND, well sorted, wet, saturated 18-20': brown coarse SAND, well sorted, wet, saturated
21 – 24		100% Recov.		ND	20-22': tan fine SAND, well sorted, wet, saturated
25 – 29					CORE TUBE FULL AT 22' **SB-E** COMPLETED AT 22' MONITORING WELL **MW-E** INSTALLED AMBIENT AIR READING = 0 ppb

ND = No VOCs Detected By PID analysis

* = Sample Submitted for Laboratory Analysis

PRECISION
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DRILLING LOG

Well/ Boring No.: SB-F

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4

Spill No: 97-06794 Location: Schenectady, NY

Driller: Mike Dudley Logged by: Dan Nierenberg

Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push

Date Drilled: 7/10/2009 Date Developed: N/A

TOC Elevation: - Total Depth of Hole: 24'

Boring Diameter: - Screen Diameter: - Length: -

Slot Size: - Riser Diameter: - Length: -

Type: Soil Boring Sand Pack: - Bentonite Seal: -

Protective Casing: -

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade)		50% Recov.		65	0-2': grass, SANDY LOAM and orgainics; changing to tan/brown medium SAND, well sorted
1					
2				ND	2-4': tan/brown medium SAND, well sorted, moist
3					
4					
5		90% Recov.		ND	4-6': brown medium SAND, well sorted; changing to brown fine SAND and SILT, wet
6					
7				ND	6-8': brown fine SAND, some to little SILT, wet; changing to brown coarse SAND, well sorted, some fine GRAVEL mixed at 8'
8					
9		75% Recov.		ND	8-10': brown coarse SAND, well sorted, moist, wet
10					
11				ND	10-12': brown coarse SAND, well sorted, moist, wet
12					
13	▽	75% Recov.		ND	(1' of cave-in, drove core to 16')
14					12-14': brown medium SAND, well sorted; changing to dark brown coarse/medium SAND, well sorted, wet
15				1,000	14-16': dark brown coarse/medium SANDm wel sorted, wet; changing to brown coarse/medium SAND, well sorted, wet, saturated
16					
17		100% Recov.		837	(3' of cave-in, drove core to 20')
18					16-18': dark brown to brown coarse SAND, well sorted, wet, saturated
19			*	1,963	18-20': brown coarse SAND, well sorted, wet; changing to tan fine SAND, well sorted, wet, saturated
20					
21		100% Recov.		1,508	(4' of cave-in, drove core to 20')
22					20-22': dark brown coarse SAND, well sorted, wet, saturated
23				1,438	22-24': tan fine/medium SAND, well sorted, wet, saturated
24					
25					**SB-H** COMPLETED AT 22'
26					AMBIENT AIR READING = 170 ppb
27					
28					ND = No VOCs Detected By PID analysis
29					* = Sample Submitted for Laboratory Analysis

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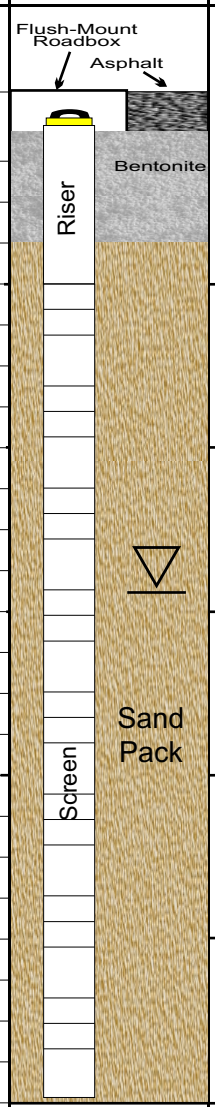
DRILLING LOG

Well/ Boring No.: SB-G/MW-G

Project: Brandywine Plume Delineation
Client: NYSDEC - Region 4
Spill No: 97-06794
Location: Schenectady, NY
Driller: Mike Dudley
Logged by: Dan Nierenberg
Drilling Contractor: PES
Drilling Method: Geoprobe/Direct Push
Date Drilled: 6/19/2009
Date Developed: N/A
TOC Elevation: 339.32'
Total Depth of Hole: 24'
Boring Diameter: 2.25"
Screen Diameter: 1"
Length: 24' - 4'
Slot Size: 0.010
Riser Diameter: 1"
Length: 4' - G
Type: SB/MW
Sand Pack: 24' - 3'
Bentonite Seal: 3' - G
Protective Casing: Road Box

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade) – 4		50% Recov.		40 ppm 13.5 ppm	0-2': ASPHALT, FILL SAND; changing to brown coarse/medium/fine SAND, poorly sorted, wet 2-4': grey/brown coarse/medium/fine SAND, poorly sorted, with medium GRAVEL mixed in; changing to brown/tan fine/medium SAND, well sorted, moist
5 – 8		50% Recov.		10.2 ppm 10.2 ppm	4-6': ASPHALT, brown/grey fine SAND and SILT; changing to fine/ medium SAND, well sorted, moist, wet 6-8': tan fine/medium SAND, well sorted, moist, wet; changing to orange/brown coarse SAND, well sorted, moist, wet at 7'
9 – 12		50% Recov.	*	7,089 10.2 ppm	8-10': tan fine/medium SAND, poorly sorted, with grey/brown fine/ medium sand lenses 10-12': same as above; changing to brown coarse SAND, well sorted, moist, wet
13 – 16		50% Recov.		1,890 968	(1' of cave-in, drove core to 20') 12-14': brown coarse SAND, well sorted, wet, saturated 14-16': brown coarse SAND, well sorted, wet, saturated
17 – 20		100% Recov.		2,198 1,175	(5' of cave-in, drove core to 20') 16-18': brown/orange coarse/medium SAND, well sorted, wet, saturated 18-20': same as above; changing to brown medium/coarse SAND, well sorted, wet, saturated
21 – 24		100% Recov.		720 623	(9' of cave-in, drove core to 24' 20-22': orange/brown coarse SAND, well sorted, saturated; changing to brown medium/coarse SAND, well sorted, wet, saturated 22-24' brown medium/coarse SAND, well sorted, wet, saturated; changing to grey fine SAND, wet, saturated
25 – 29					**SB-G** COMPLETED AT 24' MONITORING WELL **MW-G** INSTALLED AMBIENT AIR READING = 2,699 ppb

ND = No VOCs Detected By PID analysis
* = Sample Submitted for Laboratory Analysis

PRECISION
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831 Route 67
Ballston Spa, NY 12020
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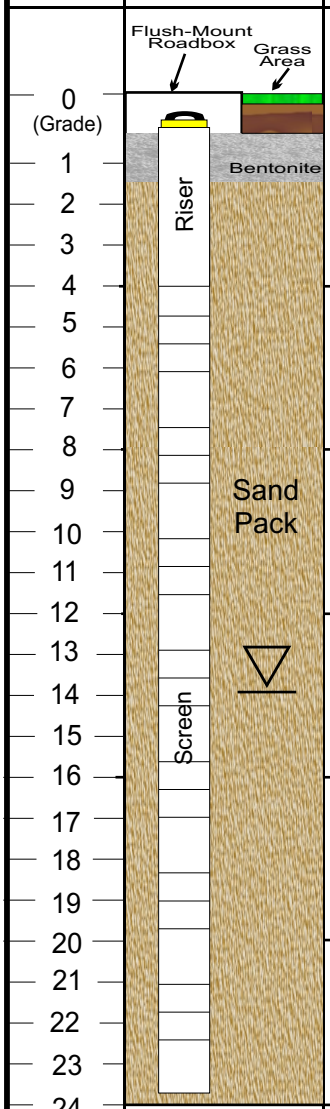
DRILLING LOG

Well/ Boring No.: SB-H/MW-H

Project: Brandywine Plume Delineation
Client: NYSDEC - Region 4
Spill No: 97-06794
Location: Schenectady, NY
Driller: Mike Dudley
Logged by: Dan Nierenberg
Drilling Contractor: PES
Drilling Method: Geoprobe/Direct Push
Date Drilled: 7/10/2009
Date Developed: N/A
TOC Elevation: 341.47'
Total Depth of Hole: 24'
Boring Diameter: 2.25"
Screen Diameter: 1"
Length: 24' - 4'
Slot Size: 0.010
Riser Diameter: 1"
Length: 4' - G
Type: SB/MW
Sand Pack: 24' - 3'
Bentonite Seal: 3' - G
Protective Casing: Road Box

See Site Map



Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
		50% Recov.		149	0-2': grass, dark brown SANDY LOAM; changing to brown medium/ fine SAND, poorly sorted, moist
				161	2-4': brown medium/fine SAND, poorly sorted, moist; changing to brown medium SAND, well sorted
		75% Recov.		1,538	4-6': brown medium SAND, well sorted; changing to brown/grey fine/medium SAND, with some SILT, wet
				877	6-8': brown/grey fine/medium SAND, with some SILT, wet; changing to brown coarse/medium SAND, well sorted, moist
		75% Recov.		1,645	8-10': brown coarse/medium to coarse SAND, well sorted, moist
			*	2,135	10-12': brown coarse SAND, well sorted, moist; changing to brown medium SAND, well sorted, moist
		90% Recov.		1,556	(1' of cave-in, drove core to 16') 12-14': brown medium SAND, well sorted, wet, saturated at 13'
				738	14-16': brown medium SAND, well sorted, wet, saturated; changing to brown fine/medium SAND, well sorted, wet, saturated
		100% Recov.		566	(2' of cave-in, drove core to 20') 16-18': brown medium/fine SAND, poorly sorted, wet, saturated
				2,000	18-20': brown medium/fine SAND, poorly sorted, wet, saturated; changing to coarse SAND with some fine GRAVEL MIX
		100% Recov.		144	(5' of cave-in, drove core to 20') 20-22': brown coarse SAND, well sorted, with fine GRAVEL mixed, wet, saturated
				81	22-24': brown medium/coarse SAND, well sorted, wet, saturated; changing to fine/medium SAND, well sorted, wet, saturated
					SB-H COMPLETED AT 22' MONITORING WELL **MW-H** INSTALLED AMBIENT AIR READING = 12 ppb

ND = No VOCs Detected By PID analysis
* = Sample Submitted for Laboratory Analysis

PRECISION
PES Environmental Services, Inc.
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831 Route 67
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DRILLING LOG

Well/ Boring No.: SB-I

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4

Spill No: 97-06794 Location: Schenectady, NY

Driller: Mike Dudley Logged by: Dan Nierenberg

Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push

Date Drilled: 6/19/2009 Date Developed: N/A

TOC Elevation: - Total Depth of Hole: 24'

Boring Diameter: 2.25" Screen Diameter: N/A Length: N/A

Slot Size: N/A Riser Diameter: N/A Length: N/A

Type: Soil Boring Sand Pack: N/A Bentonite Seal: N/A

Protective Casing: N/A

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade)		75% Recov.		780	0-2': ASPHALT; changing to tan fine SAND, with increasing SILT content with depth, moist
1					
2				1,900	2-4': tan fine SAND, with some SILT, moist
3					
4					
5		75% Recov.		1,961	4-6': tan fine SAND, with some SILT, moist
6					
7			*	1,594	6-8': tan fine SAND, with some SILT; changing to tan medium/coarse SAND, well sorted, moist, increasing SILT content with depth
8					
9	▽	100% Recov.		973	8-10': tan fine SAND, with some SILT; changing to grey/tan fine SAND, wet, saturated
10					
11				634	10-12': tan fine/medium SAND, well sorted, wet, saturated; changing to orange/brown coarse/medium SAND, well sorted, saturated
12					
13		100% Recov.			(2' of cave-in, drove core to 20')
14				722	12-14': tan/brown fine/medium SAND, well sorted, wet, saturated
15				392	14-16': orange/brown coarse/medium SAND, well sorted, wet, saturated
16					
17		100% Recov.			(1' of cave-in, drove core to 20')
18				771	16-18': lost in macrocore
19				372	18-20': brown medium/coarse SAND, well sorted; changing to medium fine/coarse SAND, well sorted, wet, saturated
20					
21		100% Recov.			(6' of cave-in, drove core to 24')
22				N/A	20-22': tan/grey fine SAND, wet, saturated; changing to brown coarse SAND, well sorted, wet, saturated
23				405	22-24': brown coarse SAND, well sorted, wet, saturated; changing to grey fine SAND, wet, moist
24					
25					**SB-I** COMPLETED AT 24'
26					**SB-I** backfilled with bentonite and uncontaminated soil
27					AMBIENT AIR READING = 256 ppb
28					
29					ND = No VOCs Detected By PID analysis * = Sample Submitted for Laboratory Analysis

PRECISION
PES Environmental Services, Inc.
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DRILLING LOG

Well/ Boring No.: SB-J/MW-J

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4

Spill No: 97-06794 Location: Schenectady, NY

Driller: Mike Dudley Logged by: Dan Nierenberg

Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push

Date Drilled: 6/24/2009 Date Developed: N/A

TOC Elevation: 339.16' Total Depth of Hole: 20'

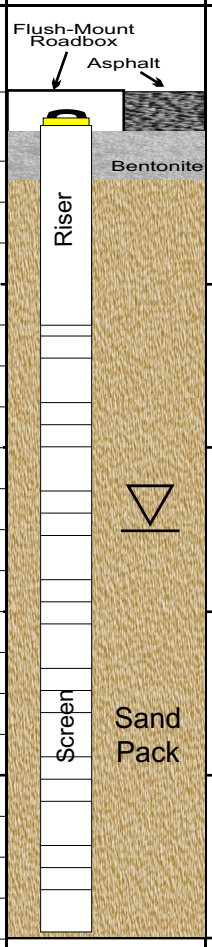
Boring Diameter: 2.25" Screen Diameter: 1" Length: 20' - 5'

Slot Size: 0.010 Riser Diameter: 1" Length: 5' - G

Type: SB/MW Sand Pack: 20' - 2' Bentonite Seal: 2' - G

Protective Casing: Road Box

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade)		50% Recov.		113	0-2': ASPHALT; changing to brown/tan fine SAND and SILT, dry
1				194	2-4': tan/brown fine SAND and SILT; changing to brown medium SAND, well sorted
2					
3					
4					
5		50% Recov.	*	296	4-6': brown coarse/medium SAND, well sorted, moist
6				280	6-8': brown coarse/medium SAND, well sorted, moist
7					
8					
9		50% Recov.		171	8-10': brown medium/coarse SAND, well sorted, moist
10				228	10-12': brown medium/coarse SAND, well sorted, moist, wet
11					
12					
13		100% Recov.			(1' of cave-in, drove core to 20')
14				208	12-14': brown medium/fine SAND, poorly sorted, moist; changing to brown coarse SAND, well sorted, wet, saturated at 13'
15				155	14-16': brown coarse SAND, well sorted, wet, saturated
16					
17		100% Recov.			(6' of cave-in, drove core to 20')
18				80	16-18': brown medium/coarse SAND, well sorted, wet, saturated
19				21	18-20': brown coarse SAND, well sorted, wet, saturated
20					
21					**SB-J** COMPLETED AT 22'
22					MONITORING WELL **MW-J** INSTALLED
23					AMBIENT AIR READING = 0 ppb
24					
25					
26					
27					
28					
29					

ND = No VOCs Detected By PID analysis

* = Sample Submitted for Laboratory Analysis

PRECISION
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DRILLING LOG

Well/ Boring No.: SB-K/MW-K

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4

Spill No: 97-06794 Location: Schenectady, NY

Driller: Mike Dudley Logged by: Dan Nierenberg

Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push

Date Drilled: 6/23/2009 Date Developed: N/A

TOC Elevation: 339.13' Total Depth of Hole: 22'

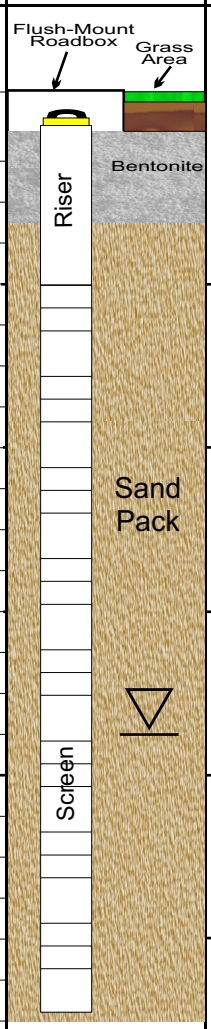
Boring Diameter: 2.25" Screen Diameter: 1" Length: 22' - 2'

Slot Size: 0.010 Riser Diameter: 1" Length: 2' - G

Type: SB/MW Sand Pack: 22' - 1' Bentonite Seal: 1' - G

Protective Casing: Road Box

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade) – 4		50% Recov.		ND ND	0-2': ASPHALT, CRUSHER RUN; changing to brown/tan coarse/ medium SAND, poorly sorted, wet 2-4': tan/brown fine/medium SAND, poorly sorted, wet, moist; changing to brown medium/coarse SAND, well sorted, moist
5 – 8		50% Recov.		ND 48	4-6': tan/brown fine/medium SAND, well sorted; changing to brown coarse/medium SAND, well sorted, moist 6-8': brown coarse/medium SAND, well sorted, moist
9 – 12		75% Recov.	*	58 58	8-10': brown medium/coarse SAND, poorly sorted; changing to brown medium SAND, well sorted, moist 10-12': brown medium/coarse SAND, well sorted, moist
13 – 16		90% Recov.		1 5	12-14': brown medium SAND, well sorted, moist 14-16': brown medium/fine SAND, well sorted, wet, saturated, with increasing sediment size with depth (medium/coarse)
17 – 20		90% Recov.		ND ND	(1' of cave-in, drove core to 20') 16-18': brown medium/fine SAND, well sorted, wet, saturated 18-20': brown medium/fine SAND, well sorted; changing to brown coarse SAND, well sorted,wetm, saturated
21 – 24		100% Recov.		ND ND	(6' of cave-in, drove core to 24') 20-21': brown medium/coarse SAND, well sorted, wet, saturated 21-22': brown coarse SAND, well sorted; changing to tan fine SAND, no SILT
25 – 29					**SB-K** COMPLETED AT 22' CORE TUBE FULL AT 22' MONITORING WELL **MW-K** INSTALLED AMBIENT AIR READING = 0 ppb ND = No VOCs Detected By PID analysis * = Sample Submitted for Laboratory Analysis

PRECISION
PES Environmental Services, Inc.
Lot 28C, Curtis Industrial Park
831 Route 67
Ballston Spa, NY 12020
TEL: 518 885-4399
FAX: 518 885-4416

DRILLING LOG

Well/ Boring No.: SB-L/MW-L

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4

Spill No: 97-06794 Location: Schenectady, NY

Driller: Mike Dudley Logged by: Dan Nierenberg

Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push

Date Drilled: 6/24/2009 Date Developed: N/A

TOC Elevation: 338.39' Total Depth of Hole: 22'

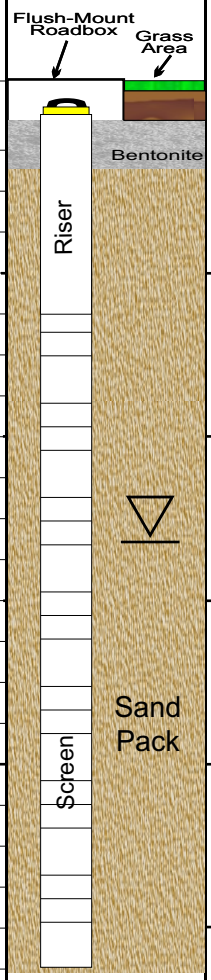
Boring Diameter: 2.25" Screen Diameter: 1" Length: 21' - 5'

Slot Size: 0.010 Riser Diameter: 1" Length: 5' - G

Type: SB/MW Sand Pack: 21' - 2' Bentonite Seal: 2' - G

Protective Casing: Road Box

See Site Map



Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade) – 4	Flush-Mount Roadbox; Grass Area; Bentonite; Riser	50% Recov.		ND	0-2': brown SANDY LOAM and few organics; changing to brown coarse/medium SAND, well sorted
				ND	2-4': brown coarse/medium SAND, well sorted; changing to brown medium/coarse SAND, poorly sorted, moist
5 – 8		50% Recov.	*	42	4-6': brown medium/coarse/fine SAND, poorly sorted; changing to brown medium/coarse SAND, well sorted, moist
				16	6-8': brown coarse/medium SAND, well sorted, moist
9 – 12	▽	75% Recov.		ND	8-10': brown medium/coarse SAND, well sorted, moist
				ND	10-12': brown medium SAND, well sorted, wet; changing to brown medium/fine SAND, well sorted, wet, saturated
13 – 16	Sand Pack; Screen	100% Recov.			(3' of cave-in, drove core to 20')
				11	12-14': brown medium/coarse SAND, well sorted, wet, saturated
				ND	14-16': brown medium/coarse SAND, well sorted; changing to brown fine/medium SAND, well sorted, wet, saturated
17 – 20		100% Recov.			(7' of cave-in, drove core to 20')
				ND	16-18': brown medium SAND, well sorted, wet, saturated
				ND	18-20': dark brown to brown coarse SAND, well sorted, wet, saturated; changing to tan/brown fine SAND at 19.5' to 20'
21 – 24		100% Recov.			(7' of cave-in, drove core to 21')
				ND	20-21': tan fine SAND, well sorted, wet, saturated
25 – 29					CORE TUBE FULL AT 21' **SB-L** COMPLETED AT 22' MONITORING WELL **MW-L** INSTALLED AMBIENT AIR READING = 0 ppb

ND = No VOCs Detected By PID analysis

* = Sample Submitted for Laboratory Analysis

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DRILLING LOG

Well/ Boring No.: SB-M/MW-M

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4
Spill No: 97-06794 Location: Schenectady, NY
Driller: Mike Dudley Logged by: Dan Nierenberg
Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push
Date Drilled: 6/19/2009 Date Developed: N/A
TOC Elevation: 339.32' Total Depth of Hole: 22'
Boring Diameter: 2.25" Screen Diameter: 1" Length: 22' - 2'
Slot Size: 0.010 Riser Diameter: 1" Length: 2' - G
Type: SB/MW Sand Pack: 22' - 1' Bentonite Seal: 1' - G
Protective Casing: Road Box

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade) – 4	Flush-Mount Roadbox; Asphalt; Riser; Bentonite	75% Recov.		ND ND	0-2': ASPHALT, CRUSHER RUN; changing to brown coarse/medium/ fine SAND, poorly sorted, with GRAVEL/PEBBLES mixed, dry 2-4': brown fine SAND, with little SILT, moist
5 – 8		50% Recov.	*	19 191	4-6': brown coarse SAND, well sorted, dry 6-8': brown coarse SAND, well sorted, dry
9 – 12		75% Recov.		63 ND	8-10': tan/brown fine SAND; changing to dark brown coarse SAND, well sorted, moist; changing to tan coarse/medium SAND, well well sorted, moist 10-12': tan/brown coarse/medium SAND, well sorted, moist
13 – 16	Sand Pack; Screen	75% Recov.		ND 5	12-14': brown coarse/medium SAND, poorly sorted, moist; changing to brown/orange coarse SAND, well sorted, wet, saturated 14-16': orange/brown coarse SAND, well sorted, wet, saturated; changing to brown coarse SAND, well sorted, saturated
17 – 20		100% Recov.		ND 36	(4' of cave-in, drove core to 20') 16-18': brown coarse/medium SAND, poorly sorted, wet, saturated 18-20': brown medium/coarse SAND, well sorted, wet, saturated
21 – 24		100% Recov.		ND ND	(9' of cave-in, drove core to 22') 20-21': orange/brown coarse SAND, well sorted, wet, saturated; changing to brown medium/coarse SAND, wet, saturated 21-22': grey/brown fine/medium SAND, well sorted, wet, saturated; changing to grey fine SAND, wet
25 – 29					CORE TUBE FULL AT 22' **SB-M** COMPLETED AT 22' MONITORING WELL **MW-M** INSTALLED AMBIENT AIR READING = 0 ppb

ND = No VOCs Detected By PID analysis
* = Sample Submitted for Laboratory Analysis

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DRILLING LOG

Well/ Boring No.: SB-N/MW-N

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4

Spill No: 97-06794 Location: Schenectady, NY

Driller: Mike Dudley Logged by: Dan Nierenberg

Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push

Date Drilled: 6/22/2009 Date Developed: N/A

TOC Elevation: 337.71' Total Depth of Hole: 22'

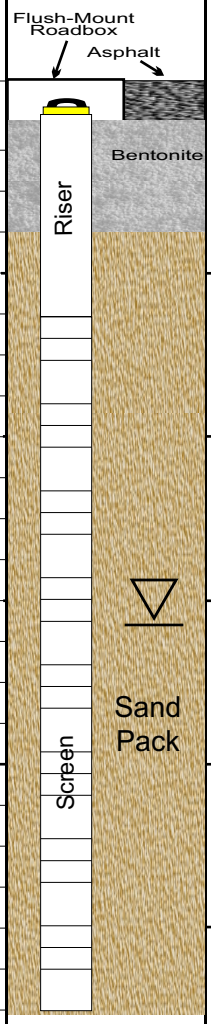
Boring Diameter: 2.25" Screen Diameter: 1" Length: 22' - 5'

Slot Size: 0.010 Riser Diameter: 1" Length: 5' - G

Type: SB/MW Sand Pack: 22' - 3' Bentonite Seal: 3' - G

Protective Casing: Road Box

See Site Map



Depth (ft.)	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade) – 4	75% Recov.		ND	0-2': ASPHALT; changing to brown coarse/medium/fine SAND, poorly sorted, dry
			ND	2-4': brown medium/coarse/fine SAND, poorly sorted, dry
5 – 8	50% Recov.	*	19	4-6': brown medium/coarse/fine, poorly sorted, dry
			191	6-8': brown coarse/medium SAND, well sorted; changing to dark brown, moist at depth
9 – 12	75% Recov.		63	8-10': brown/tan medium/coarse/fine SAND; changing to dark brown coarse/medium SAND, well sorted, moist
			ND	10-12': dark brown to brown coarse/medium SAND, well sorted, moist
13 – 16	75% Recov.			(1' of cave-in, drove core to 20')
			ND	12-14': brown/tan medium/coarse/fine SAND; changing to brown to dark brown coarse SAND, well sorted, wet, saturated
			5	14-16': dark brown coarse SAND, well sorted, wet, saturated
17 – 20	100% Recov.			(4' of cave-in, drove core to 20')
			ND	16-18': dark brown coarse SAND, well sorted, wet, saturated
			36	18-20': dark brown coarse SAND, well sorted, wet, saturated; changing to tan fine/medium SAND, well sorted, wet
21 – 24	100% Recov.			(6' of cave-in, drove core to 22')
			N/A	20-21': brown coarse SAND, well sorted, wet, saturated
			ND	21-22': tan fine/medium SAND, well sorted, wet (mottled)
25 – 29				CORE TUBE FULL AT 22' **SB-M** COMPLETED AT 22' MONITORING WELL **MW-M** INSTALLED AMBIENT AIR READING = 0 ppb

ND = No VOCs Detected By PID analysis

* = Sample Submitted for Laboratory Analysis

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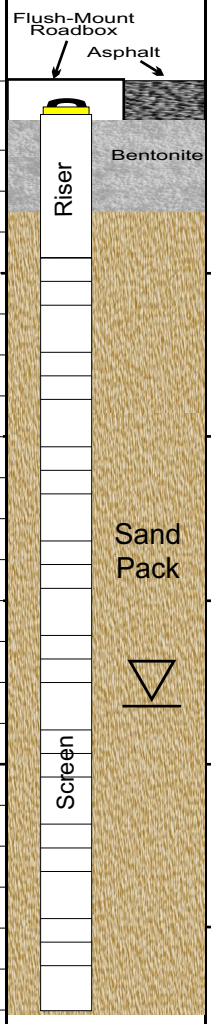
DRILLING LOG

Well/ Boring No.: SB-O/MW-O

Project: Brandywine Plume Delineation
Client: NYSDEC - Region 4
Spill No: 97-06794
Location: Schenectady, NY
Driller: Mike Dudley
Logged by: Dan Nierenberg
Drilling Contractor: PES
Drilling Method: Geoprobe/Direct Push
Date Drilled: 6/22/2009
Date Developed: N/A
TOC Elevation: 337.40
Total Depth of Hole: 22'
Boring Diameter: 2.25"
Screen Diameter: 1"
Length: 23' - 3'
Slot Size: 0.010
Riser Diameter: 1"
Length: 3' - G
Type: SB/MW
Sand Pack: 22' - 2'
Bentonite Seal: 2' - G
Protective Casing: Road Box

See Site Map



Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
		90% Recov.		474	0-2': ASPHALT, CRUSHER RUN; changing to dark brown fine/ medium SAND,poorly sorted; changing to brown/orange medium/ coarse SAND, well sorted
				1,050	2-4': dark brown medium SAND, well sorted
		100% Recov.		2,604	4-6': brown/orange medium/coarse SAND, well sorted; changing to brown/orange medium SAND, well sorted, moist
			*	3,157	6-8': brown/orange to brown medium SAND, well sorted, moist
		75% Recov.		1,922	8-10': brown medium SAND, well sorted, moist; changing to brown to dark brown coarse SAND, well sorted, moist
				1,580	10-12': brown coarse SAND, well sorted, moist
		90% Recov.		410	12-14': dark brown coarse SAND, well sorted, wet, saturated; changing to brown medium/coarse SAND, poorly sorted, wet, saturated
				198	14-16': dark brown coarse SAND, well sorted, wet, saturated
		100% Recov.			(4' of cave-in, drove core to 20')
				8	16-18': dark brown coarse SAND, well sorted, wet, saturated
				73	18-20': dark brown coarse SAND, well sorted, wet, saturated; changing to tan fine/medium SAND, well sorted, wet
		100% Recov.			(6' of cave-in, drove core to 22')
				33	20-21': brown coarse SAND, well sorted, wet, saturated
				ND	21-22': tan fine/medium SAND, well sorted, wet (mottled)
					CORE TUBE FULL AT 22' **SB-M** COMPLETED AT 22' MONITORING WELL **MW-M** INSTALLED AMBIENT AIR READING = 0 ppb

ND = No VOCs Detected By PID analysis

* = Sample Submitted for Laboratory Analysis

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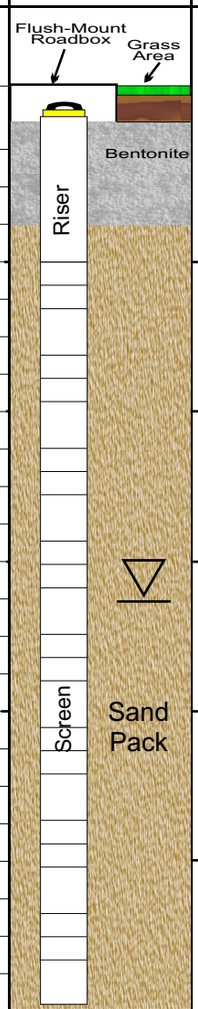
DRILLING LOG

Well/ Boring No.: SB-P/MW-P

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4
Spill No: 97-06794 Location: Schenectady, NY
Driller: Mike Dudley Logged by: Dan Nierenberg
Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push
Date Drilled: 6/16/2009 Date Developed: N/A
TOC Elevation: 338.30' Total Depth of Hole: 28'
Boring Diameter: 2.25" Screen Diameter: 1" Length: 24' - 4'
Slot Size: 0.010 Riser Diameter: 1" Length: 4' - G
Type: SB/MW Sand Pack: 24' - 3' Bentonite Seal: 3' - G
Protective Casing: Road Box

See Site Map



Depth (ft.)	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade)				
1	90% Recov.		172	0-2': grass, black/dark brown SANDY LOAM and organics
2				
3			109	2-4': brown medium/fine/coarse SAND, poorly sorted, with increasing coarse SAND with depth
4				
5	75% Recov.		121	4-6': brown medium/coarse/fine SAND, poorly sorted
6				
7			241	6-8': brown medium/fine/coarse SAND, poorly sorted, moist
8				
9	75% Recov.		180	8-10': brown medium/coarse SAND, well sorted, moist, wet
10				
11			238	10-12': brown coarse/medium SAND, well sorted, moist, wet
12				
13	75% Recov.	*	263	12-14': brown/dark brown coarse/medium SAND, well sorted, wet, saturated
14				
15			201	14-16': brown/dark brown medium/coarse SAND, well sorted, wet saturated; increasing medium/fine SAND with depth
16				
17	100% Recov.		238	16-18': brown coarse SAND, well sorted, wet, saturated
18				
19			128	18-20': brown coarse SAND, well sorted, wet, saturated
20				
21	100% Recov.		191	20-22': brown coarse SAND, well sorted, wet, saturated
22				
23			100	22-24': brown coarse SAND, well sorted, wet, saturated; grey fine/ medium SAND, poorly sorted, wet, saturated @ 24'
24				
25	100% Recov.		120	24-26': brown coarse SAND, well sorted, wet, saturated
26				26-27.5': brown to grey coarse SAND, wet, saturated; increasing medium/fine SAND with depth
27			168	27.5-28': grey fine SAND, with some SILT, well sorted, moist
28				
29				
30				
31				
32				
33				
34				
35				
36				
37				
38				
39				
40				

SB-P COMPLETED AT 32'
MONITORING WELL **MW-P** INSTALLED
AMBIENT AIR READING = 0 ppb

ND = No VOCs Detected By PID analysis
* = Sample Submitted for Laboratory Analysis

PRECISION
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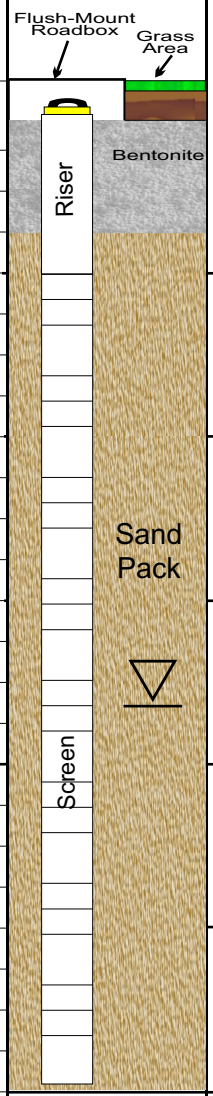
DRILLING LOG

Well/ Boring No.: SB-Q/MW-Q

Project: Brandywine Plume Delineation
Client: NYSDEC - Region 4
Spill No: 97-06794
Location: Schenectady, NY
Driller: Mike Dudley
Logged by: Dan Nierenberg
Drilling Contractor: PES
Drilling Method: Geoprobe/Direct Push
Date Drilled: 6/22/2009
Date Developed: N/A
TOC Elevation: 338.49'
Total Depth of Hole: 24'
Boring Diameter: 2.25"
Screen Diameter: 1"
Length: 24' - 4'
Slot Size: 0.010
Riser Diameter: 1"
Length: 4' - G
Type: SB/MW
Sand Pack: 24' - 3'
Bentonite Seal: 3' - G
Protective Casing: Road Box

See Site Map



Depth (ft.)	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade) – 4	50% Recov.		ND	0-2': grass, black organics and SANDY LOAM; changing to brown fine/medium SAND, poorly sorted, moist
			171	2-4': brown fine/medium SAND, poorly sorted, moist
5 – 8	50% Recov.		53	4-6': brown fine/medium SAND, poorly sorted, moist
			77	6-8': brown fine/medium SAND, poorly sorted, moist
9 – 12	50% Recov.			(1' of cave-in, drove core to 12')
			172	8-10': brown medium SAND, well sorted, moist, wet
			1	10-12': brown medium SAND, some fine SAND, well sorted, moist, wet
13 – 16	75% Recov.		77	(1' of cave-in, drove core to 16') 12-14': brown medium/fine SAND, poorly sorted, moist, wet
		*	1,043	14-16': brown coarse/medium SAND, well sorted, moist, wet
17 – 20	100% Recov.			(4' of cave-in, drove core to 20')
			375	16-18': brown medium/coarse SAND, well sorted, wet; changing to brown/grey medium/coarse SAND, well sorted, wet
			53	18-20': brown/tan medium SAND, well sorted, wet, saturated
21 – 24	100% Recov.			(5' of cave-in, drove core to 22')
			694	20-22': brown medium/coarse/fine SAND, poorly sorted, wet, saturated; changing to brown/grey coarse SAND, well sorted, wet, saturated
			ND	22-24': brown/grey coarse SAND, well sorted, wet, saturated
25 – 29				**SB-Q** COMPLETED AT 24' MONITORING WELL **MW-Q** INSTALLED AMBIENT AIR READING = 0 ppb

ND = No VOCs Detected By PID analysis
* = Sample Submitted for Laboratory Analysis

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DRILLING LOG

Well/ Boring No.: SB-R/MW-R

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4

Spill No: 97-06794 Location: Schenectady, NY

Driller: Mike Dudley Logged by: Dan Nierenberg

Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push

Date Drilled: 6/16/2009 Date Developed: N/A

TOC Elevation: 338.22' Total Depth of Hole: 32'

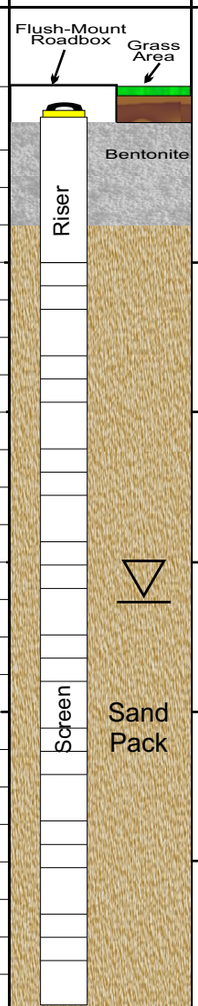
Boring Diameter: 2.25" Screen Diameter: 1" Length: 24' - 4'

Slot Size: 0.010 Riser Diameter: 1" Length: 4' - G

Type: SB/MW Sand Pack: 24' - 3' Bentonite Seal: 3' - G

Protective Casing: Road Box

See Site Map



Depth (ft.)	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade) – 4	90% Recov.		384	0-2': grass, dark brown SANDY LOAM and organics; changing to medium/fine/coarse brown SAND, poorly sorted
			ND	2-4': brown medium/coarse SAND, poorly sorted; changing to coarse SAND, well sorted, moist
4 – 8	75% Recov.		167	4-6': brown medium/fine SAND, poorly sorted, moist; changing to brown coarse SAND, well sorted, moist
			ND	6-8': brown coarse SAND, well sorted, moist
8 – 12	75% Recov.		112	8-10': brown coarse SAND, well sorted, moist
			ND	10-12': brown coarse SAND, well sorted, moist
12 – 16	75% Recov.		422	12-14': brown coarse SAND, well sorted, wet, saturated
		*	2,134	14-16': brown coarse SAND, wells sorted, wet, saturated
16 – 20	100% Recov.		1,231	16-18': brown coarse SAND, well sorted, wet, saturated
			293	18-20': lost interval in macrocore; brown coarse/medium SAND, well sorted, wet, saturated @ 20'
20 – 24	100% Recov.		632	20-22': brown coarse/medium SAND, well sorted,wet, saturated
			225	22-24': brown coarse SAND, well sorted wet, saturated
24 – 28	100% Recov.		60	24-26': brown medium/fine/coarse SAND, poorly sorted; changing to brown coarse SAND, well sorted, wet, saturated
			762	26-28': brown coarse SAND, well sorted; changing to grey coarse/ medium SAND, well sorted, wet, saturated
28 – 32	100% Recov.		413	28-30': brown medium/coarse SAND, poorly sorted, with little fine SAND, wet, saturated
			158	30-32': grey fine SAND with some SILT, wet
32 – 40				**SB-R** COMPLETED AT 32' MONITORING WELL **MW-R** INSTALLED AMBIENT AIR READING = 63 ppb

ND = No VOCs Detected By PID analysis

* = Sample Submitted for Laboratory Analysis

PRECISION
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DRILLING LOG

Well/ Boring No.: SB-S/MW-S

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4

Spill No: 97-06794 Location: Schenectady, NY

Driller: Mike Dudley Logged by: Dan Nierenberg

Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push

Date Drilled: 6/25/2009 Date Developed: N/A

TOC Elevation: 338.38' Total Depth of Hole: 22'

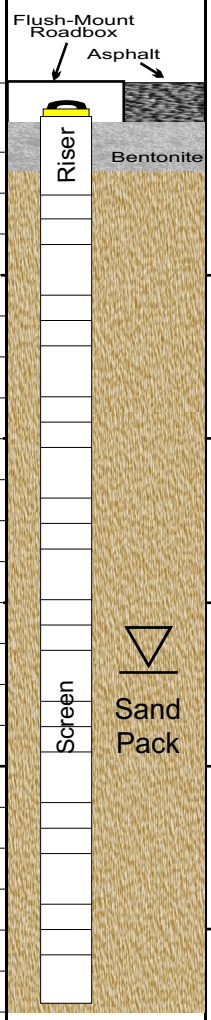
Boring Diameter: 2.25" Screen Diameter: 1" Length: 20' - 2'

Slot Size: 0.010 Riser Diameter: 1" Length: 2' - G

Type: SB/MW Sand Pack: 22' - 1' Bentonite Seal: 1' - G

Protective Casing: Road Box

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade) – 4		25% Recov.		502	0-4': ASPHALT, CRUSHER RUN; changing to brown FILL SAND with GRAVEL MIX; changing to brown medium/coarse/fine SAND, poorly sorted, dry
5 – 8		50% Recov.		246 369	4-6': brown medium/coarse SAND, well sorted, moist 6-8': brown coarse/medium SAND, well sorted, moist
9 – 12		75% Recov.		169 174	8-10: brown coarse/medium SAND, well sorted, moist 10-12': brown medium/coarse SAND, well sorted, moist
13 – 16		75% Recov.	*	96 692	12-14': brown medium SAND, well sorted, wet, saturated 14-16': brown medium SAND, well sorted, wet, saturated; changing to brown coarse SAND, well sorted, wet, saturated
17 – 20		90% Recov.		405 167	(5' of cave-in, drove core to 20') 16-18': brown medium/fine SAND, well sorted, moist; changing to brown coarse SAND, well sorted, wet, saturated 18-20': brown coarse SAND, well sorted, wet, saturated
21 – 24		90% Recov.		215 59	20-21': brown coarse/medium SAND, well sorted, wet, saturated 21-22': brown fine/medium SAND, well sorted, wet, saturated
25 – 29					CORE TUBE FULL AT 22' **SB-S** COMPLETED AT 22' MONITORING WELL **MW-S** INSTALLED AMBIENT AIR READING = 0 ppb

ND = No VOCs Detected By PID analysis

* = Sample Submitted for Laboratory Analysis

PRECISION
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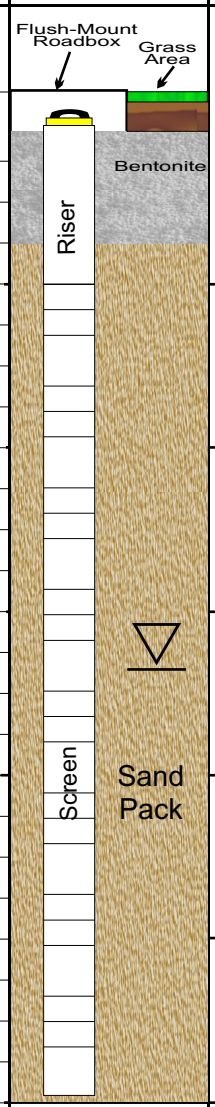
TEL: 518 885-4399
FAX: 518 885-4416

DRILLING LOG

Well/ Boring No.: SB-T/MW-T

Project: Brandywine Plume Delineation
Client: NYSDEC - Region 4
Spill No: 97-06794
Location: Schenectady, NY
Driller: Mike Dudley
Logged by: Dan Nierenberg
Drilling Contractor: PES
Drilling Method: Geoprobe/Direct Push
Date Drilled: 6/15/2009
Date Developed: N/A
TOC Elevation: 338.64'
Total Depth of Hole: 24'
Boring Diameter: 2.25"
Screen Diameter: 1"
Length: 24' - 4'
Slot Size: 0.010
Riser Diameter: 1"
Length: 4' - G
Type: SB/MW
Sand Pack: 24' - 3'
Bentonite Seal: 3' - G
Protective Casing: Road Box

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade)		90% Recov.		ND	0-2': grey STONE/CRUSHER RUN; changing to brown SANDY LOAM, medium/coarse SAND, well sorted, moist
1				ND	2-4': tan fine/medium SAND, well sorted, moist
2					
3					
4		75% Recov.		ND	4-6': brown/tan fine SAND, CRUSHER RUN; changing to brown coarse SAND, well sorted, moist
5				ND	6-8': brown coarse SAND, well sorted, with some fine GRAVEL mixed, moist
6					
7					
8		75% Recov.		ND	8-10': tan fine SAND and SILT (4"); changing to brown coarse SAND, well sorted, with some fine GRAVEL mixed
9				ND	10-12': brown coarse SAND, well sorted, with some fine GRAVEL mixed
10					
11					
12		75% Recov.	*	ND	12-14'; brown coarse SAND, well sorted, moist, wet
13				ND	14-16': brown coarse/medium SAND, well sorted, moist, wet
14					
15					
16		100% Recov.		ND	16-18': brown/dark brown coarse SAND, well sorted, with fine GRAVEL mixed, wet, saturated
17				ND	18-20': dark brown coarse SAND, well sorted, with fine GRAVEL mixed; changing to medium/coarse SAND, poorly sorted, wet, saturated
18					
19					
20		100% Recov.		ND	20-22': brown/dark brown coarse SAND, well sorted, wet, saturated
21				ND	22-24': brown/dark brown coarse SAND, well sorted, wet, saturated; 23.6' to 24' grey fine SAND and SILT, with little CLAY, dry
22					
23					
24					
25					**SB-T** COMPLETED AT 24' MONITORING WELL **MW-T** INSTALLED
26					
27					
28					
29					

ND = No VOCs Detected By PID analysis

* = Sample Submitted for Laboratory Analysis

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DRILLING LOG

Well/ Boring No.: SB-U/MW-U

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4

Spill No: 97-06794 Location: Schenectady, NY

Driller: Mike Dudley Logged by: Dan Nierenberg

Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push

Date Drilled: 6/22/2009 Date Developed: N/A

TOC Elevation: 338.93' Total Depth of Hole: 22'

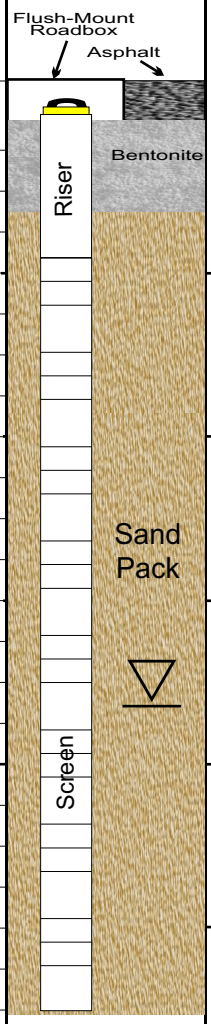
Boring Diameter: 2.25" Screen Diameter: 1" Length: 23' - 3'

Slot Size: 0.010 Riser Diameter: 1" Length: 3' - G

Type: SB/MW Sand Pack: 22' - 2' Bentonite Seal: 2' - G

Protective Casing: Road Box

See Site Map



Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade) – 4		25% Recov.		ND	0-4': ASPHALT, CONCRETE, CRUSHER RUN; changing to brown/ orange coarse/medium SAND, well sorted, dry
4 – 8		50% Recov.		ND ND	4-6': brown/orange coarse/medium SAND, poorly sorted, dry 6-8': brown/orange coarse/medium SAND, poorly sorted, dry
8 – 12		100% Recov.		ND ND	8-10': brown coarse/medium SAND, well sorted, moist 10-12': brown coarse/medium SAND, well sorted, moist
12 – 16		75% Recov.	*	ND 331	(1' of cave-in, drove core to 16') 12-14': brown medium/coarse SAND, poorly sorted, moist 14-16': brown coarse/medium SAND, well sorted, wet; changing to black/grey at 16' (staining?)
16 – 20		100% Recov.		ND ND	(1.5' of cave-in, drove core to 20') 16-18': brown/grey coarse SAND, well sorted, wet, saturated 18-20': brown medium/coarse SAND, wet, saturated
20 – 24		100% Recov.		ND	(6' of cave-in, drove core to 22') 20-22': grey/brown medium/coarse SAND, wet, saturated, well sorted
24 – 29					CORE TUBE FULL AT 22' **SB-U** COMPLETED AT 22' MONITORING WELL **MW-U** INSTALLED AMBIENT AIR READING = 0 ppb

ND = No VOCs Detected By PID analysis

* = Sample Submitted for Laboratory Analysis

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DRILLING LOG

Well/ Boring No.: SB-V

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4

Spill No: 97-06794 Location: Schenectady, NY

Driller: Mike Dudley Logged by: Paul Sokolowski

Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push

Date Drilled: 6/17/2009 Date Developed: N/A

TOC Elevation: - Total Depth of Hole: 24'

Boring Diameter: 2.25" Screen Diameter: N/A Length: N/A

Slot Size: N/A Riser Diameter: N/A Length: N/A

Type: Soil Boring Sand Pack: N/A Bentonite Seal: N/A

Protective Casing: N/A

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade) – 4		75% Recov.		276 532	Brown medium/fine SAND, moist layer 3 to 3.5'
5 – 8		75% Recov.		76 82	Brown medium/fine SAND, moist
9 – 12	▽	90% Recov.		21 66	Dark brown coarse/medium/fine SAND, moist
13 – 16		75% Recov.	*	70 2.700	Saturated @ 13'; dark brown coarse/medium/fine SAND to 15' Grey/brown coarse/medium/fine SAND with petro odor 15 to 16'
17 – 20		100% Recov.		3,852 131	(1' of cave-in, drove core to 20') Grey/brown coarse/medium/fine SAND, with petro odor to 18' Brown coarse/medium/fine SAND 18 to 20'
21 – 24		100% Recov.		45 201	(2' of cave-in, drove core to 24') Brown coarse/medium SAND to 20'; brown/grey tight SILT @ 20'
25 – 29					**SB-T** COMPLETED AT 24' **SB-T** backfilled with bentonite and uncontaminated soil

ND = No VOCs Detected By PID analysis

* = Sample Submitted for Laboratory Analysis

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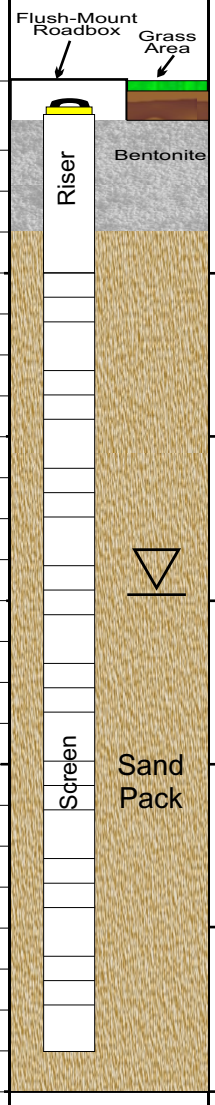
DRILLING LOG

Well/ Boring No.: SB-W/MW-W

Project: Brandywine Plume Delineation
Client: NYSDEC - Region 4
Spill No: 97-06794
Location: Schenectady, NY
Driller: Mike Dudley
Logged by: Paul Sokolowski
Drilling Contractor: PES
Drilling Method: Geoprobe/Direct Push
Date Drilled: 6/17/2009
Date Developed: N/A
TOC Elevation: 338.88'
Total Depth of Hole: 24'
Boring Diameter: 2.25"
Screen Diameter: 1"
Length: 24' - 4'
Slot Size: 0.010
Riser Diameter: 1"
Length: 4' - G
Type: SB/MW
Sand Pack: 24' - 43
Bentonite Seal: 3' - G
Protective Casing: Road Box

See Site Map



Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
		50% Recov.		ND	Brown medium/fine SAND, with fine GRAVEL and conrete fragments, moist
		100% Recov.		56 233	Brown medium/fine SAND, moist
		100% Recov.		308 371	Brown coarse/medium/fine SAND, moist to 11.75'; wet to 11.75'
		100% Recov.		293 350	Brown coarse/medium/fine SAND, saturated at 13'
		100% Recov.		135 212	(2' of cave-in, drove core to 20') Brown coarse/medium/fine SAND, saturated
		100% Recov.	*	463 223	(2' of cave-in, drove core to 24') Brown coarse/medium/fine SAND to 19'; brown/grey SILT, tight, dry 19 to 19.5' grey silt; 19.5 to 20' clay
					SB-W COMPLETED AT 24' MONITORING WELL **MW-W** INSTALLED

ND = No VOCs Detected By PID analysis
* = Sample Submitted for Laboratory Analysis

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DRILLING LOG

Well/ Boring No.: SB-X/MW-X

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4

Spill No: 97-06794 Location: Schenectady, NY

Driller: Mike Dudley Logged by: Dan Nierenberg

Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push

Date Drilled: 6/26/2009 Date Developed: N/A

TOC Elevation: 339.25' Total Depth of Hole: 22'

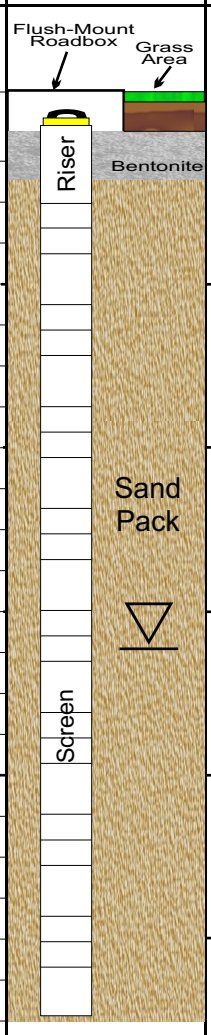
Boring Diameter: 2.25" Screen Diameter: 1" Length: 22' - 2'

Slot Size: 0.010 Riser Diameter: 1" Length: 2' - G

Type: SB/MW Sand Pack: 22' - 1' Bentonite Seal: 1' - G

Protective Casing: Road Box

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade) – 4		50% Recov.		59 32	0-2': grass, organics, SANDY LOAM; changing to brown medium/ coarse SAND, poorly sorted, moist 2-4': brown medium/coarse SAND, poorly sorted, moist
4 – 8		50% Recov.		80 45	4-6': brown coarse/medium SAND, well sorted, moist 6-8': brown coarse/medium SAND, well sorted, moist
8 – 12		50% Recov.		36 2	8-10': brown coarse SAND, well sorted, moist 10-12': brown coarse SAND, well sorted, moist
12 – 16		75% Recov.	*	3,759 2,854	(4' of cave-in, drove core to 20') 12-14': brown coarse SAND, well sorted; changing to brown to dark brown medium/coarse SAND, well sorted, wet, saturated 14-16': brown to grey/brown coarse SAND, well sorted, wet, saturated
16 – 20		100% Recov.		3,392 2,396	(4' of cave-in, drove core to 20') 16-18': brown medium/coarse SAND, well sorted, wet, saturated 18-20': tan fine SAND, well sorted, wet, saturated
20 – 24		100% Recov.		N/A	20-22': tan fine SAND, well sorted, wet, saturated
24 – 29					CORE TUBE FULL AT 22' **SB-X** COMPLETED AT 22' MONITORING WELL **MW-X** INSTALLED AMBIENT AIR READING = 0 ppb

ND = No VOCs Detected By PID analysis

* = Sample Submitted for Laboratory Analysis

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DRILLING LOG

Well/ Boring No.: SB-Y

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4

Spill No: 97-06794 Location: Schenectady, NY

Driller: Mike Dudley Logged by: Paul Sokolowski

Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push

Date Drilled: 6/17/2009 Date Developed: N/A

TOC Elevation: - Total Depth of Hole: 24'

Boring Diameter: 2.25" Screen Diameter: N/A Length: N/A

Slot Size: N/A Riser Diameter: N/A Length: N/A

Type: Soil Boring Sand Pack: N/A Bentonite Seal: N/A

Protective Casing: N/A

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade) – 4		90% Recov.		32	Brown medium/fine SAND, with brick fragments to 2'; light brown medium/fine SAND
5 – 8		90% Recov.		ND ND	Light brown medium/fine SAND to 7'; brown medium/fine SAND
9 – 12	▽	100% Recov.		ND ND	Brown medium/fine SAND to 9.5'; brown coarse/medium/fine SAND, moist 9.5 to 11'; brown medium/fine SAND, moist to 11'
13 – 16		100% Recov.	*	890 1,672	Brown medium/fine SAND to 14.5', saturated at 13'; brown coarse/ medium/fine SAND, with petro odor
17 – 20		100% Recov.		896 267	(1' of cave-in, drove core to 20') Brown coarse/medium/fine SAND, with petro/solvent (?) odor, odor to 18'; brown medium/fine SAND
21 – 24		100% Recov.		655 720	Drove core to 24'; however, MD felt material pushing into core from 8 to 24'. Material in core is similar to that seen throughout borehole. There is no discernable new soil
25 – 29					**SB-Y** COMPLETED AT 24' **SB-Y** backfilled with bentonite and uncontaminated soil

ND = No VOCs Detected By PID analysis

* = Sample Submitted for Laboratory Analysis

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DRILLING LOG

Well/ Boring No.: SB-Z/MW-Z

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4

Spill No: 97-06794 Location: Schenectady, NY

Driller: Mike Dudley Logged by: Paul Sokolowski

Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push

Date Drilled: 6/17/2009 Date Developed: N/A

TOC Elevation: 339.81' Total Depth of Hole: 24'

Boring Diameter: 2.25" Screen Diameter: 1" Length: 24' -4 '

Slot Size: 0.010 Riser Diameter: 1" Length: 4' - G

Type: SB/MW Sand Pack: 24' - 3' Bentonite Seal: 3' - G

Protective Casing: Road Box

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade) – 4	Flush-Mount Roadbox; Grass Area; Bentonite; Riser	90% Recov.		ND 20	Brown medium/fine SAND to 2.5'; light brown medium/fine SILT and SAND, moist
5 – 8		90% Recov.		ND ND	Light brown medium/fine SILT and SAND, moist to 5'; brown medium/ fine SAND
9 – 12	▽	100% Recov.		ND 29	Brown medium/fine SAND, moist
13 – 15		75% Recov.		291 250	Brown medium/fine SAND, saturated at 13'
16 – 19	Screen; Sand Pack	100% Recov.	*	427 175	Brown medium/fine SAND
20 – 23		100% Recov.		250 350	Borehole collapsing. Core picking up material at 11'. Core may not represent actual conditions. Material similar to that observed above.
24 – 29					**SB-Z** COMPLETED AT 24' MONITORING WELL **MW-Z** INSTALLED

ND = No VOCs Detected By PID analysis

* = Sample Submitted for Laboratory Analysis

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DRILLING LOG

Well/ Boring No.: SB-AA

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4

Spill No: 97-06794 Location: Schenectady, NY

Driller: Mike Dudley Logged by: Paul Sokolowski

Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push

Date Drilled: 6/17/2009 Date Developed: N/A

TOC Elevation: - Total Depth of Hole: 24'

Boring Diameter: 2.25" Screen Diameter: N/A Length: N/A

Slot Size: N/A Riser Diameter: N/A Length: N/A

Type: Soil Boring Sand Pack: N/A Bentonite Seal: N/A

Protective Casing: N/A

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade) – 4		90% Recov.		104 121	Dark brown SAND, with SILT, moist
5 – 8		100% Recov.		419 1086	Grey/brown SAND, with SILT, moist, odor at 6'
9 – 12	▽	100% Recov.		995 253	Grey/brown SAND, with SILT, moist
13 – 16		90% Recov.	*	1,314 514	Grey/brown medium/fine SAND to 14', saturated at 12'; brown medium/fine SAND
17 – 20		100% Recov.		406	(2' of cave-in, drove core to 20') Brown medium/fine SAND
21 – 24		100% Recov.		N/A N/A	Drove core to 24', started picking up material at 12'. Material in core resembles that from previous with similar headspace. Borehole collapse causing the collection of samples that may not represent actual conditions.
25 – 29					**SB-AA** COMPLETED AT 24' **SB-AA** backfilled with bentonite and uncontaminated soil

ND = No VOCs Detected By PID analysis

* = Sample Submitted for Laboratory Analysis

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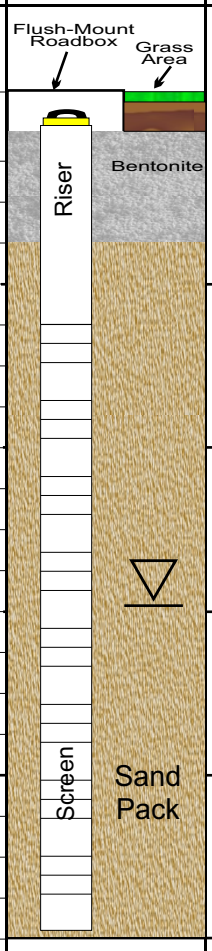
DRILLING LOG

Well/ Boring No.: SB-AB/MW-AB

Project: Brandywine Plume Delineation
Client: NYSDEC - Region 4
Spill No: 97-06794
Location: Schenectady, NY
Driller: Mike Dudley
Logged by: Dan Nierenberg
Drilling Contractor: PES
Drilling Method: Geoprobe/Direct Push
Date Drilled: 6/18/2009
Date Developed: N/A
TOC Elevation: 340.90'
Total Depth of Hole: 20'
Boring Diameter: 2.25"
Screen Diameter: 1"
Length: 20' - 5'
Slot Size: 0.010
Riser Diameter: 1"
Length: 5' - G
Type: SB/MW
Sand Pack: 20' - 3'
Bentonite Seal: 3' - G
Protective Casing: Road Box

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade) – 4		75% Recov.		533 4,179	0-2': GRASS, SANDY LOAM and organics; changing to brown medium/fine/coarse SAND, poorly sorted 2-4': brown medium/coarse/fine SAND, poorly sorted
5 – 8		75% Recov.		1,776 1,300	4-6': brown medium/coarse/fine SAND, poorly sorted 6-8': brown coarse/medium SAND, well sorted, moist
9 – 12		75% Recov.		1,133 835	8-10': brown coarse/medium SAND, well sorted, moist 10-12': brown coarse/medium SAND, well sorted, moist
13 – 16		75% Recov.	*	1,307 788	12-14': brown medium/fine SAND, poorly sorted (cave-in); changing to brown coarse/medium SAND, well sorted, wet 14-16': brown coarse/medium SAND, well sorted, wet, saturated
17 – 20		100% Recov.		440 535	(2' of cave-in, drove core to 20') 16-18': brown coarse SAND, well sorted, wet, saturated 18-20': brown coarse SAND, well sorted, wet, saturated; changing to brown CLAY lenses (~2"); changing to brown coarse SAND, well sorted (~4"); changing to brown to grey CLAY (19 to 20')
21 – 29					**SB-AB** COMPLETED AT 2**0'** MONITORING WELL **MW-AB** INSTALLED AMBIENT AIR READING = 0 ppb

ND = No VOCs Detected By PID analysis
* = Sample Submitted for Laboratory Analysis

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DRILLING LOG

Well/ Boring No.: SB-AC

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4

Spill No: 97-06794 Location: Schenectady, NY

Driller: Mike Dudley Logged by: Dan Nierenberg

Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push

Date Drilled: 6/18/2009 Date Developed: N/A

TOC Elevation: - Total Depth of Hole: 24'

Boring Diameter: 2.25" Screen Diameter: N/A Length: N/A

Slot Size: N/A Riser Diameter: N/A Length: N/A

Type: Soil Boring Sand Pack: N/A Bentonite Seal: N/A

Protective Casing: N/A

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade)		50% Recov.		786	2x Refusals at 2.5 to 3', relocating 9' North of original SB-AC locale 0-2': GRASS, black/dark brown SANDY LOAM and organics; changing to brown coarse/medium/fine SAND, poorly sorted, with mixed PEBBLES; brick at 2'
1					
2				1,290	2-4': brown coarse/medium/fine SAND, poorly sorted, changing to brown/orange medium SAND, well sorted
3					
4					
5		75% Recov.		1,531	4-6': brown/tan coarse/medium/fine SAND, poorly sorted, with brick fragments; changing to brown/tan medium sand, well sorted, moist
6					
7				1,473	6-8': brown/tan medium SAND, well sorted, moist
8					
9		75% Recov.		1,118	8-10': brown/tan medium SAND, well sorted, moist; changing to coarse/medium/fine SAND, poorly sorted, with some fine GRAVEL mixed in
10					
11	▽			1,281	10-12': brown coarse/medium SAND, poorly sorted, moist, wet
12					
13		75% Recov.		1,192	12-14': brown medium/coarse SAND, well sorted, wet, increasing GRAVEL (medium/fine) with depth
14					
15				21.6 ppm	14-16': brown medium/coarse SAND, well sorted, wet; grey/brown medium SAND, well sorted, wet, saturated, petro odor
16					
17		100% Recov.			(4' of cave-in, drove core to 20')
18				1,477	16-18': brown medium SAND, well sorted, wet, saturated
19			*	152 ppm	18-20': grey/brown to grey medium SAND, petro odor, sheen; changing to brown coarse SAND, well sorted, wet, saturated
20					
21		100% Recov.		N/A	(4' of cave-in, drove core to 24')
22					
23				N/A	
24					
25					**SB-AC** COMPLETED AT 24'
26					**SB-AC** backfilled with bentonite and uncontaminated soil
27					AMBIENT AIR READING = 123 ppb
28					
29					ND = No VOCs Detected By PID analysis * = Sample Submitted for Laboratory Analysis

PRECISION
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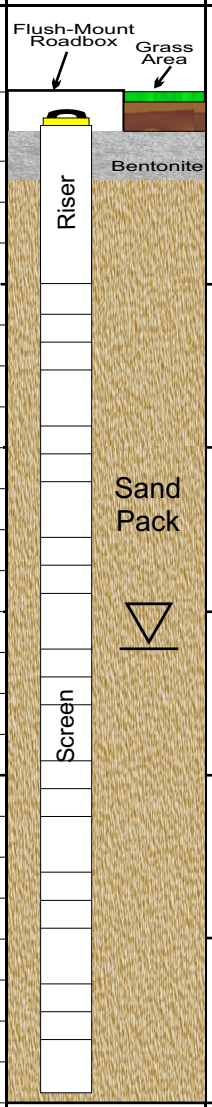
DRILLING LOG

Well/ Boring No.: SB-AD/MW-AD

Project: Brandywine Plume Delineation
Client: NYSDEC - Region 4
Spill No: 97-06794
Location: Schenectady, NY
Driller: Mike Dudley
Logged by: Dan Nierenberg
Drilling Contractor: PES
Drilling Method: Geoprobe/Direct Push
Date Drilled: 6/26/2009
Date Developed: N/A
TOC Elevation: 341.62'
Total Depth of Hole: 24'
Boring Diameter: 2.25"
Screen Diameter: 1"
Length: 24' - 4'
Slot Size: 0.010
Riser Diameter: 1"
Length: 4' - G
Type: SB/MW
Sand Pack: 24' - 2'
Bentonite Seal: 2' - G
Protective Casing: Road Box

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade) – 24		50% Recov.		12 ND	0-2': grass, organics, SANDY LOAM; changing to brown/tan medium/ fine SAND, well sorted, dry 2-4': brown/tan medium SAND, well sorted, dry
		75% Recov.		ND ND	4-6': brown/tan medium SAND, poorly sorted, moist 6-8': brown/tan coarse/medium SAND, well sorted, moist
		90% Recov.		ND ND	8-10': brown/tan medium/coarse SAND, poorly sorted, moist; changing to orange/brown coarse/medium SAND at 10' 10-12': brown/orange coarse/medium SAND, well sorted, moist; changing to brown medium SAND, well sorted, wet
		50% Recov.	*	28.6 ppm 495 ppm (over range)	12-14': brown coarse/medium SAND, poorly sorted, wet, saturated, with increased clay content with depth 14-16': black/grey coarse/medium SAND, poorly sorted, wet, saturated, odor, staining
		90% Recov.		92.7 ppm 401 ppm	(4' of cave-in, drove core to 20') 16-18': bkacl coarse/medium SAND, poorly sorted, wet, saturated; changing to black coarse/medium SAND, staining and sheen 18-20': black coarse/medium SAND; changing to brown coarse/ fine SAND, poorly sorted, wet, saturated
		100% Recov.		100 ppm 5,063	20-22': brown coarse/fine SAND, poorly sorted, wet, saturated 22-24': brown coarse/medium SAND, poorly sorted, wet, saturated
					CORE TUBE FULL AT 24' **SB-AD** COMPLETED AT 24' MONITORING WELL **MW-AD** INSTALLED AMBIENT AIR READING = 0 ppb

ND = No VOCs Detected By PID analysis
* = Sample Submitted for Laboratory Analysis

PRECISION
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TEL: 518 885-4399
FAX: 518 885-4416

DRILLING LOG

Well/ Boring No.: SB-AE/MW-AE

Project: Brandywine Plume Delineation
Client: NYSDEC - Region 4
Spill No: 97-06794
Location: Schenectady, NY
Driller: Mike Dudley
Logged by: Dan Nierenberg
Drilling Contractor: PES
Drilling Method: Geoprobe/Direct Push
Date Drilled: 6/25/2009
Date Developed: N/A
TOC Elevation: 340.24'
Total Depth of Hole: 22'
Boring Diameter: 2.25"
Screen Diameter: 1"
Length: 20' - 2'
Slot Size: 0.010
Riser Diameter: 1"
Length: 2' - G
Type: SB/MW
Sand Pack: 22' - 1'
Bentonite Seal: 1' - G
Protective Casing: Road Box

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade) – 12	Flush-Mount Roadbox; Asphalt; Riser; Bentonite; Sand Pack; Screen	50% Recov.		ND 228	0-2': ASPHALT, CRUSHER RUN; changing to brown FILL SAND with GRAVEL MIX; changing to brown coarse/medium/fine SAND, poorly sorted 2-4': brown to brown/tan medium/fine/coarse SAND, poorly sorted, dry
5 – 8		75% Recov.		304 422	4-6': brown/tan medium/fine/coarse SAND, poorly sorted, dry 6-8': brown/tan medium/fine/coarse SAND, poorly sorted; changing to brown coarse SAND, well sorted, moist
9 – 12		75% Recov.	*	155 ND	8-10': brown/dark brown coarse/medium SAND, well sorted, moist 10-12': brown medium/coarse SAND, well sorted, moist
13 – 16		75% Recov.		ND ND	12-14': brown medium/coarse SAND, well sorted, moist, wet 14-16': brown coarse/medium SAND, well sorted, wet, saturated
17 – 20		100% Recov.		ND ND	(4' of cave-in, drove core to 20') 16-18': brown medium/coarse/fine SAND, well sorted, wet, saturated 18-20': brown medium/coarse SAND, well sorted, wet, saturated; changing to grey/tan fine SAND and SILT, little CLAY, wet
21 – 24		100% Recov.		ND	20-22': brown/dark brown coarse medium SAND, well sorted, wet, saturated; changing to grey fine SAND and SILT, dry at 22'
25 – 29					CORE TUBE FULL AT 22' **SB-AE** COMPLETED AT 22' MONITORING WELL **MW-AE** INSTALLED AMBIENT AIR READING = 0 ppb

ND = No VOCs Detected By PID analysis
* = Sample Submitted for Laboratory Analysis

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DRILLING LOG

Well/ Boring No.: SB-AF/MW-AF

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4

Spill No: 97-06794 Location: Schenectady, NY

Driller: Mike Dudley Logged by: Dan Nierenberg

Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push

Date Drilled: 6/25/2009 Date Developed: N/A

TOC Elevation: 340.25' Total Depth of Hole: 23'

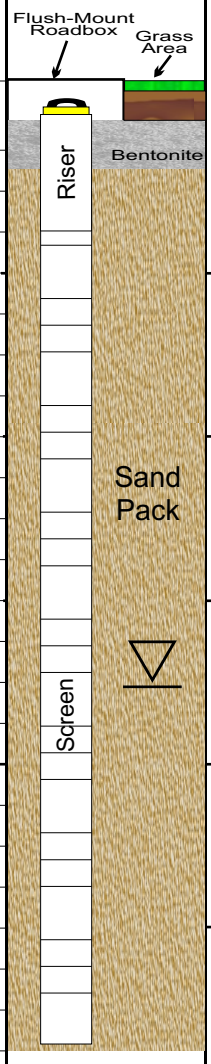
Boring Diameter: 2.25" Screen Diameter: 1" Length: 23' - 3'

Slot Size: 0.010 Riser Diameter: 1" Length: 3' - G

Type: SB/MW Sand Pack: 23' - 2' Bentonite Seal: 2' - G

Protective Casing: Road Box

See Site Map



Depth (ft.)	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade)				
1	75% Recov.		ND	0-2': grass, SANDY LOAM; changing to brown coarse/medium/fine SAND, poorly sorted, moist
2			ND	2-4': brown coarse/medium/fine SAND, poorly sorted; changing to brown medium/coarse SAND, well sorted at 4'
3				
4				
5	50% Recov.		ND	4-6': brown coarse/medium SAND, well sorted, moist
6			ND	6-8': brown coarse/medium SAND, well sorted, moist
7				
8				
9	50% Recov.		ND	8-10': brown coarse/medium SAND, well sorted, moist
10			39	10-12': brown coarse/medium SAND, well sorted, moist
11				
12				
13	75% Recov.	*	55	12-14': brown/tan medium/coarse SAND, moist; changing to tan coarse/medium SAND, well sorted, moist, wet
14				
15			ND	14-16': tan medium SAND, well sorted, wet, saturated
16				
17	100% Recov.			(4' of cave-in, drove core to 20')
18			ND	16-18': brown medium/coarse SAND, well sorted, wet, saturated
19			ND	18-20': brown medium/coarse SAND, well sorted, wet, saturated; changing to brown/tan fine/medium SAND, well sorted, saturated
20				
21	100% Recov.		ND	20-22': brown/tan fine medium SAND, well sorted, wet, saturated
22				
23			ND	22-23': brown/tan fine medium SAND, well sorted, wet, saturated
24				
25				CORE TUBE FULL AT 23'
26				**SB-AF** COMPLETED AT 23'
27				MONITORING WELL **MW-AF** INSTALLED
28				AMBIENT AIR READING = 0 ppb
29				

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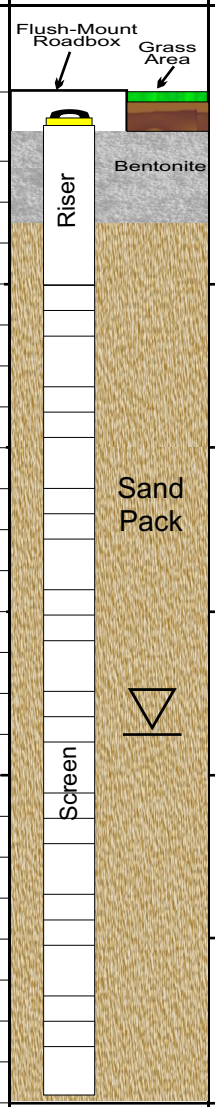
DRILLING LOG

Well/ Boring No.: SB-AG/MW-AG

Project: Brandywine Plume Delineation
Client: NYSDEC - Region 4
Spill No: 97-06794
Location: Schenectady, NY
Driller: Mike Dudley
Logged by: Dan Nierenberg
Drilling Contractor: PES
Drilling Method: Geoprobe/Direct Push
Date Drilled: 6/23/2009
Date Developed: N/A
TOC Elevation: 338.86'
Total Depth of Hole: 23'
Boring Diameter: 2.25"
Screen Diameter: 1"
Length: 23' - 3'
Slot Size: 0.010
Riser Diameter: 1"
Length: 3' - G
Type: SB/MW
Sand Pack: 22' - 2'
Bentonite Seal: 2' - G
Protective Casing: Road Box

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade)		90% Recov.		151	0-2': ASPHALT, CRUSHER RUN; changing to brown medium/fine SAND, poorly sorted
1					
2					
3				94	2-4': brown medium/fine SAND, poorly sorted; changing to grey medium SAND, well sorted
4					
5		50% Recov.		274	4-6': brown/grey medium/fine SAND, poorly sorted, moist, wet
6					
7				85 ppm	6-8': brown/grey to grey medium SAND, well sorted, wet, moist
8					
9		90% Recov.		87.5 ppm	8-10': brown/grey medium/coarse SAND, poorly sorted, wet
10					
11				28.6 ppm	10-12': brown/grey medium/coarse SAND, poorly sorted, wet
12					
13		75% Recov.		706	12-14': grey/brown coarse SAND, well sorted, wet, saturated
14					
15			*	3,817	14-16': grey/brown coarse SAND, well sorted, wet, saturated; changing to brown medium SAND, well sorted, wet, saturated
16					
17		100% Recov.			(1.5' of cave-in, drove core to 20')
18				286	16-18': brown/grey to brown coarse SAND, well sorted, wet, saturated; changing to brown medium/fine SAND, wet, saturated
19					
20				131	18-20': tan fine/medium SAND, wet, saturated
21		100% Recov.			(7.5' of cave-in, drove core to 24')
22				155	20-22': grey/brown coarse/medium SAND, well sorted, wet, saturated; changing to brown medium/coarse SAND, well sorted, saturated
23				410	22-24': brown medium SAND, well sorted; changing to fine SAND, wet moist; 24': grey fine SAND and SILT with some CLAY (~0.5')
24					
25					**SB-AG** COMPLETED AT 24'
26					MONITORING WELL **MW-AG** INSTALLED
27					AMBIENT AIR READING = 0 ppb
28					
29					

ND = No VOCs Detected By PID analysis
* = Sample Submitted for Laboratory Analysis

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DRILLING LOG

Well/ Boring No.: SB-AH/MW-AH

Project: Brandywine Plume Delineation
Client: NYSDEC - Region 4
Spill No: 97-06794
Location: Schenectady, NY
Driller: Mike Dudley
Logged by: Dan Nierenberg
Drilling Contractor: PES
Drilling Method: Geoprobe/Direct Push
Date Drilled: 6/23/2009
Date Developed: N/A
TOC Elevation: 339.24'
Total Depth of Hole: 24'
Boring Diameter: 2.25"
Screen Diameter: 1"
Length: 23' - 3'
Slot Size: 0.010
Riser Diameter: 1"
Length: 3' - G
Type: SB/MW
Sand Pack: 22' - 2'
Bentonite Seal: 2' - G
Protective Casing: Road Box

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade)	Flush-Mount Roadbox; Grass Area; Bentonite; Riser; Sand Pack; Screen	50% Recov.		651	0-2': ASPHALT, CRUSHER; changing to brown medium SAND, poorly sorted
1					
2				228	2-4': black to brown medium/coarse/fine SAND, poorly sorted
3					
4					
5		75% Recov.	*	61 ppm	4-6': brown/orange coarse/medium SAND, well sorted, moist
6					
7				3,072	6-8': brown/orange coarse/medium SAND, well sorted, moist
8					
9		75% Recov.		915	8-10': brown medium/coarse SAND, well sorted, moist
10					
11				1,062	10-12': brown coarse SAND, well sorted, moist
12					
13		90% Recov.		1,014	12-14': brown coarse SAND, well sorted, moist, wet
14					
15				804	14-16': brown coarse/medium SAND; changing to tan fine SAND, well sorted, wet at 15.5'
16					
17		100% Recov.		820	(2' of cave-in, drove core to 20')
18					16-18': brown medium/coarse SAND, well sorted, wet, saturated
19				490	18-20': tan/brown medium/coarse SAND, well sorted; changing to brown coarse SAND, well sorted, wet, saturated
20					
21		100% Recov.		445	20-22': brown coarse/medium SAND, well sorted, wet, saturated
22					
23				215	22-24': brown coarse/medium SAND, well sorted, wet, saturated; changing to grey/brown fine SAND, with little to no SILT, wet
24					
25					**SB-AH** COMPLETED AT 24'
26					MONITORING WELL **MW-AH** INSTALLED
27					AMBIENT AIR READING = 0 ppb
28					
29					

ND = No VOCs Detected By PID analysis
* = Sample Submitted for Laboratory Analysis

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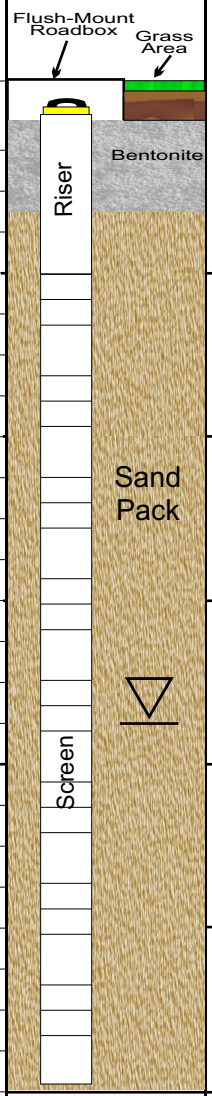
DRILLING LOG

Well/ Boring No.: SB-AI/MW-AI

Project: Brandywine Plume Delineation
Client: NYSDEC - Region 4
Spill No: 97-06794
Location: Schenectady, NY
Driller: Mike Dudley
Logged by: Dan Nierenberg
Drilling Contractor: PES
Drilling Method: Geoprobe/Direct Push
Date Drilled: 6/23/2009
Date Developed: N/A
TOC Elevation: 338.24'
Total Depth of Hole: 23'
Boring Diameter: 2.25"
Screen Diameter: 1"
Length: 23' - 3'
Slot Size: 0.010
Riser Diameter: 1"
Length: 3' - G
Type: SB/MW
Sand Pack: 22' - 2'
Bentonite Seal: 2' - G
Protective Casing: Road Box

See Site Map



Depth (ft.)	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade)	90% Recov.		ND	0-2': GRAVEL, CRUSHER RUN; changing to brown/orange medium/ coarse SAND, poorly sorted; changing to brown coarse/medium SAND with CRUSHER RUN at 2'
1				
2				
3			24	2-4': brown/orange coarse/medium SAND, well sorted
4				
5	50% Recov.		ND	4-6': orange/brown medium/coarse SAND, well sorted; changing to brown coarse/medium SAND, well sorted, moist
6				
7			ND	6-8': brown coarse/medium SAND, well sorted, moist
8				
9	90% Recov.		ND	8-10': brown/orange coarse/medium SAND, well sorted
10				
11			ND	10-12': brown/tan medium/fine SAND, well sorted, moist
12				
13	75% Recov.			(1' of cave-in, drove core to 20')
14			ND	12-14': brown to tan brown medium SAND, well sorted, wet, moist
15		*	ND	14-16': brown/tan medium SAND, well sorted, wet, moist
16				
17	100% Recov.			(1' of cave-in, drove core to 20')
18			ND	16-18': brown fine/medium SAND, well sorted, wet; changing to brown coarse SAND, well sorted, wet, saturated
19			ND	18-20': brown coarse SAND, well sorted, wet, saturated; changing to tan/brown medium/fine SAND, well sorted, wet, saturated
20				
21	100% Recov.			(6' of cave-in, drove core to 20')
22			ND	20-22': brown coarse/medium SAND, well sorted, wet, saturated
23			ND	22-23': brown/tan medium/fine SAND, well sorted, fining with depth, wet, saturated
24				
25				**SB-AI** COMPLETED AT 23'
26				CORE TUBE FULL AT 23'
27				MONITORING WELL **MW-AI** INSTALLED
28				AMBIENT AIR READING = 0 ppb
29				

ND = No VOCs Detected By PID analysis

* = Sample Submitted for Laboratory Analysis

PRECISION
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DRILLING LOG

Well/ Boring No.: SB-AJ/MW-AJ

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4

Spill No: 97-06794 Location: Schenectady, NY

Driller: Mike Dudley Logged by: Dan Nierenberg

Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push

Date Drilled: 6/23/2009 Date Developed: N/A

TOC Elevation: 337.18' Total Depth of Hole: 24'

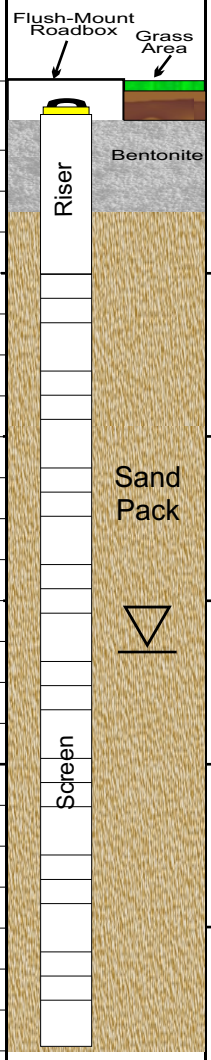
Boring Diameter: 2.25" Screen Diameter: 1" Length: 23' - 3'

Slot Size: 0.010 Riser Diameter: 1" Length: 3' - G

Type: SB/MW Sand Pack: 23' - 2' Bentonite Seal: 2' - G

Protective Casing: Road Box

See Site Map



Depth (ft.)	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade) – 4	75% Recov.		59 ppm	0-2': ASPHALT, CONCRETE; changing to brown medium SAND, well sorted, dry
			ND	2-4': brown medium SAND, well sorted, dry
4 – 8	90% Recov.		ND	4-6': brown medium/fine/coarse SAND, poorly sorted, moist; changing to brown medium/coarse SAND, well sorted, moist
			41	6-8': brown coarse SAND, moist, well sorted
8 – 12	90% Recov.			(1' of cave-in, drove core to 12')
			97	8-10': brown coarse SAND, well sorted, moist
			ND	10-12': brown coarse/medium SAND, well sorted, moist, wet
12 – 16	90% Recov.			(2' of cave-in, drove core to 16')
			24	12-14': brown medium/fine SAND, poorly sorted, moist, wet
			ND	14-16': brown coarse/medium SAND, well sorted, moist, wet
16 – 20	90% Recov.			(3' of cave-in, drove core to 20')
			84	16-18': brown medium/coarse SAND, poorly sorted, wet; changing to brown fine/medium SAND, well sorted at 17-18'
			86	18-20': brown fine/medium SAND, fining with depth, wet, saturated
20 – 24	100% Recov.		N/A	20-22': brown coarse/medium SAND, well sorted, wet, saturated
		*	138	22-23': tan fine SAND, well sorted, wet
24 – 29				**SB-AJ** COMPLETED AT 23' CORE TUBE FULL AT 23' MONITORING WELL **MW-AJ** INSTALLED AMBIENT AIR READING = 0 ppb

ND = No VOCs Detected By PID analysis

* = Sample Submitted for Laboratory Analysis

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DRILLING LOG

Well/ Boring No.: SB-AK/MW-AK

Project: Brandywine Plume Delineation Client: NYSDEC - Region 4

Spill No: 97-06794 Location: Schenectady, NY

Driller: Mike Dudley Logged by: Dan Nierenberg

Drilling Contractor: PES Drilling Method: Geoprobe/Direct Push

Date Drilled: 6/25/2009 Date Developed: N/A

TOC Elevation: 342.06' Total Depth of Hole: 24'

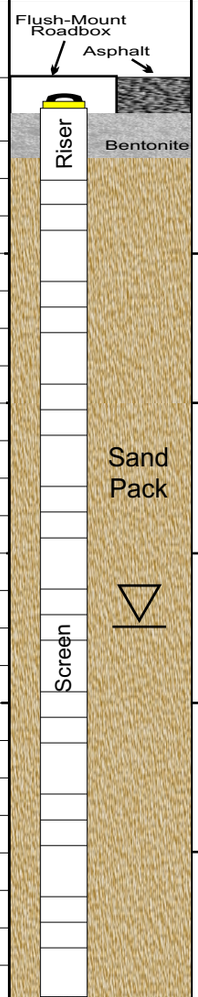
Boring Diameter: 2.25" Screen Diameter: 1" Length: 20' - 4'

Slot Size: 0.010 Riser Diameter: 1" Length: 4' - G

Type: SB/MW Sand Pack: 24' - 2' Bentonite Seal: 2' - G

Protective Casing: Road Box

See Site Map

Depth (ft.)	Well Construction	Notes	Sample Type/ #	PID (ppb)	Description / Soil Classification
0 (Grade) – 16		50% Recov.		385 58	0-2': ASPHALT, CRUSHER RUN; changing to brown/dark grey medium/fine/coarse SAND, poorly sorted 2-4': brown to orange/brown medium SAND, well sorted, moist
5 – 8		75% Recov.		69 218	4-6': tan/brown medium/fine SAND, well sorted; changing to tan/brown fine SAND and SILT at 5' 6-8': tan/brown fine SAND and SILT; changing to brown coarse/ medium SAND, well sorted, moist
9 – 12		75% Recov.		256 301	8-10': brown coarse/medium SAND, well sorted, moist 10-12': brown coarse/medium SAND, well sorted, moist
13 – 16		75% Recov.		356 917	12-14': brown coarse SAND, well sorted, moist 14-16': brown coarse/medium SAND, well sorted moist, wet
17 – 20		50% Recov.	*	(2' of cave-in, drove core to 20') 579 5,215	16-18': brown medium SAND, poorly sorted, moist 18-20': brown coarse/medium SAND, well sorted, wet, saturated; changing to grey/black at 19', staining, odor
21 – 24		90% Recov.		671 ND	20-22': brown coarse/medium SAND, wet, saturated; changing to grey/black at 21' to grey/brown at 22' 22-24': grey/brown coarse SAND, well sorted, wet, saturated
25 – 28		100% Recov.		206	24-26': grey fine SAND and SILT, with little CLAY, dry
29 – 40					**SB-AK** COMPLETED AT 22' MONITORING WELL **MW-AK** INSTALLED AMBIENT AIR READING = 0 ppb ND = No VOCs Detected By PID analysis * = Sample Submitted for Laboratory Analysis

Attachment C:
Tables

TABLE 1
Summary of Groundwater
Gauging and Elevation Data

Brandywine Plume Delineation

Schenectady, Albany County, New York

NYSDEC Site No.: 97-06794/H0926

Gauge Date: July 20, 2009

Well Identification	Top of Casing Elevation	Depth to Water	Depth to Bottom	Water Table Elevation
MW-A	341.03	12.37	*22.75*	328.66
MW-B	340.13	11.68	*22.84*	328.45
MW-C	340.89	12.65	*23.04*	328.24
MW-E	339.90	11.10	*21.29*	328.80
MW-G	339.32	11.27	*23.56*	328.05
MW-H	341.47	12.82	*22.92*	328.65
MW-J	339.16	10.63	*19.40*	328.53
MW-K	339.13	11.42	*21.50*	327.71
MW-L	338.39	10.30	*18.96*	328.09
MW-M	339.32	12.09	*21.83*	327.23
MW-N	337.71	11.83	*21.55*	325.88
MW-O	337.40	12.33	*21.58*	325.07
MW-P	338.30	12.69	*23.25*	325.61
MW-Q	338.49	12.57	*23.36*	325.92
MW-R	338.22	12.28	*22.96*	325.94
MW-S	338.38	12.74	*21.58*	325.64
MW-T	338.64	12.34	*22.13*	326.30
MW-U	338.93	12.81	*21.75*	326.12
MW-W	338.88	11.95	*22.08*	326.93
MW-X	339.25	12.54	*20.46*	326.71
MW-Z	339.81	12.49	*22.22*	327.32
MW-AB	340.90	12.87	*19.20*	328.03
MW-AD	341.62	12.02	*22.35*	329.60
MW-AE	340.24	12.20	*20.00*	328.04
MW-AF	340.25	12.51	*22.65*	327.74
MW-AG	338.86	13.83*	*22.81*	325.03
MW-AH	339.24	14.30*	*21.68*	324.94
MW-AI	338.24	14.65*	*22.70*	323.59
MW-AJ	337.18	15.24*	*22.60*	321.94
MW-AK	342.06	14.92	*23.80*	327.14
MW-2	unknown	12.82*	*20.15*	N/A
MW-6	unknown	13.80*	*21.30*	N/A
MW-7	unknown	13.65*	*18.08*	N/A
MW-9	unknown	14.65*	*19.30*	N/A

Comments: All values are reported in feet.
Elevations based on USGS Bench Mark 342' above sea level, 38WSM, 1952
* Indicates water level measurements taken on July 21, 2009

TABLE 2
Summary of Soil
Analytical Results

Brandywine Plume Delineation Schenectady, Albany County, New York NYSDEC Spill No.: 9706794/ Pin No.: H0926 June 2009		Soil Sample Identification										NYSDEC Unrestricted Use Soil Cleanup Objective*[1]
Parameter	**Method**	**SB-A**	**SB-B**	**SB-C**	**SB-D**	**SB-E**	**SB-F**	**SB-G**	**SB-H**	**SB-I**	**SB-J**	
Chloromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,1,1-Trichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*680*
1,1,2,2-Tetrachloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,1,2-Trichloro-1,2,2-trifluoroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,1,2-Trichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,1-Dichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*270*
1,1-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*330*
1,2,4-Trichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,2-Dibromo-3-chloropropane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,2-Dibromomethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,2-Dichlorobenze	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1,100*
1,2-Dichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*20*
1,2-Dichloropropane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,3-Dichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*2,400*
1,4-Dichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1,800*
2-Butanone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*120*
2-Hexanone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
4-Methyl-2-pentanone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Acetone	EPA 8260	ND	ND	ND	**14**	**12**	**18**	ND	**12**	ND	ND	*50*
Benzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*60*
Bromodichloromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Bromoform	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Bromomethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Carbon Disulfide	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Carbon Tertachloride	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*760*
Chlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1,100*
Chloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Chloroform	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*370*
cis-1,2-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*250*
cis-1,3-Dichloropropene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Cyclohexane	EPA 8260	**1,000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Dibromochloromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Dichlorodifluoromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Ethylbenzene	EPA 8260	**2,500**	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1,000*
Isopropylbenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
mixes-Xylenes	EPA 8260	**12,000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	*260*
Methyl Acetate	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Methyl Cyclohexane	EPA 8260	**3,000**	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Methyl tert-Butyl Ether	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*930*
Methylene Chloride	EPA 8260	ND	ND	ND	**9**	**6**	**8**	ND	**7**	ND	**6**	*50*
Styrene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Tetrachloroethene (PCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1,300*
Toluene	EPA 8260	**810**	ND	ND	ND	ND	ND	ND	ND	ND	ND	*700*
trans-1,2-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*190*
trans-1,3-Dichloropropene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Trichloroethene (TCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*470*
Trichlorofluoromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Vinyl Chloride	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*20*
BTEX	EPA 8260	2,500	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Total Compounds	**EPA 8260**	**19,310**	**ND**	**ND**	**23**	**18**	**26**	**ND**	**19**	**ND**	**6**	

All values are reported in ug/kg - parts per billions (ppb)

Analytical Facility - Adirondack Environmental Services, Inc. - Schenectady, NY

Values in RED Equal or Exceed NYS DEC Guidance Values

Values in **BOLD** indicate concentrations detected above laboratory minimum detection limits but below NYSDEC Guidance values

ND = Not Detected Above Laboratory's Minimum Detection Limits

NA = Not Applicable/Not Available

*[1] = NYSDEC Regulation 6 NYCRR Subpart 375 Unrestricted Use Soil Cleanup Objectives

TABLE 2
Summary of Soil
Analytical Results

Brandywine Plume Delineation Schenectady, Albany County, New York NYSDEC Spill No.: 9706794/ Pin No.: H0926 June 2009		Soil Sample Identification										NYSDEC Unrestricted Use Soil Cleanup Objective*[1]
Parameter	**Method**	**SB-K**	**SB-L**	**SB-M**	**SB-N**	**SB-O**	**SB-P**	**SB-Q**	**SB-R**	**SB-S**	**SB-T**	
Chloromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,1,1-Trichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*680*
1,1,2,2-Tetrachloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,1,2-Trichloro-1,2,2-trifluoroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,1,2-Trichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,1-Dichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*270*
1,1-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*330*
1,2,4-Trichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,2-Dibromo-3-chloropropane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,2-Dibromomethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,2-Dichlorobenze	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1,100*
1,2-Dichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*20*
1,2-Dichloropropane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,3-Dichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*2,400*
1,4-Dichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1,800*
2-Butanone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*120*
2-Hexanone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
4-Methyl-2-pentanone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Acetone	EPA 8260	ND	**10**	**10**	ND	ND	ND	ND	ND	ND	ND	*50*
Benzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*60*
Bromodichloromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Bromoform	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Bromomethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Carbon Disulfide	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Carbon Tertachloride	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*760*
Chlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1,100*
Chloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Chloroform	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*370*
cis-1,2-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*250*
cis-1,3-Dichloropropene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Cyclohexane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Dibromochloromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Dichlorodifluoromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Ethylbenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1,000*
Isopropylbenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
m.p-Xylene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*260*
Methyl Acetate	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Methyl Cyclohexane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Methyl tert-Butyl Ether	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*930*
Methylene Chloride	EPA 8260	**6**	**6**	**6**	ND	ND	ND	ND	ND	ND	ND	*50*
Styrene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Tetrachloroethene (PCE)	EPA 8260	ND	ND	ND	ND	ND	ND	**24**	**26**	ND	ND	*1,300*
Toluene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*700*
trans-1,2-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*190*
trans-1,3-Dichloropropene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Trichloroethene (TCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	**8**	ND	ND	*470*
Trichlorofluoromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Vinyl Chloride	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*20*
BTEX	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Total Compounds	**EPA 8260**	**6**	**16**	**16**	**ND**	**ND**	**ND**	**24**	**34**	**ND**	**ND**	

All values are reported in ug/kg - parts per billions (ppb)

Analytical Facility - Adirondack Environmental Services, Inc. - Schenectady, NY

Values in RED Equal or Exceed NYS DEC Guidance Values

Values in **BOLD** indicate concentrations detected above laboratory minimum detection limits but below NYSDEC Guidance values

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*[1] = NYSDEC Regulation 6 NYCRR Subpart 375 Unrestricted Use Soil Cleanup Objectives

TABLE 2
Summary of Soil
Analytical Results

Brandywine Plume Delineation Schenectady, Albany County, New York NYSDEC Spill No.: 9706794/ Pin No.: H0926 June 2009		Soil Sample Identification										NYSDEC Unrestricted Use Soil Cleanup Objective*[1]
Parameter	**Method**	**SB-U**	**SB-V**	**SB-W**	**SB-X**	**SB-Y**	**SB-Z**	**SB-AA**	**SB-AB**	**SB-AC**	**SB-AD**	
Chloromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,1,1-Trichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*680*
1,1,2,2-Tetrachloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,1,2-Trichloro-1,2,2-trifluoroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,1,2-Trichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,1-Dichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*270*
1,1-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*330*
1,2,4-Trichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,2-Dibromo-3-chloropropane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,2-Dibromomethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,2-Dichlorobenze	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1,100*
1,2-Dichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*20*
1,2-Dichloropropane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
1,3-Dichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*2,400*
1,4-Dichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1,800*
2-Butanone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*120*
2-Hexanone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
4-Methyl-2-pentanone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Acetone	EPA 8260	ND	**14**	**13**	ND	ND	ND	**17**	**16**	ND	**10**	*50*
Benzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*60*
Bromodichloromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Bromoform	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Bromomethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Carbon Disulfide	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Carbon Tertachloride	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*760*
Chlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1,100*
Chloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Chloroform	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*370*
cis-1,2-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*250*
cis-1,3-Dichloropropene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Cyclohexane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Dibromochloromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Dichlorodifluoromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Ethylbenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	**41**	*1,000*
Isopropylbenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	**49**	*NA*
m.p-Xylene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	**180**	*260*
Methyl Acetate	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Methyl Cyclohexane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	**67**	*NA*
Methyl tert-Butyl Ether	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*930*
Methylene Chloride	EPA 8260	ND	ND	ND	**6**	**9**	**10**	**8**	**10**	ND	ND	*50*
Styrene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Tetrachloroethene (PCE)	EPA 8260	ND	ND	**5**	**6**	ND	**12**	ND	ND	ND	ND	*1,300*
Toluene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*700*
trans-1,2-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*190*
trans-1,3-Dichloropropene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Trichloroethene (TCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*470*
Trichlorofluoromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*NA*
Vinyl Chloride	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*20*
BTEX	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	90	
Total Compounds	**EPA 8260**	**ND**	**14**	**18**	**12**	**9**	**22**	**25**	**26**	**ND**	**347**	

All values are reported in ug/kg - parts per billions (ppb)

Analytical Facility - Adirondack Environmental Services, Inc. - Schenectady, NY

Values in RED Equal or Exceed NYS DEC Guidance Values

Values in **BOLD** indicate concentrations detected above laboratory minimum detection limits but below NYSDEC Guidance values

ND = Not Detected Above Laboratory's Minimum Detection Limits

NA = Not Applicable/Not Available

*[1] = NYSDEC Regulation 6 NYCRR Subpart 375 Unrestricted Use Soil Cleanup Objectives

TABLE 2
Summary of Soil
Analytical Results

Brandywine Plume Delineation Schenectady, Albany County, New York NYSDEC Spill No.: 9706794/ Pin No.: H0926 June 2009		Soil Sample Identification							*NYSDEC Unrestricted Use Soil Cleanup Objective*[1]
Parameter	**Method**	**SB-AE**	**SB-AF**	**SB-AG**	**SB-AH**	**SB-AI**	**SB-AJ**	**SB-AK**	
Chloromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
1,1,1-Trichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*680*
1,1,2,2-Tetrachloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
1,1,2-Trichloro-1,2,2-trifluoroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
1,1,2-Trichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
1,1-Dichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*270*
1,1-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*330*
1,2,4-Trichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
1,2-Dibromo-3-chloropropane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
1,2-Dibromomethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
1,2-Dichlorobenze	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*1,100*
1,2-Dichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*20*
1,2-Dichloropropane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
1,3-Dichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*2,400*
1,4-Dichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*1,800*
2-Butanone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*120*
2-Hexanone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
4-Methyl-2-pentanone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
Acetone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*50*
Benzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*60*
Bromodichloromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
Bromoform	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
Bromomethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
Carbon Disulfide	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
Carbon Tertachloride	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*760*
Chlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*1,100*
Chloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
Chloroform	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*370*
cis-1,2-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*250*
cis-1,3-Dichloropropene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
Cyclohexane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
Dibromochloromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
Dichlorodifluoromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
Ethylbenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*1,000*
Isopropylbenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
m.p-Xylene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*260*
Methyl Acetate	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
Methyl Cyclohexane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
Methyl tert-Butyl Ether	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*930*
Methylene Chloride	EPA 8260	**6**	**5**	ND	ND	ND	ND	**5**	*50*
Styrene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
Tetrachloroethene (PCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*1,300*
Toluene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*700*
trans-1,2-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*190*
trans-1,3-Dichloropropene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
Trichloroethene (TCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*470*
Trichlorofluoromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*NA*
Vinyl Chloride	EPA 8260	ND	ND	ND	ND	ND	ND	ND	*20*
BTEX	EPA 8260	ND	ND	ND	ND	ND	ND	ND	
Total Compounds	**EPA 8260**	**6**	**5**	**ND**	**ND**	**ND**	**ND**	**5**	

All values are reported in ug/kg - parts per billions (ppb)

Analytical Facility - Adirondack Environmental Services, Inc. - Schenectady, NY

Values in RED Equal or Exceed NYS DEC Guidance Values

Values in **BOLD** indicate concentrations detected above laboratory minimum detection limits but below NYSDEC Guidance values

ND = Not Detected Above Laboratory's Minimum Detection Limits

NA = Not Applicable/Not Available

*[1] = NYSDEC Regulation 6 NYCRR Subpart 375 Unrestricted Use Soil Cleanup Objectives

TABLE 3
Summary of Groundwater
Analytical Results

Brandywine Plume Delineation **Schenectady, Albany County, New York** **NYSDEC Spill No.: 9706794/ Pin No.: H0926**		**Sample Identification**										*NYS DEC Groundwater Standards**
Parameter	**Method**	**MW-A**	**MW-B**	**MW-C**	**MW-E**	**MW-G**	**MW-H**	**MW-J**	**MW-K**	**MW-L**	**MW-M**	
Chloromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Bromomethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Vinyl Chloride	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*2*
Chloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Methylene Chloride	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Acetone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
Carbon Disulfide	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*60*
1,1-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
1,1-Dichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
trans-1,2-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
cis-1,2-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Chloroform	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*7*
1,2-Dichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*0.6*
2-Butanone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
1,1,1-Trichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1*
Carbon Tertachloride	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Bromodichloromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
1,2-Dichloropropane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1*
cis-1,3-Dichloropropene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*0.4*
Trichloroethene (TCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Dibromochloromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
1,1,2-Trichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1*
Benzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1*
trans-1,3-Dichloropropene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*0.4*
Bromoform	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
4-Methyl-2-pentanone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
2-Hexanone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
Tetrachloroethene (PCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
1,1,2,2-Tetrachloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Toluene	EPA 8260	**76**	ND	ND	ND	ND	ND	ND	**7**	ND	ND	*5*
Chlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Ethylbenzene	EPA 8260	**64**	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Styrene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
m.p-Xylene	EPA 8260	**230**	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
o-Xylene	EPA 8260	**92**	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Methyl tert-Butyl Ether	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*10*
Dichlorodifluoromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Methyl Acetate	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
1,1,2-Trichloro-1,2,2-trifluoroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Trichlorofluoromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Cyclohexane	EPA 8260	**26**	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
Methyl Cyclohexane	EPA 8260	**47**	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
1,2-Dibromomethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
1,3-Dichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*3*
Isopropylbenzene	EPA 8260	**7**	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
1,4-Dichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*3*
1,2-Dichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*3*
1,2-Dibromo-3-chloropropane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*0.04*
1,2,4-Trichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
BTEX	EPA 8260	462	ND	ND	ND	ND	ND	ND	7	ND	ND	
Total Compounds	**EPA 8260**	**542**	**ND**	**ND**	**ND**	**ND**	**ND**	**ND**	**7**	**ND**	**ND**	

All values are reported in ug/L - parts per billions (ppb)

Analytical Facility - Adirondack Environmental Services, Inc. - Schenectady, NY

Values in RED Equal or Exceed NYS DEC Guidance Values

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*NYS DEC - Division of Water Resources, Classes and Quality Standards for Ground Water, Chapter 10 of Title 6, Article 2, Part 703

TABLE 3
Summary of Groundwater
Analytical Results

Brandywine Plume Delineation **Schenectady, Albany County, New York** **NYSDEC Spill No.: 9706794/ Pin No.: H0926**		**Sample Identification**										*NYS DEC Groundwater Standards**
Parameter	**Method**	**MW-N**	**MW-O**	**MW-P**	**MW-Q**	**MW-R**	**MW-S**	**MW-T**	**MW-U**	**MW-W**	**MW-X**	
Chloromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Bromomethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Vinyl Chloride	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*2*
Chloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Methylene Chloride	EPA 8260	ND	ND	ND	ND	ND	**5.1 B**	ND	ND	ND	ND	*5*
Acetone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
Carbon Disulfide	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*60*
1,1-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
1,1-Dichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
trans-1,2-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
cis-1,2-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	ND	**70**	**25**	ND	ND	**7**	*5*
Chloroform	EPA 8260	**6**	**9**	ND	ND	ND	ND	ND	ND	ND	ND	*7*
1,2-Dichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*0.6*
2-Butanone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
1,1,1-Trichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1*
Carbon Tertachloride	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Bromodichloromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
1,2-Dichloropropane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1*
cis-1,3-Dichloropropene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*0.4*
Trichloroethene (TCE)	EPA 8260	ND	ND	ND	ND	ND	**9**	ND	ND	ND	ND	*5*
Dibromochloromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
1,1,2-Trichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1*
Benzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1*
trans-1,3-Dichloropropene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*0.4*
Bromoform	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
4-Methyl-2-pentanone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
2-Hexanone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
Tetrachloroethene (PCE)	EPA 8260	ND	ND	ND	**13**	**42**	**17**	ND	ND	**8**	**25**	*5*
1,1,2,2-Tetrachloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Toluene	EPA 8260	**8**	**23**	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Chlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Ethylbenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Styrene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
m.p-Xylene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
o-Xylene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Methyl tert-Butyl Ether	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*10*
Dichlorodifluoromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Methyl Acetate	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
1,1,2-Trichloro-1,2,2-trifluoroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Trichlorofluoromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Cyclohexane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
Methyl Cyclohexane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
1,2-Dibromomethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
1,3-Dichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*3*
Isopropylbenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
1,4-Dichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*3*
1,2-Dichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*3*
1,2-Dibromo-3-chloropropane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*0.04*
1,2,4-Trichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
BTEX	EPA 8260	8	23	ND	ND	ND	ND	ND	ND	ND	ND	
Total Compounds	**EPA 8260**	**14**	**32**	**ND**	**13**	**42**	**96**	**25**	**ND**	**8**	**32**	

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Analytical Facility - Adirondack Environmental Services, Inc. - Schenectady, NY

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TABLE 3
Summary of Groundwater
Analytical Results

Brandywine Plume Delineation **Schenectady, Albany County, New York** **NYSDEC Spill No.: 9706794/ Pin No.: H0926**		**Sample Identification**										*NYS DEC Groundwater Standards**
Parameter	**Method**	**MW-Z**	**MW-AB**	**MW-AD**	**MW-AE**	**MW-AF**	**MW-AG**	**MW-AH**	**MW-AI**	**MW-AJ**	**MW-AK**	
Chloromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Bromomethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Vinyl Chloride	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*2*
Chloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Methylene Chloride	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Acetone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
Carbon Disulfide	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*60*
1,1-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
1,1-Dichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
trans-1,2-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
cis-1,2-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	ND	ND	**22**	ND	ND	**6**	*5*
Chloroform	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*7*
1,2-Dichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*0.6*
2-Butanone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
1,1,1-Trichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1*
Carbon Tertachloride	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Bromodichloromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
1,2-Dichloropropane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1*
cis-1,3-Dichloropropene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*0.4*
Trichloroethene (TCE)	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Dibromochloromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
1,1,2-Trichloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1*
Benzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*1*
trans-1,3-Dichloropropene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*0.4*
Bromoform	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
4-Methyl-2-pentanone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
2-Hexanone	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
Tetrachloroethene (PCE)	EPA 8260	**28**	**5**	ND	ND	ND	ND	**11**	ND	**14**	**11**	*5*
1,1,2,2-Tetrachloroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Toluene	EPA 8260	ND	**5**	**7**	ND	ND	ND	ND	ND	ND	ND	*5*
Chlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Ethylbenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Styrene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
m.p-Xylene	EPA 8260	ND	ND	**6**	ND	ND	ND	ND	ND	ND	ND	*5*
o-Xylene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Methyl tert-Butyl Ether	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*10*
Dichlorodifluoromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Methyl Acetate	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
1,1,2-Trichloro-1,2,2-trifluoroethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Trichlorofluoromethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
Cyclohexane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
Methyl Cyclohexane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
1,2-Dibromomethane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5**
1,3-Dichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*3*
Isopropylbenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
1,4-Dichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*3*
1,2-Dichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*3*
1,2-Dibromo-3-chloropropane	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*0.04*
1,2,4-Trichlorobenzene	EPA 8260	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	*5*
BTEX	EPA 8260	ND	5	13	ND	ND	ND	ND	ND	ND	ND	
Total Compounds	**EPA 8260**	**28**	**10**	**13**	**ND**	**ND**	**ND**	**33**	**ND**	**14**	**17**	

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Analytical Facility - Adirondack Environmental Services, Inc. - Schenectady, NY

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TABLE 3
Summary of Groundwater
Analytical Results

Brandywine Plume Delineation **Schenectady, Albany County, New York** **NYSDEC Spill No.: 9706794/ Pin No.: H0926**		**Sample Identification**				*NYS DEC Groundwater Standards**
Parameter	**Method**	**MW-2**	**MW-6**	**MW-7**	**MW-9**	
Chloromethane	EPA 8260	ND	ND	ND	ND	*5*
Bromomethane	EPA 8260	ND	ND	ND	ND	*5*
Vinyl Chloride	EPA 8260	ND	ND	ND	ND	*2*
Chloroethane	EPA 8260	ND	ND	ND	ND	*5*
Methylene Chloride	EPA 8260	ND	ND	ND	ND	*5*
Acetone	EPA 8260	ND	ND	ND	ND	*5**
Carbon Disulfide	EPA 8260	ND	ND	ND	ND	*60*
1,1-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	*5*
1,1-Dichloroethane	EPA 8260	ND	ND	ND	ND	*5*
trans-1,2-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	*5*
cis-1,2-Dichloroethene (DCE)	EPA 8260	ND	ND	ND	ND	*5*
Chloroform	EPA 8260	ND	ND	ND	ND	*7*
1,2-Dichloroethane	EPA 8260	ND	ND	ND	ND	*0.6*
2-Butanone	EPA 8260	ND	ND	ND	ND	*5**
1,1,1-Trichloroethane	EPA 8260	ND	ND	ND	ND	*1*
Carbon Tertachloride	EPA 8260	ND	ND	ND	ND	*5*
Bromodichloromethane	EPA 8260	ND	ND	ND	ND	*5**
1,2-Dichloropropane	EPA 8260	ND	ND	ND	ND	*1*
cis-1,3-Dichloropropene	EPA 8260	ND	ND	ND	ND	*0.4*
Trichloroethene (TCE)	EPA 8260	ND	ND	ND	ND	*5*
Dibromochloromethane	EPA 8260	ND	ND	ND	ND	*5**
1,1,2-Trichloroethane	EPA 8260	ND	ND	ND	ND	*1*
Benzene	EPA 8260	ND	ND	ND	ND	*1*
trans-1,3-Dichloropropene	EPA 8260	ND	ND	ND	ND	*0.4*
Bromoform	EPA 8260	ND	ND	ND	ND	*5**
4-Methyl-2-pentanone	EPA 8260	ND	ND	ND	**17**	*5**
2-Hexanone	EPA 8260	ND	ND	ND	ND	*5**
Tetrachloroethene (PCE)	EPA 8260	ND	ND	ND	ND	*5*
1,1,2,2-Tetrachloroethane	EPA 8260	ND	ND	ND	ND	*5*
Toluene	EPA 8260	ND	ND	ND	ND	*5*
Chlorobenzene	EPA 8260	ND	ND	ND	ND	*5*
Ethylbenzene	EPA 8260	ND	ND	ND	**40**	*5*
Styrene	EPA 8260	ND	ND	ND	ND	*5*
m.p-Xylene	EPA 8260	ND	ND	ND	**49**	*5*
o-Xylene	EPA 8260	ND	ND	ND	**8**	*5*
Methyl tert-Butyl Ether	EPA 8260	ND	ND	ND	ND	*10*
Dichlorodifluoromethane	EPA 8260	ND	ND	ND	ND	*5*
Methyl Acetate	EPA 8260	ND	ND	ND	ND	*5**
1,1,2-Trichloro-1,2,2-trifluoroethane	EPA 8260	ND	ND	ND	ND	*5*
Trichlorofluoromethane	EPA 8260	ND	ND	ND	ND	*5*
Cyclohexane	EPA 8260	ND	ND	ND	**29**	*5**
Methyl Cyclohexane	EPA 8260	ND	ND	ND	**23**	*5**
1,2-Dibromomethane	EPA 8260	ND	ND	ND	ND	*5**
1,3-Dichlorobenzene	EPA 8260	ND	ND	ND	ND	*3*
Isopropylbenzene	EPA 8260	ND	ND	ND	**33**	*5*
1,4-Dichlorobenzene	EPA 8260	ND	ND	ND	ND	*3*
1,2-Dichlorobenzene	EPA 8260	ND	ND	ND	ND	*3*
1,2-Dibromo-3-chloropropane	EPA 8260	ND	ND	ND	ND	*0.04*
1,2,4-Trichlorobenzene	EPA 8260	ND	ND	ND	ND	*5*
BTEX	EPA 8260	ND	ND	ND	97	
Total Compounds	**EPA 8260**	**ND**	**ND**	**ND**	**199**	

All values are reported in ug/L - parts per billions (ppb)

Analytical Facility - Adirondack Environmental Services, Inc. - Schenectady, NY

Values in RED Equal or Exceed NYS DEC Guidance Values

Values in **BOLD** indicate concentrations detected above laboratory minimum detection limits but below NYSDEC Guidance values

ND = Not Detected Above Laboratory's Minimum Detection Limits

B = Laboratory Qualifier: analyte detected in the associated method blank

E = Laboratory Qualifier: value above quantitative range

NA = Not Applicable/Not Available

*NYS DEC - Division of Water Resources, Classes and Quality Standards for Ground Water, Chapter 10 of Title 6, Article 2, Part 703

Attachment D:
Laboratory Analytical Reports