FIRST ENVIRONMENT

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March 8, 2019

Ardsley, LLC
1515 Des Peres Road, Suite 300
St. Louis, MO 63131
c/o Mr. Daniel Dunn

Re: Remedial Investigation Summary Report
Former Akzo Nobel Plant
One Lawrence Street
Ardsley, New York
NYSDEC Site No. C360146

Dear Mr. Dunn:

As requested, First Environment, Inc. (First Environment) completed supplemental remedial investigation (RI) activities at the above-referenced site (the "Site") in order to delineate the extent of contaminants of concern previously identified in soil and groundwater by others. These activities were conducted to support the regulatory closure of the Site with the ultimate goal of attaining a Certificate of Completion from the New York Department of Environmental Conservation (NYSDEC). All work was completed in accordance with the requirements of the *DER-10/Technical Guidance for Site Investigation and Remediation (DER-10), CP-51/Soil Cleanup Guidance,* and *6 NYCRR Part 375: Environmental Remediation Programs* dated December 14, 2006. Historical soil analytical results collected by others are provided on Tables 1A, 1B, 2, and 2A.

The Former Akzo Nobel Pilot Plant property is located on Lawrence Street in the Village of Ardsley, New York. The property is located in the Saw Mill River valley and is situated between the Saw Mill River Parkway and a branch of the Saw Mill River to the west and a branch of the Saw Mill River to the east. Lawrence Street borders the property to the south and undeveloped land borders the property to the north. A branch of the Saw Mill River, a tributary of the Hudson River, flows in a general easterly direction in the northern portion of the Site and then bends toward the south before splitting and flowing along the Site's eastern and western boundaries. A Site Location Map and Site Plan are included in Attachment 1.

The Site is 9.62 acres in area and formerly contained seven freestanding structures and a guard house that were demolished in 2008-2009. Most of the property is covered by impervious surfaces (i.e., remnants of building slabs, and asphalt pavement), with the exception of an area of undeveloped land to the north of the main parking lot, which is located at the northern portion of the property. The remainder of the Site is covered by asphalt parking areas, landscaped areas, and clean brick and concrete rubble, which was used to grade the Site following demolition activities. No current operations are active as the Site awaits opportunities for redevelopment.

Technical Overview

The collection of all soil and groundwater samples was performed in accordance with the Technical Guidance for Site Investigation and Remediation (NYSDEC DER-10, May 2010). All samples were placed in laboratory coolers that were chilled to 4ºC with a completed chain-of-custody. Laboratory analyses were performed by TestAmerica Laboratories of Edison, New Jersey, a New York State Department of Health ELAP-certified laboratory (Certification No.11452), using accepted and current United States Environmental Protection Agency (US EPA) analytical methods. Samples were handled and analyzed in compliance with sample holding times, method detection limits, and precision and accuracy criteria for the analytical method. No significant events or seasonal variations occurred that may have influenced sampling procedures or analytical results. Summary tables of analytical results are provided as Attachment 2.

Standards, Criteria, and Guidance (SCGs)

Numerous standards, criteria, and guidance (SCGs) are applicable, or potentially applicable, to this project. The extensive list of SCGs potentially applicable to this BCP Site was provided in Appendix A of the RI Work Plan. This list is based on the lists of SCGs for all constituents and as provided in Section 3.2, 3.5, 3.6, 3.7, and 3.11 of the DER-10.

Quality Assurance/Quality Control

The Quality Assurance/Quality Control (QA/QC) procedures were conducted as described in the Quality Assurance Project Plan (QAPP) provided as Appendix C of the RI Work Plan. Laboratory reduced data deliverables are provided as Attachment 3.

Remedial Investigation

A summary of the RI activities conducted by First Environment is presented below.

Soil Boring Installation and Sampling – July 2018

On July 17 and 18, 2018, First Environment conducted a soil investigation at the Site. The purpose of the soil investigation was to complete delineation of soil impacts at the following areas of concern: Former Solvent Shed, the Former RCRA Shed, the Former Carbon Disulfide UST Vault, the Former White House Building Vault, and Pesticide Impacted Soil. Pennington Environmental, Inc. (Pennington), under the direct supervision of First Environment, utilized a direct push drill rig (i.e., Geoprobe®) to advance 17 soil borings (FE-SB-1 through FE-SB-14, SB-49C, SB74C, and VES-1) to depths ranging from 5.0 and 15.0 feet bgs at the Site. A First Environment geologist described the recovered soil using the Modified Burmister Soil Classification Scheme and used a photoionization detector (PID) with a 10.6 eV bulb and visual/olfactory means to field screen the soil for signs of impact (i.e., staining, odors, elevated PID readings). The soil encountered consisted primarily of black to brown sand, silt, and gravels. PID readings ranged from 0.0 ppm in FE-SB-3 to 36.1 ppm in boring VES-1. Saturated soil was encountered at depths ranging from 5.5 and 7.0 feet bgs. Soil boring logs are provided in Attachment 4.

First Environment collected a total of 21 soil samples at various depths from the soil borings. The soil samples were submitted to TestAmerica for analysis specific to the AOC, as outlined in the July 2017 RIWP.

A summary of sample collection data including sample depth, photoionization detector (PID) readings, and analytical parameters is included in Table 3. Boring locations and analytical results

are provided on Figures 3 through 7 (see Attachment 1). Soil analytical data is presented on Tables 4 thorough 8 (see Attachment 2).

A summary of the soil investigation activities and corresponding analytical results for each AOC is provided below.

Analytical Results

Former Solvent Shed

Eight soil samples, including FE-SB-1 (2.5-3, FE-SB-2 (2.5-3), FE-SB-2A (2.5-3), FE-SB-3 (2.5-3), FE-SB-4 (2.5-3), FE-SB-5 (2.5-3), VES-1 (13.5-14), and VES-1A (22.5-23) were collected and analyzed for VOCs. The analytical results for the soil samples collected at the Former Solvent Shed are summarized in Table 4, and the sample locations are depicted on Figure 3. The analysis detected select VOCs in all six soil samples collected in July 2018. Samples FE-SB-1 (2.5-3), FE-SB-2 (2.5-3), FE-SB-3 (2.5-3) all contained 1,2-dichloroethene at respective concentrations of 0.47 ppm, 0.16 ppm, and 0.18 ppm, which all exceed the NYSDEC Unrestricted Use Soil Cleanup Objective (UUSC0) but are below the NYSDEC Restricted Commercial Soil Cleanup Objective (RCSCO). Methylene Chloride was found in FE-SB-1 (2.5-3) at 0.094 ppm and FE-SB-3 (2.5-3) at 0.051 ppm, which exceed the UUSCO. Sample FE-SB-3 (2.5-3) also contained chloroform at 0.58 ppm and ethylbenzene at 1.1 ppm, which exceed the UUSCO. Sample VES-1 (13.5-14) contained benzene at 0.26 ppm, which exceeds the UUSCO. PCE was detected in all six samples; however, only FE-SB-1 (2.5-3) at 92 ppm, FE-SB-2 (2.5-3) at 25 ppm, FE-SB-3 (2.5-3) at 45 ppm, FE-SB-5 (2.5-3) at 67 ppm, and VES-1 (13.5-14) at 33 ppm exceeded the UUSCO but were below the Residential Soil Cleanup Objective (RSCO)

Former RCRA Shed

Three soil samples, including FE-SB-6 (0-0.5), FESB-6 (1.5-2), and FE-74C (7.5-8) were collected at the Former RCRA Shed and analyzed for PCBs. The analytical results for soil samples collected at the Former RCRA Shed are presented on Table 5 and the sample locations are depicted on Figure 4.

The analytical results indicated that sample FE-SB-6 (0-0.5) exhibited a PCB (Aroclor 1254) concentration of 0.98 ppm, which exceeds the UUSCO of 0.1 ppm but is below the RCRSCO of 1.0 ppm. Sample FE-SB-6 (1.5-2.0) exhibited a PCB Aroclor 1254 concentration of 3.0 ppm, which exceeds the RCSCO of 1.0 ppm. PCBs were not detected in SB-74C (7.5-8).

Former Carbon Disulfide Vault

Seven soil samples, including FE-SB-7 (8-8.5), FE-SB-8 (7.5-8), FE-SB-9 (8-8.5), FE-SB-10 (8-8.5), FE-SB-11 (8-8.5), FE-SB-11 (10-10.5), and FE-SB-11 (14.5-15) were collected at the Former Carbon Disulfide Vault area and analyzed for lead (Pb). The analytical results for the samples collected from the carbon disulfide vault are presented in Table 6 and the sample locations are depicted on Figure 5.

The analytical results revealed the presence of lead in five of the samples at concentrations ranging from 1.7 ppm in FE-SB-11 (14.5-15) to 78.5 ppm in FE-SB-7 (8-8.5). Lead was not detected in sample FE-SB-11 (10-10.5), while the reported concentration in sample FE-SB-7 (8-8.5) exceeded the UUSCO, all concentrations remained below the RCSCO of 1,000 ppm.

Former White House Building Vault

The analytical results for the samples collected from the Former White House Building Vault are presented in Table 7 and the sample locations are depicted on Figure 6. The VOC analysis for samples FE-SB-12 (5-5.5), FE-SB-13 (5-5.5), SB-49C (7.5-8), and SB-49C (9.5-10) revealed that, with the exception of acetone, VOC concentrations were either not detected or were present at concentrations below their respective UUSCO. Acetone was detected in all five samples at concentrations ranging from 0.010 ppm in sample SB-49C (9.5-10) to 0.11 ppm in sample FE-SB-12 (5-5.5), which exceeds the UUSCO of 0.05 ppm; however, acetone was also detected in the laboratory method blank, which indicates that the presence of acetone in these samples is a laboratory artifact.

Pesticide Impacted Soils

The analytical results for samples SB-10 (4.0-4.5) and SB-10 (10-10.5) that were collected from the pesticide impacted soil area are presented in Table 8 and the sample locations are depicted on Figure 7. The pesticide analysis revealed that sample SB-10 (4-4.5) contained 0.47 ppm of dieldrin, which was below the CSCC. Sample SB-10 (10-10.5) contained 0.0012 ppm of dieldrin which was below the POG SCO but exceeded the UUSCO.

Supplemental Soil Boring Installation and Sampling Event – September 13, 2018

On September 13, 2018, First Environment returned to the Site with Pennington to supervise the installation of two soil borings (FE-SB-2A and FE-SB-2B) to complete horizontal delineation of PCE at the Former Solvent Shed. FE-SB-2A was installed approximately 10 feet south of soil boring FE-SB-2 and FE-SB-2B was installed approximately 10 feet south of FE-SB-2A. Soil borings are provided in Attachment 4.

An additional soil boring, VES-1A, was installed directly adjacent to VES-1 to complete vertical delineation of VOCs.

Soils encountered consisted of brown to black sand, clay, and silt. PID readings ranged from 1.2 to 2.2 ppm in FE-SB-2A, 0.2 in FE-SB-2B, and 0.0 in VES-1A. FE-SB-2A and FE-SB-2B were advanced to a depth of 2.5 to 3.0 feet bgs. One soil sample was collected from each boring at a depth of 2.5 to 3.0 feet bgs. In addition, VES-1A was advanced to a depth of 40.0 feet bgs. One soil sample was collected at a depth of 22.5 to 23.0 feet bgs. A summary of field screening results and sample collection data is provided in Table 2.

Analytical Results

The analytical results for samples VES-1A (22.5-23) and SB-2A (2.5-3) are presented on Table 4 and the boring locations are depicted on Figure 3. The analytical results revealed that VOC concentrations in samples FE-SB-2A (2.5-3) and VES-1A (22.5-23) were either not detected or detected at concentrations below the UUSSO. Specifically, PCE was detected in FE-SB-2A (2.5-3) at 0.23 ppm and 0.0089 ppm in VES-1A (22.5-23), both of which are below the UUSCO and POG SCO of 1.3 ppm. Based on the analytical results for FE-SB-2A (2.5-3), analysis for FE-SB-2B (2.5-3) was not activated.

Groundwater Sampling – August 16, 2018

First Environment collected groundwater samples at the Site on August 16, 2018. Monitoring wells MW-1 and MW-2) were sampled in accordance with the low-flow procedures outlined in the July 2017 RIWP.

Prior to initiating the sampling activities, the headspace of each well was monitored using a properly calibrated PID and depth-to-water/product measurements were recorded for each well using the TOC as a reference point. The depth-to-water measurements, combined with the results from the vertical elevation well survey, provided the necessary information to construct a groundwater contour map. Groundwater elevation measurements indicated a fairly flat hydraulic gradient, with groundwater flow towards the south-southeast. The well gauging data are provided on the well sampling logs provided in Attachment 5. Monitoring well MW-3 could not be located and a depth-to-groundwater measurement was not collected from this location; therefore, a groundwater elevation contour map was not developed.

Following the water level measurement, First Environment utilized the low-flow purge/sample procedure to collect groundwater samples from the monitoring wells. Field parameters, including pH, temperature, dissolved oxygen, turbidity, and specific conductance, were measured and recorded. Field sampling parameter results (obtained during well purging and at the time of well sampling) are summarized on the well sampling logs provided in Attachment 5. Upon completion of purging, a sample was collected using a dedicated polyethylene tubing and submitted to TestAmerica for analysis for TCL VO+15, 1,4-dioxane, and PFO/PFAs.

Analytical Results

Figure 8 illustrates the monitoring well locations and accompanying analytical results. In addition, the analytical results for the groundwater sampling event are summarized on Table 9. The analytical results for the August 16, 2018 groundwater sampling event revealed the following:

- No targeted VOCs or VO tentatively identified compounds (TICs)or SVOCs were detected in MW-1.
- MW-2 contained 0.41 ppb of chloroform, 4.3 ppb of PCE, and 0.74 ppb of trichlorofluoromethane. The reported concentrations for these compounds were all below the NYSDEC AGWQS.
- The laboratory analysis did not detect 1,4-dioxane in either sample.
- The analysis for PFBAs reported the following:
    - 6.2 FTS was detected at an estimated concentration of 8.9 ppb in MW-1 and 6.5 ppb in MW-2.
    - Perfluorobutanesulfonic acid at 1.8 ppb in MW-1 and not detected in MW-2
    - Perfluorobutanoic acid at 4.7 ppb in MW-1 and not detected in MW-2; however, Perfluorobutanoic acid was also detected in the laboratory blank and may represent a laboratory artifact.
    - Perfluoroheptanesulfonic acid was detected at an estimated concentration of 0.21 ppb in MW-1 and 0.33 in MW-2.
    - Perfluoroheptanoic acid was detected at 1.9 ppb in MW-1 and 3.9 ppb in MW-2.
    - Perfluorohexanesulfonic acid was detected at 3.4 ppb in MW-1 and an estimated concertation of 0.85 ppb in MW-2; however, perfluoroheacesulfonic acid was also detected in the laboratory blank and may represent a laboratory artifact.
    - Perfluorohexanoic acid was detected at 2.8 ppb in MW-1 and 4.6 ppb in MW-2.
    - Perfluorononanoic acid was detected at an estimated concentration of 0.55 ppb in MW-1 and 7.8 ppb in MW-2.

- Perfluorooctanesulfonic acid was detected in MW-1 at 5.0 ppb and 7.8 ppb in MW-2.
- Perfluorooctanoic acid was detected in MW-1 at 6.6 ppb and in MW-2 at 13 ppb.
- Perfluoropentanoic acid was detected in MW-1 at 3.9 ppb and MW-2 at 9.5 ppb.
- DIethyltoluamide was detected in MW-2 at an estimated concentration of 6.7 ppb. No result was reported for MW-1.

Aquifer Testing – September 13, 2018

On September 13, 2018, First Environment conducted rising head slug tests at monitoring wells MW-1 and MW-2. Falling head aquifer tests were not conducted as this is not an appropriate test for wells where the screened interval spans the water table of an unconfined aquifer such as is present at the Site. The primary objective of the slug tests was to provide data necessary for calculating the hydraulic conductivity of the aquifer.

Prior to installation, all downhole equipment (pressure transducer and slug) was thoroughly decontaminated to prevent potential cross-contamination issues. The static water level within each well was measured and recorded. A pressure transducer was placed into the well to a depth immediately above the bottom of the screened interval. The transducer was connected to an In-Situ Rugged Reader data logger for data logging purposes and allowed to thermally equilibrate prior to the start of the test. A one-inch diameter five-foot long slug filled with water was placed in the well and secured until the water level equilibrated. After the water level equilibrated the slug was removed, causing the water level to drop. Recharge of the well caused the water level to rise. The change in water level was continuously logged via the pressure transducer and data logger. The water level was allowed to recover to a minimum of 90 percent of the pre-slug removal water level condition before the test was stopped.

Aquifer Testing Results

The data collected during the aquifer testing was analyzed using the United States Geologic Survey Spreadsheet with the Bouwer and Rice Method to calculate hydraulic conductivity (K). The spreadsheet produced a K of 13 feet per day (ft/day) for MW-1 and 1.7 ft/day for MW-2. Based on the shape of the curve and values available in reference data for the soil type, a value of 13 is anomalous and probably represents the monitoring well filter; not the formation. A K value of 1.7 is more representative of the type of soil found at the Site. Copies of the spreadsheet results are provided in Attachment 6.

Findings

The following provides a summary of the investigation activities and results. First Environment conducted two rounds of soil sampling, a single round of groundwater samples, and a round of aquifer testing. The findings are presented below:

Former Solvent Shed

The highest concentration of PCE was reported as 100 ppm at the Former Solvent Shed Area in boring VES-1A at a depth of 2.5 to 4.0 feet bgs. The horizontal extent of PCE-impacted soil is defined to the UUSCO of 1.3 ppm approximately 26 feet to the north by 0.159 ppm in sample SB-15 (3.0-4.0); approximately 21 feet to the east by 0.0757 ppm in sample SB-52 (6.5-7.0), approximately 46 feet to the southeast by 0.0061 ppm in sample FE-SB-4 (2.5-3), approximately 42 feet to the south-southeast by 0.23 ppm in sample FE-SB-2A (2.5-3.0), and approximately 41 feet to the northwest by a non-detect value in sample VB-6 (2.5-4). The analytical result for

sample VES-1A (22.5-23), which exhibited a PCE with a concentration of 0.0089 ppm, confirms the vertical extent of PCE

Former RCRA Shed

Analysis of soil samples from boring SB-74 show PCB concentrations of 3.44 ppm at 0 to 2.0 feet decreasing to 2.57 ppm at 5.5 to 6.0 feet bgs, with vertical delineation being achieved at 7.5 to 8.0 feet bgs with no PCBs detected in sample SB-74C. Horizontal delineation was achieved to the UUCO approximately 25 feet to the north in SB-75 (ND), approximately 33 feet to the west in VB-8 (0.095 ppm), and to the CSCO approximately 44 feet to the south of VB-13 (0.16 ppm). Boring VB-19 was advanced to the east; however, no analytical data was available.

Former Carbon Disulfide Vault

Lead exceeding the CSCO of 1,000 ppm at the Former Carbon Disulfide Shed was detected at a concentration 10,600 ppm at 8.0 to 8.5 feet below grade in Test Pit number 6. Lead concentrations at the Former Carbon Disulfide vault are delineated to the UUSCO of 63 ppm approximately 18 feet to the north by 78.5 ppm in FE-SB-7 (8-8.5); approximately 18 feet to the east by sample FE-SB-8 (8-8.5) with 47.7 ppm; approximately 21 feet to the south by FE-SB-9 (8-8.5) with 30.4 ppm; and approximately 21 feet to the west by FE-SB-10(8-8.5) with 6.5 ppm. Analysis of sample FE-SB-11 (10-10.5) reported that lead was non-detect, which completed vertical delineation to the UUSCO.

Former White House Vault

PCE exceeding the UUSCO of 1.3 ppm at the Former White House Vault was detected at a concentration of 23.9 ppm at 5.0 to 5.5 feet below grade in sample SB-49B. Horizontal delineation was initially achieved to the UUSCO with a result of not detected approximately 12 feet to the north-northwest in sample SB-55, with 0.0012 ppm approximately 47 feet to the northeast in sample SB-44, with a result of not detected to the south in SB-48, and approximately 23 feet to the southwest in SB-43. No samples were previously collected east of boring SB-49B.

Analysis of soil samples collected during the RI refined the horizontal extent of PCE to the UUSCO to 18 feet the northeast by sample FE-SB-12 (5-5.5) with 0.0002 ppm and approximately 14 feet to the east-southeast by sample FE-SB-13 (5-5.5) with 0.0068 ppm. Vertical delineation was completed at 9.5 to 10 feet bgs with a PCE concentration of 0.003 ppm in sample SB-49C.

Pesticide Impacted Soil

A dieldrin concentration of 6.47 ppm, which exceeds the UUSCO of 0.005 ppm, POG SCO of 0.1 ppm, and CSCO of 1.4 ppm was detected at 7.0 to 8.0 feet bgs in boring SB-10. Dieldrin concentrations adjacent to soil boring SB-10 were horizontally delineated to the CSCO of 1.4 ppm approximately 13 feet to the north in SB-79 (0.129 ppm); approximately 12 feet to the south in SB-80 at 0.0191 ppm; and approximately 17 feet to the west in SB-77 at 0.0228 ppm. Dieldrin is delineated to the UUSCO approximately 17 feet to the east in SB-78 with no dieldrin detected. Vertical delineation to the CSCO was refined in SB-10(10-10.5) with 0.012 ppm.

Groundwater

As stated in Vertex's October 2014 letter, the primary groundwater contaminants are PCE and carbon disulfide. Vertex determined that the source area for PCE is the Former Solvent Shed adjacent to boring SB-16 and potentially the Former White House Vault near SB-49. The results of additional temporary wells installed at the Site indicates that groundwater impacts could extend

approximately 240 feet south to VES-11GW, which exhibited a PCE concentration of 13 ppb, and 110 feet to the southeast to VES-10, which exhibited a PCE concentration of 7.4 ppb. No PCE data for points south of these locations were discussed in Vertex's letter. A degradation product of PCE, vinyl chloride (2.3 ppb), was detected at concentrations in VES-13, which is located approximately 310 feet south-southeast of VES-1A. VES-1A also reported cis-1,2-dichloroethene at 17 ppb.

Vertex also identified two separate carbon disulfide sources; the first originating at the Former Solvent Shed and the second originating at the Former Carbon Disulfide Shed. The Carbon Disulfide impacts from the Former Solvent Shed could extend 87 feet south to VES-2 with a concentration of 640 ppb. Groundwater samples collected south of VES-2 did not contain carbon disulfide. The groundwater impacts from the Former Carbon Disulfide Shed were delineated by VES-11 (located approximately 112 feet to the southwest) and VES-12GW (located approximately 75 feet to the south-southeast), both which revealed no detectable concentrations of carbon disulfide.

Analysis of the groundwater sample collected from MW-1 revealed that no VOCs were detected. Analysis of the groundwater sample from MW-2 revealed that chloroform at 0.41 ppb, PCE at 4.3 ppb, and trichlorofluoromethane at 0.74 ppb; all below the applicable limits. MW-3 could not be located and therefore was not sampled.

We trust that this RI summary letter is responsive to your needs. Should you require additional information, please contact me at (973) 334-0003, or ddl@firstenvironment.com.

Best regards,

FIRST ENVIRONMENT, INC.

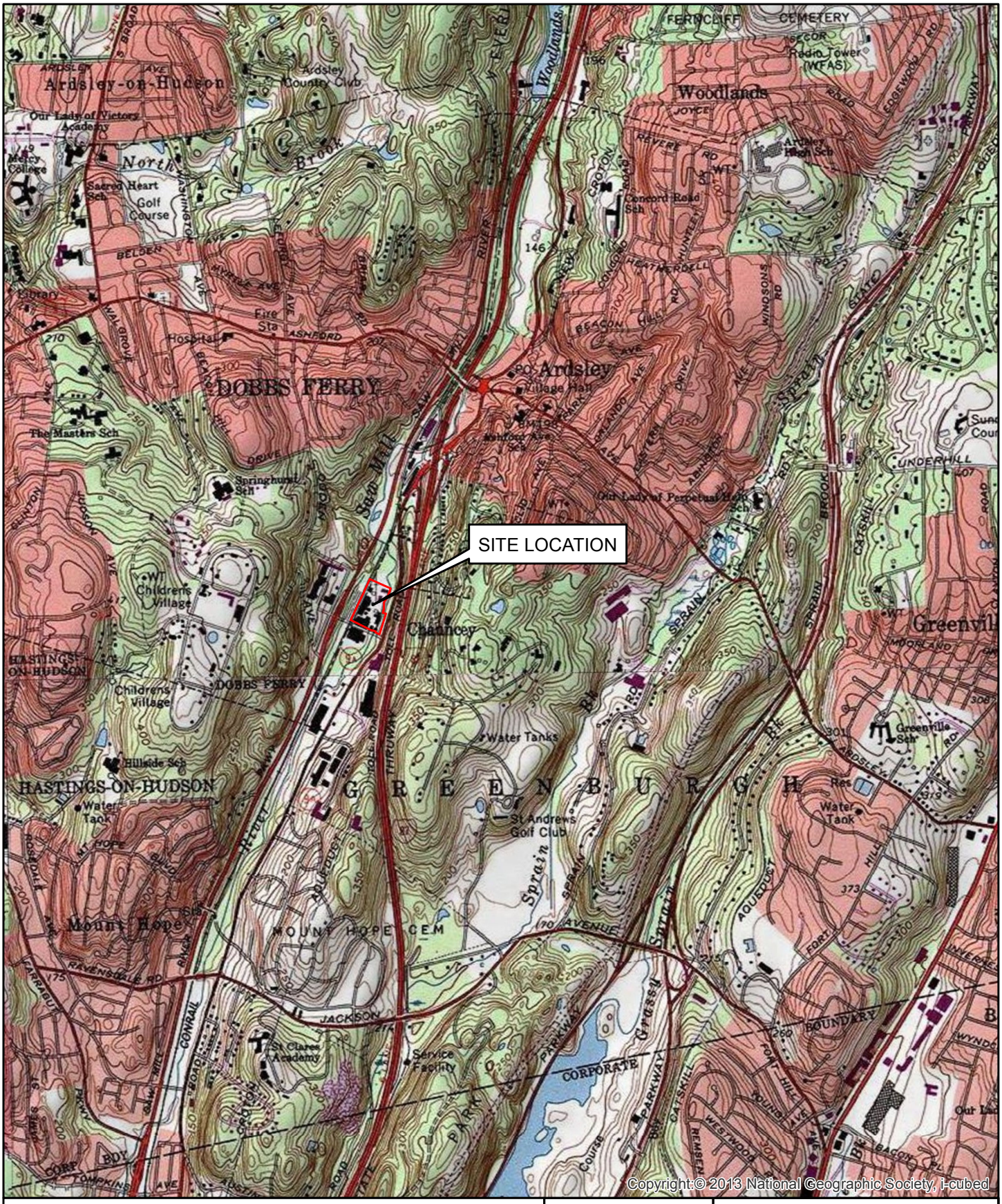
Daniel D. Lattanzi, LSRP
Senior Associate

Attachments:

- Attachment 1 - FIGURES
  - 1 – Site Location
  - 2 – Site Plan
  - 3 – Former Solvent Shed Area
  - 4 – Former RCRA Shed Area
  - 5 – Former Carbon Disulfide UST Area
  - 6 – Former White House Building Area
  - 7 – Pesticide-Impacted Soil Area
  - 8 – Groundwater Sampling Locations

- Attachment 2 - TABLES
  - 1 – Historical Soil Results - VOCs
  - 1A – Historical Soil Results - Pesticides and PCB s
  - 1B – Historical Soil Results - Metals
  - 2 – Historical Groundwater Results – VOCs and SVOCs
  - 2A - Historical Groundwater Results – Metals, Pesticides, and PCBs
  - 3 – Sample Summary
  - 4- Former Solvent Shed Area
  - 5 – Former RCRA Shed Area
  - 6 – Former Carbon Disulfide UST Area
  - 7 – Former White House Building Area
  - 8 – Pesticide-Impacted Soil Area
  - 9 – Groundwater Analytical Results
- Attachment 3 - Category B Data Deliverable Reports
- Attachment 4 - Soil Boring Logs
- Attachment 5 – Groundwater Field Sampling Records
- Attachment 6 - Hydraulic Conductivity Test Results

ATTACHMENT 1



N
W E
S

1 inch = 2,000 feet

United States Geological Survey, White Plains & Mount Vernon NY Topographic Quadrangles, 1967, Photorevised 1981

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91 Fulton Street
Boonton, New Jersey 07005

1 Lawrence Street
Ardsley, Westchester County, NY

FIGURE 1

SITE LOCATION MAP

Revised	Drawn	Checked	Approved	Date
	LS	DDL	DDL	7/10/17

Legend

- Monitoring Well
- Site Boundary
- Saw Mill River

N
W E
S

1 inch = 150 feet

Saw Mill River: USGS National Hydrography Dataset

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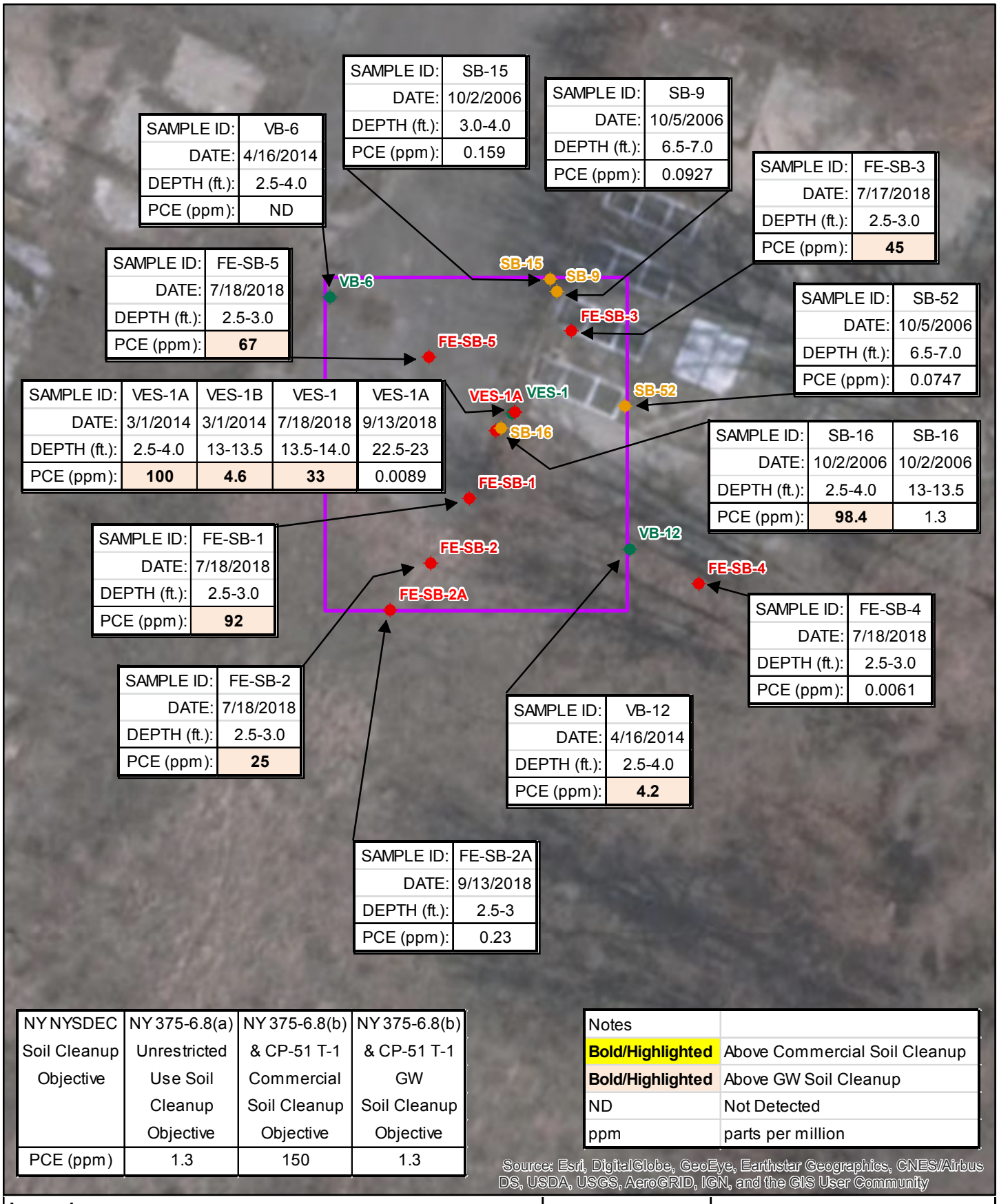
91 Fulton Street
Boonton, New Jersey 07005

1 Lawrence Street
Ardsley, Westchester County, NY
FIGURE 2
SITE PLAN

Revised	Drawn	Checked	Approved	Date
	LS	DDL	DDL	7/17/17



NY NYSDEC Soil Cleanup Objective	NY 375-6.8(a) Unrestricted Use Soil Cleanup Objective	NY 375-6.8(b) & CP-51 T-1 Commercial Soil Cleanup Objective	NY 375-6.8(b) & CP-51 T-1 GW Soil Cleanup Objective
PCE (ppm)	1.3	150	1.3

Notes	
Bold/Highlighted	Above Commercial Soil Cleanup
Bold/Highlighted	Above GW Soil Cleanup
ND	Not Detected
ppm	parts per million

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

- 2006 Soil Borings (Sovereign)
- 2014 Soil Borings (Vertex)
- 2018 Soil Borings (First Environment)
- Possible Area of Excavation

N W E S

1 inch = 25 feet

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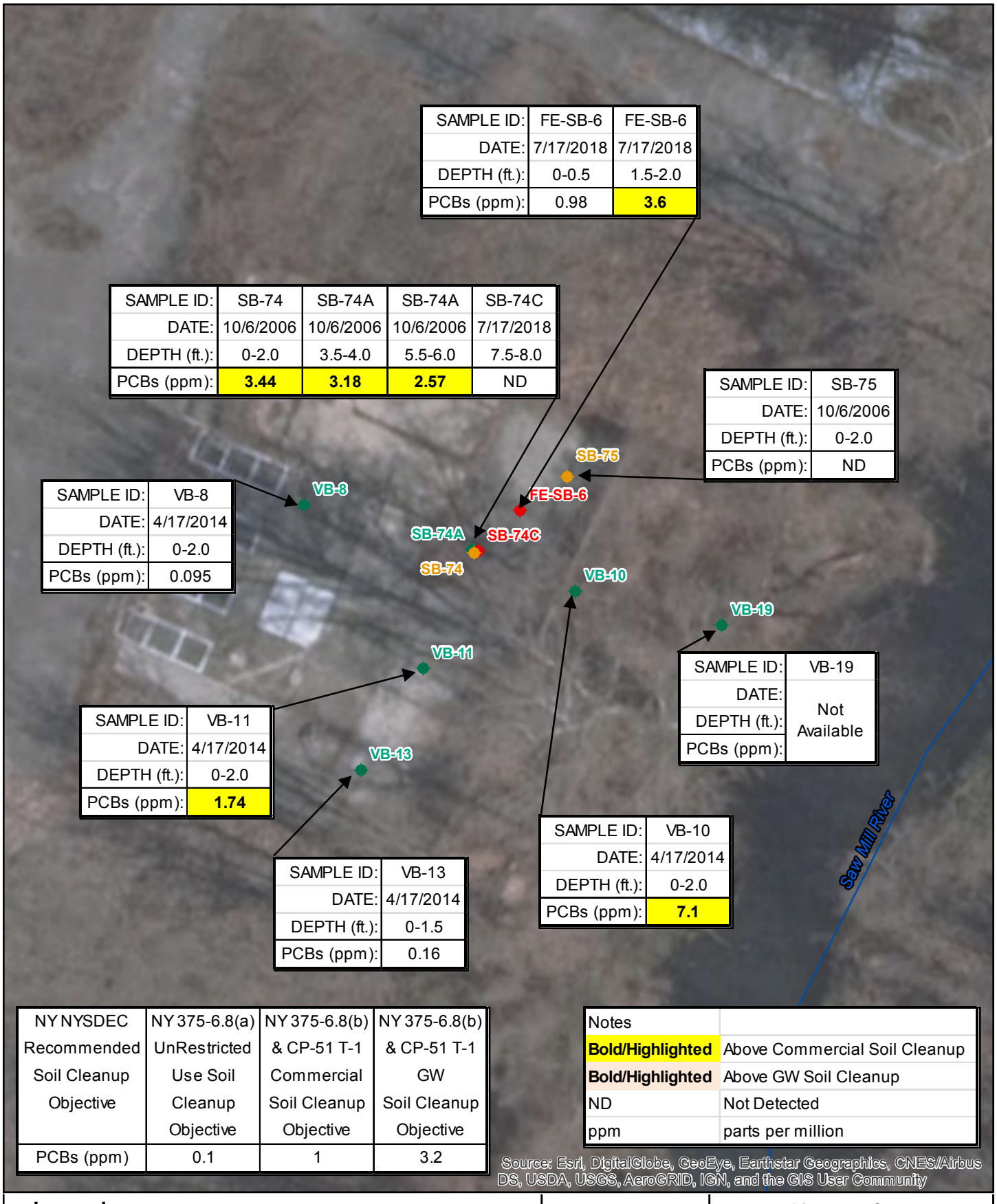
91 Fulton Street
Boonton, New Jersey 07005

1 Lawrence Street
Ardsley, Westchester County, NY
FIGURE 3
FORMER SOLVENT SHED

Revised	Drawn	Checked	Approved	Date
	LS	AAA	DDL	11/30/2018



SAMPLE ID:	FE-SB-6	FE-SB-6
DATE:	7/17/2018	7/17/2018
DEPTH (ft.):	0-0.5	1.5-2.0
PCBs (ppm):	0.98	**3.6**

SAMPLE ID:	SB-74	SB-74A	SB-74A	SB-74C
DATE:	10/6/2006	10/6/2006	10/6/2006	7/17/2018
DEPTH (ft.):	0-2.0	3.5-4.0	5.5-6.0	7.5-8.0
PCBs (ppm):	**3.44**	**3.18**	**2.57**	ND

SAMPLE ID:	SB-75
DATE:	10/6/2006
DEPTH (ft.):	0-2.0
PCBs (ppm):	ND

SAMPLE ID:	VB-8
DATE:	4/17/2014
DEPTH (ft.):	0-2.0
PCBs (ppm):	0.095

SAMPLE ID:	VB-19
DATE:	Not Available
DEPTH (ft.):	
PCBs (ppm):	

SAMPLE ID:	VB-11
DATE:	4/17/2014
DEPTH (ft.):	0-2.0
PCBs (ppm):	**1.74**

SAMPLE ID:	VB-10
DATE:	4/17/2014
DEPTH (ft.):	0-2.0
PCBs (ppm):	**7.1**

SAMPLE ID:	VB-13
DATE:	4/17/2014
DEPTH (ft.):	0-1.5
PCBs (ppm):	0.16

NY NYSDEC Recommended Soil Cleanup Objective	NY 375-6.8(a) UnRestricted Use Soil Cleanup Objective	NY 375-6.8(b) & CP-51 T-1 Commercial Soil Cleanup Objective	NY 375-6.8(b) & CP-51 T-1 GW Soil Cleanup Objective
PCBs (ppm)	0.1	1	3.2

Notes	
Bold/Highlighted	Above Commercial Soil Cleanup
Bold/Highlighted	Above GW Soil Cleanup
ND	Not Detected
ppm	parts per million

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

- 2018 Soil Borings (First Environment)
- 2014 Soil Borings (Vertex)
- 2006 Soil Borings (Sovereign)

N W E S

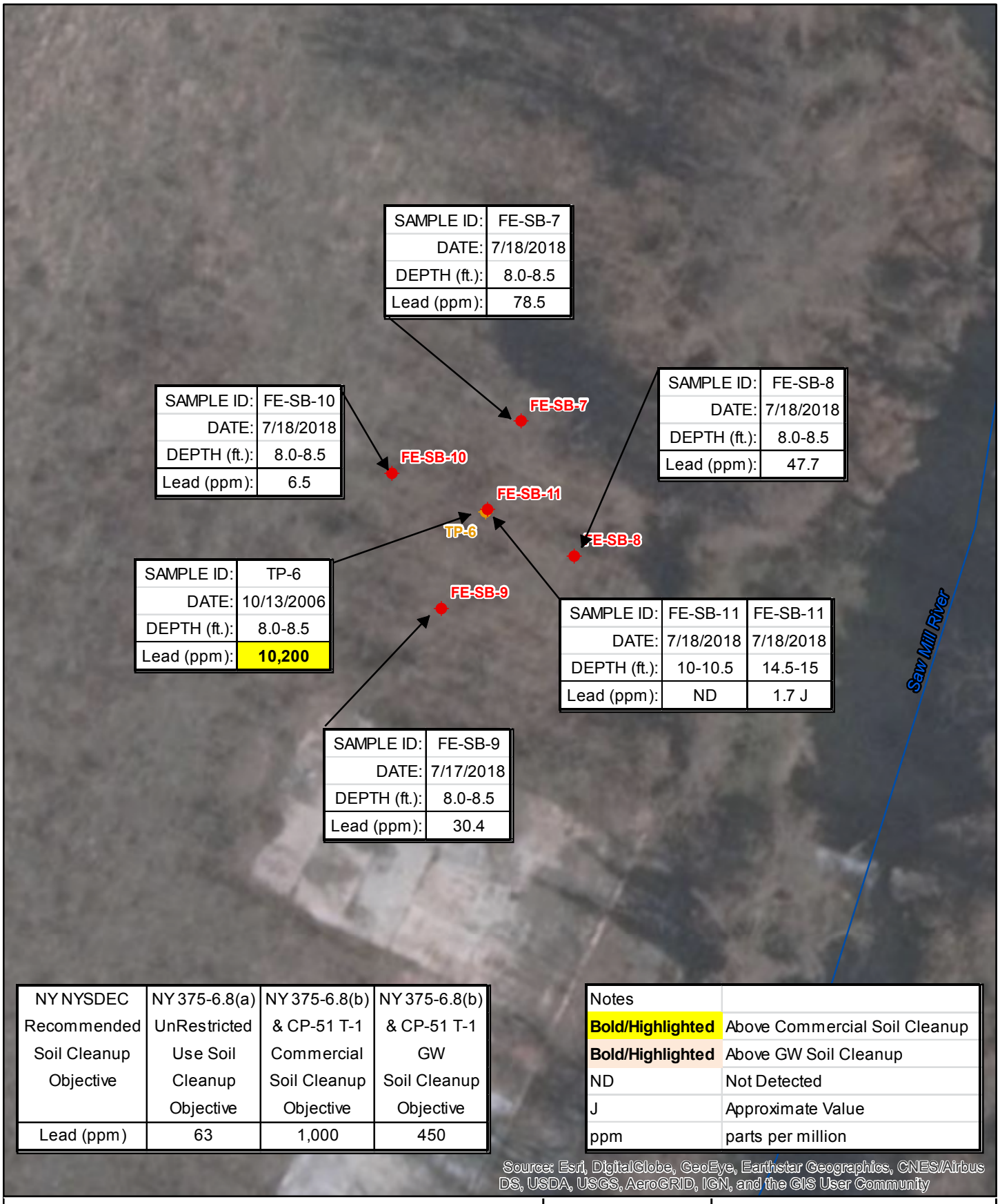
1 inch = 25 feet

FIRST ENVIRONMENT

91 Fulton Street
Boonton, New Jersey 07005

1 Lawrence Street
Ardsley, Westchester County, NY
FIGURE 4
FORMER RCRA SHED

Revised	Drawn	Checked	Approved	Date
	LS	AAA	DDL	11/30/2018



NY NYSDEC Recommended Soil Cleanup Objective	NY 375-6.8(a) UnRestricted Use Soil Cleanup Objective	NY 375-6.8(b) & CP-51 T-1 Commercial Soil Cleanup Objective	NY 375-6.8(b) & CP-51 T-1 GW Soil Cleanup Objective
Lead (ppm)	63	1,000	450

Notes	
Bold/Highlighted	Above Commercial Soil Cleanup
Bold/Highlighted	Above GW Soil Cleanup
ND	Not Detected
J	Approximate Value
ppm	parts per million

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

- 2018 Soil Borings (First Environment)
- 2006 Soil Borings (Sovereign)

N W E S

1 inch = 25 feet

FIRST ENVIRONMENT

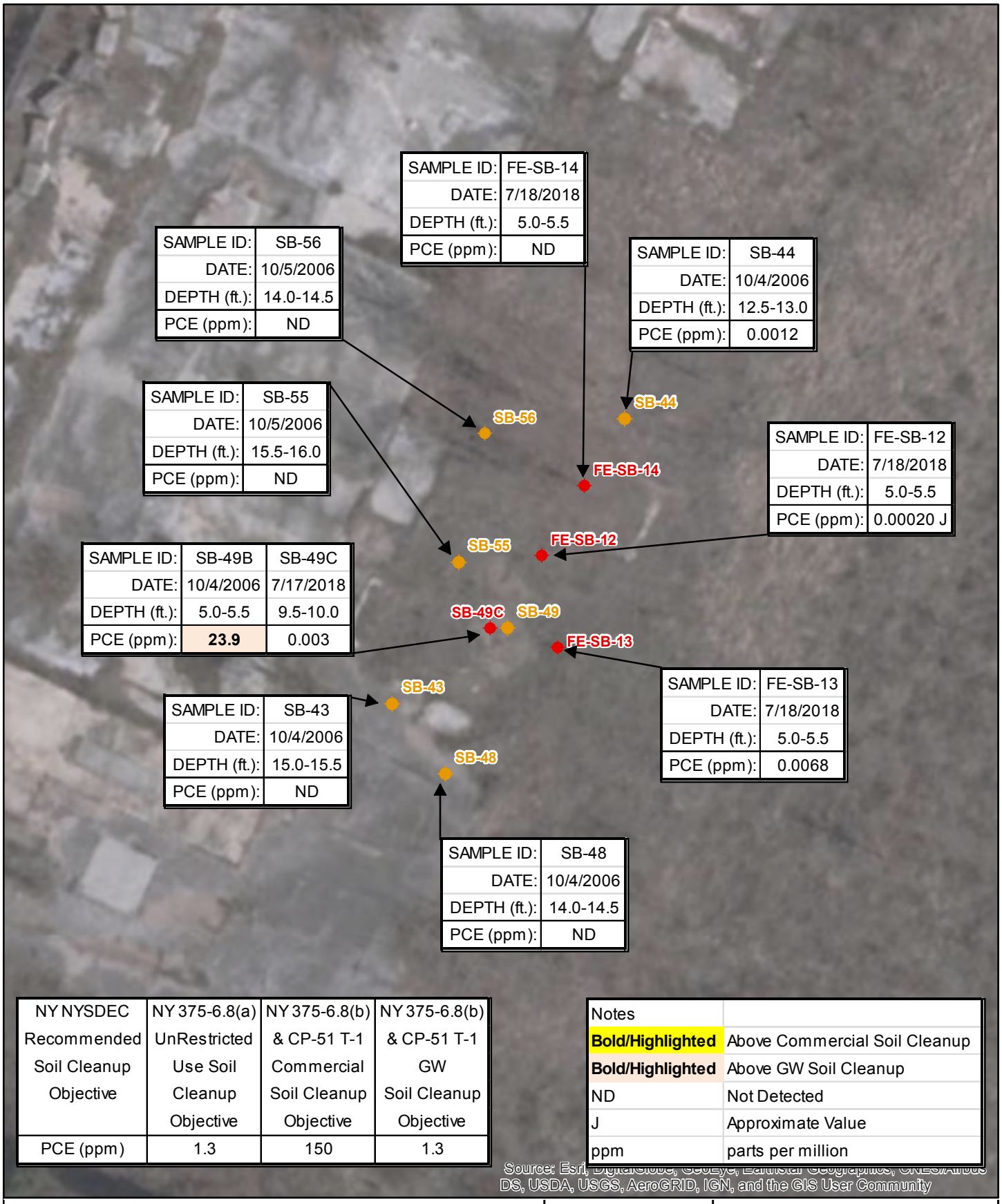
91 Fulton Street
Boonton, New Jersey 07005

1 Lawrence Street
Ardsley, Westchester County, NY

FIGURE 5

FORMER CARBON DISULFIDE UST VAULT

Revised	Drawn	Checked	Approved	Date
	LS	AAA	DDL	11/30/2018



NY NYSDEC Recommended Soil Cleanup Objective	NY 375-6.8(a) UnRestricted Use Soil Cleanup Objective	NY 375-6.8(b) & CP-51 T-1 Commercial Soil Cleanup Objective	NY 375-6.8(b) & CP-51 T-1 GW Soil Cleanup Objective
PCE (ppm)	1.3	150	1.3

Notes	
Bold/Highlighted	Above Commercial Soil Cleanup
Bold/Highlighted	Above GW Soil Cleanup
ND	Not Detected
J	Approximate Value
ppm	parts per million

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

- 2018 Soil Borings (First Environment)
- 2006 Soil Borings (Sovereign)

N W E S

1 inch = 25 feet

FIRST ENVIRONMENT

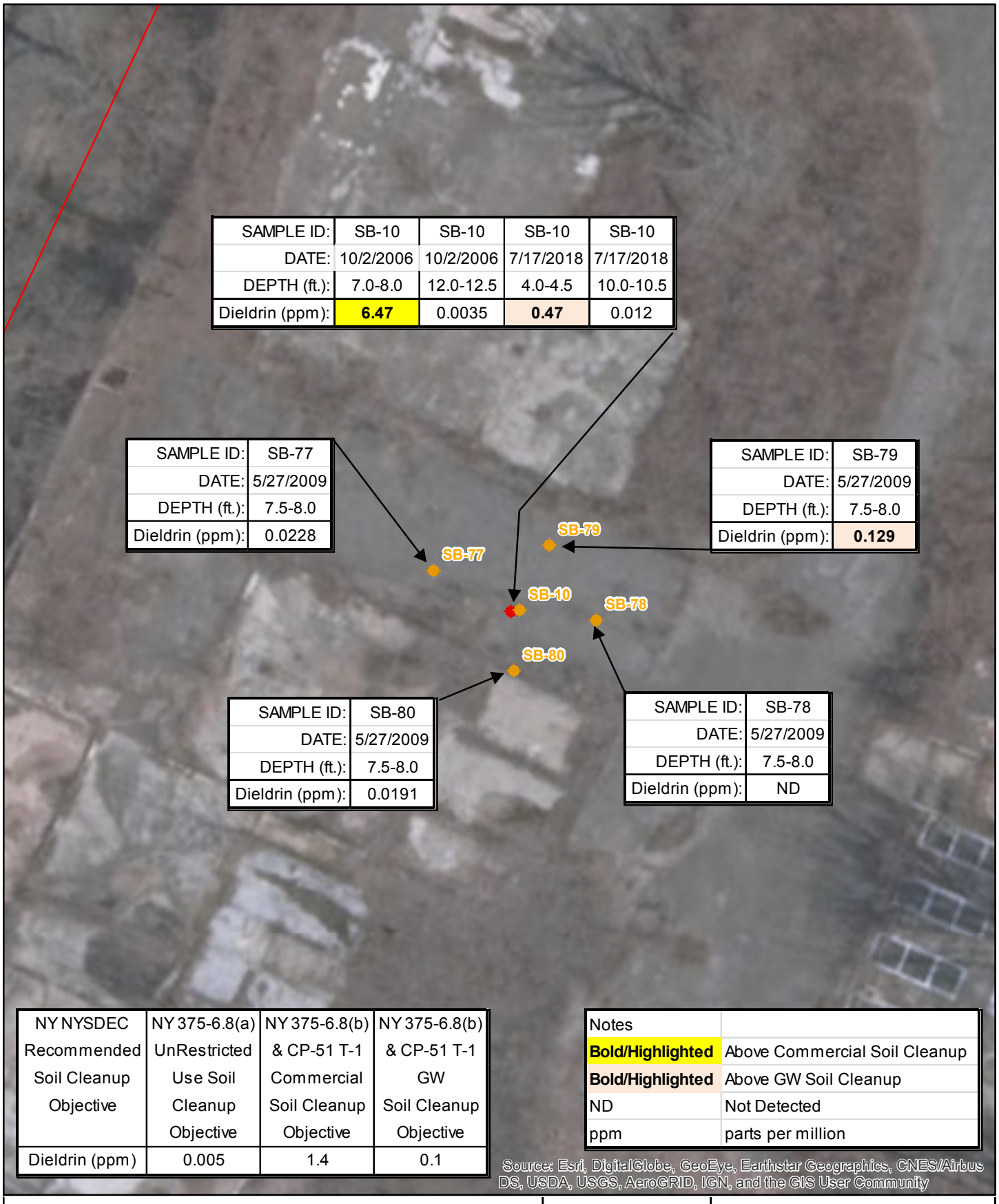
91 Fulton Street
Boonton, New Jersey 07005

1 Lawrence Street
Ardsley, Westchester County, NY

FIGURE 6

FORMER WHITE HOUSE BUILDING VAULT

Revised	Drawn	Checked	Approved	Date
	LS	AAA	DDL	11/30/2018



SAMPLE ID:	SB-10	SB-10	SB-10	SB-10
DATE:	10/2/2006	10/2/2006	7/17/2018	7/17/2018
DEPTH (ft.):	7.0-8.0	12.0-12.5	4.0-4.5	10.0-10.5
Dieldrin (ppm):	**6.47**	0.0035	**0.47**	0.012

SAMPLE ID:	SB-77
DATE:	5/27/2009
DEPTH (ft.):	7.5-8.0
Dieldrin (ppm):	0.0228

SAMPLE ID:	SB-79
DATE:	5/27/2009
DEPTH (ft.):	7.5-8.0
Dieldrin (ppm):	**0.129**

SAMPLE ID:	SB-80
DATE:	5/27/2009
DEPTH (ft.):	7.5-8.0
Dieldrin (ppm):	0.0191

SAMPLE ID:	SB-78
DATE:	5/27/2009
DEPTH (ft.):	7.5-8.0
Dieldrin (ppm):	ND

NY NYSDEC Recommended Soil Cleanup Objective	NY 375-6.8(a) UnRestricted Use Soil Cleanup Objective	NY 375-6.8(b) & CP-51 T-1 Commercial Soil Cleanup Objective	NY 375-6.8(b) & CP-51 T-1 GW Soil Cleanup Objective
Dieldrin (ppm)	0.005	1.4	0.1

Notes	
Bold/Highlighted	Above Commercial Soil Cleanup
Bold/Highlighted	Above GW Soil Cleanup
ND	Not Detected
ppm	parts per million

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

- 2018 Soil Borings (First Environment)
- 2006 Soil Borings (Sovereign)

N W E S

1 inch = 25 feet

FIRST ENVIRONMENT

91 Fulton Street
Boonton, New Jersey 07005

1 Lawrence Street
Ardsley, Westchester County, NY
FIGURE 7
PESTICIDE IMPACTED SOIIL

Revised	Drawn	Checked	Approved	Date
	LS	AAA	DDL	11/30/2018

MW-1	NYSDEC AWQS	NYSDEC TOGS-GA	8/16/2018 (µg/L)	Q
Volatile Organics by GC/MS				
Chloroform	7	7	1.0	U *
Tetrachloroethene	5	5	1.0	U
Trichlorofluoromethane	NA	5	1.0	U

VES-1 GWA	NYSDEC AWQS	NYSDEC TOGS-GA	3/1/2014 (ug/L)	Q	4/18/2014 (ug/L)	Q
Volatile Organics by GC/MS						
cis-1,2-Dichloroethene	5	5	ND		17	
Tetrachloroethene	5	5	2,000		4	
Benzene	1	1	10	J	0.51	
Carbon disulfide	60	60	680		1.4	J

VES-2 GW	NYSDEC AWQS	NYSDEC TOGS-GA	3/1/2014 (ug/L)	Q
Semivolatile Organics by GC/MS-SIM				
Acenaphthene	20	20	80	
Fluoranthene	50	50	340	
Naphthalene	10	10	320	
Chrysene	0.002	0.002	130	
Anthracene	50	50	120	
Fluorene	50	50	92	
Phenanthrene	50	50	42	
Pyrene	50	50	270	
Semivolatile Organics by GC/MS-SIM				
Benzo(a)pyrene	0	0	48	
Benzo(b)fluoranthene	0.002	0.002	40	
Benzo(k)fluoranthene	0.002	0.002	38	
Indeno(1,2,3-cd)Pyrene	0.002	0.002	32	
Volatile Organics by GC/MS				
Tetrachloroethene	5	5	12	
Chlorobenzene	5	5	24	
Trichlorofluoromethane	5	5	5.6	J
Benzene	1	1	270	
Vinyl chloride	2	2	9.4	
Trichloroethene	5	5	5	
Carbon disulfide	60	60	640	

VES-10 GW	NYSDEC AWQS	NYSDEC TOGS-GA	4/18/2014 (ug/L)	Q
Volatile Organics by GC/MS				
Tetrachloroethene	5	5	7.4	

VES-3 GW	NYSDEC AWQS	NYSDEC TOGS-GA	3/1/2014 (ug/L)	Q
Volatile Organics by GC/MS				
Trichlorofluoromethane	5	5	22	

VES-4 GW	NYSDEC AWQS	NYSDEC TOGS-GA	3/1/2014 (ug/L)	Q
Semivolatile Organics by GC/MS				
Phenol	1	2	5	
Volatile Organics by GC/MS				
Carbon disulfide	60	60	2,600	

VES-11 GW	NYSDEC AWQS	NYSDEC TOGS-GA	4/18/2014 (ug/L)	Q
Volatile Organics by GC/MS				
Tetrachloroethene	5	5	13	

MW-2	NYSDEC AWQS	NYSDEC TOGS-GA	8/16/2018 (µg/L)	Q
Volatile Organics by GC/MS				
Chloroform	7	7	0.41	J *
Tetrachloroethene	5	5	4.3	
Trichlorofluoromethane	NA	5	0.74	J

VES-13 GW	NYSDEC AWQS	NYSDEC TOGS-GA	4/18/2014 (ug/L)	Q
Volatile Organics by GC/MS				
Vinyl chloride	2	2	2.3	

NOTES:
Exceeds applicable NYSDEC Standards
ND - Not detected at the reported detection limit for the sample.
AWQS - New York TOGS 111 Ambient Water Quality Standards Objective
TOGS -GA - New York TOGS 111 Groundwater Effluent Limitations Objective

Legend

- Site Boundary
- Temporary Monitoring Well Locations
- Monitoring Well Locations

2017 Proposed Sample Locations (First Environment)
- Soil Sample Locations

2014 Sample Locations (Vertex)
- Soil Sample Locations
- Sediment & Surface Water Sample Locations

2009/2006 Sample Locations (Sovereign)
- Soil Sample Locations
- Test Pit Locations

Note: Sediment/Surface water sample SED1/SW1 (not shown) was collected from the Saw Mill River at the northern property boundary.

N W E S

1 inch = 25 feet

FIRST ENVIRONMENT
91 Fulton Street
Boonton, New Jersey 07005

1 Lawrence Street
Ardsley, Westchester County, NY

FIGURE 8

GROUNDWATER SAMPLING LOCATIONS

Revised	Drawn	Checked	Approved	Date
	LS	AAA	DDL	11/30/2018

ATTACHMENT 2

TABLE 1
Former AKZO-Nobel Pilot Plant
2014 Volatile Organic Compound Detections

Client ID	NY 375-6.8(a) & CP-51 Table 1				VB-1		VB-2		VB-3		SB-38A		SB-38A		VB-4		VB-5		VB-6 (2.5-4)		VB-6 (13.5-14)		VB-7		SB-53A (16.5-17')		VB-12 (2.5-4')	
Lab Sample ID	Unrestricted			Restricted	L1408055-04		L1408055-05		L1408055-02		L1408055-03		L1408055-03 R1		L1408198-02		L1408198-01		L1408055-10		L1408055-11		L1408055-07		L1408055-09		L1408315-05	
Sampling Date	Use Soil	Groundwater	Residential	Residential	4/16/2014		4/16/2014		4/16/2014		4/16/2014		4/16/2014		4/17/2014		4/17/2014		4/16/2014		4/16/2014		4/16/2014		4/16/2014		4/18/2014	
Matrix	Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Depth (ft. bgs)	Objective	Objective	Objective	Objective	11.5-12		11.5-12		11.5-12		15-15.5		15-15.5		13.5-14		13.5-14		2.5-4		13.5-14		13.5-14		16.5-17			
					Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Petroleum Hydrocarbon Quantitation (mg/kg)																												
TPH	NA	NA	NA	NA	-		-		-		-		-						-		7690		-		-			
Volatile Organics by 8260/5035 (mg/kg)																												
Methylene chloride	0.05	0.05	51	100	0.012	U	0.013	U	0.012	U	0.011	U	0.77	U	0.012	U	0.72	U	0.012	U	0.73	U	0.012	U	0.012	U	0.14	J
1,2,4,5-Tetramethylbenzene	NA	NA	NA	NA	0.0046	U	0.0052	U	0.0047	U	0.0046	U	0.31	U	0.0048	U	0.57		0.0049	U	0.42		0.0004	J	0.0049	U	0.014	J
1,2,4-Trimethylbenzene	3.6	3.6	47	52	0.0058	U	0.0065	U	0.0059	U	0.0057	U	-		0.006	U	0.81		0.0062	U	0.89		0.0059	U	0.0061	U	0.3	U
1,2-Dichlorobenzene	1.1	1.1	100	100	0.0058	U	0.00085	J	0.0059	U	0.0057	U	0.38	U	0.006	U	0.36	U	0.0062	U	0.36	U	0.0059	U	0.0061	U	0.3	U
1,2-Dichloroethane	0.02	0.02	2.3	3.1	0.0012	U	0.0013	U	0.0012	U	0.0011	U	0.077	U	0.00037	J	0.072	U	0.0012	U	0.073	U	0.0012	U	0.0012	U	0.15	
1,3,5-Trimethylbenzene	8.4	8.4	47	52	0.0058	U	0.0065	U	0.0059	U	0.0057	U	-		0.006	U	0.36	U	0.0062	U	0.3	J	0.0059	U	0.0061	U	0.3	U
1,4-Diethylbenzene	NA	NA	NA	NA	0.0046	U	0.0052	U	0.0047	U	0.0046	U	0.31	U	0.0048	U	0.18	J	0.0049	U	0.18	J	0.0047	U	0.0049	U	0.019	J
2-Butanone	0.12	0.12	100	100	0.012	U	0.013	U	0.012	U	0.011	U	0.27	J	0.0044	J	0.72	U	0.012	U	0.73	U	0.012	U	0.012	U	0.59	U
4-Ethyltoluene	NA	NA	NA	NA	0.0046	U	0.0052	U	0.0047	U	0.0046	U	0.31	U	0.0048	U	0.24	J	0.0049	U	0.42		0.0047	U	0.0049	U	0.24	U
Acetone	0.05	0.05	100	100	0.0085	J	0.0051	J	0.023		0.013		0.77	U	0.017		0.72	U	0.0091	J	0.73	U	0.015		0.0072	J	0.2	J
Benzene	0.06	0.06	2.9	4.8	0.0012	U	0.0013	U	0.0012	U	0.0011	U	0.077	U	0.0012	U	0.072	U	0.0012	U	0.086		0.0012	U	0.0012	U	0.059	U
Carbon disulfide	NA	2.7	100	NA	0.0051	J	0.0054	J	0.031		0.39	E	0.77	U	0.0063	J	1.1		0.012	U	0.78		0.0032	J	0.099		0.59	U
Carbon tetrachloride	0.76	0.76	1.4	2.4	0.0012	U	0.0013	U	0.0012	U	0.0011	U	0.077	U	0.0012	U	0.072	U	0.0012	U	0.073	U	0.0012	U	0.0012	U	4.2	
Chlorobenzene	1.1	1.1	100	100	0.0012	U	0.0013	U	0.0012	U	0.0017		0.12	U	0.0012	U	0.072	U	0.0012	U	0.056	J	0.0012	U	0.003		0.059	U
Chloroform	0.37	0.37	10	49	0.0017	U	0.002	U	0.0018	U	0.0017	U	0.12	U	0.0018	U	0.11	U	0.0018	U	0.11	U	0.0018	U	0.0018	U	0.7	
cis-1,2-Dichloroethene	0.25	0.25	59	100	0.0012	U	0.031		0.0012	U	0.0015		0.077	U	0.0012	U	0.072	U	0.0012	U	0.073	U	0.0012	U	0.0089		0.059	U
Ethylbenzene	1	1	30	41	0.0012	U	0.0013	U	0.0012	U	0.0011	U	0.077	U	0.0012	U	0.1		0.0012	U	0.17		0.0012	U	0.0014		0.059	U
Isopropylbenzene	NA	2.3	100	NA	0.0012	U	0.0013	U	0.0012	U	0.0011	U	0.077	U	0.0012	U	0.084		0.0012	U	0.095		0.0012	U	0.0012	U	0.059	U
Naphthalene	12	12	100	100	0.0058	U	0.0065	U	0.0059	U	0.0057	U	0.38	U	0.006	U	0.39		0.0062	U	0.88		0.0059	U	0.0061	U	0.12	J
n-Butylbenzene	12	12	100	100	0.0012	U	0.0013	U	0.0012	U	0.0011	U	0.077	U	0.0012	U	0.2		0.0012	U	0.18		0.0012	U	0.0012	U	0.059	U
n-Propylbenzene	3.9	3.9	100	100	0.0012	U	0.0013	U	0.0012	U	0.0011	U	0.077	U	0.0012	U	0.15		0.0012	U	0.17		0.0012	U	0.0012	U	0.059	U
o-Xylene	NA	NA	NA	NA	0.0023	U	0.0026	U	0.0024	U	0.0023	U	0.15	U	0.0024	U	0.12	J	0.0025	U	0.18		0.0024	U	0.0024	U	0.12	U
p/m-Xylene	NA	NA	NA	NA	0.0023	U	0.0026	U	0.0024	U	0.0023	U	0.15	U	0.0024	U	0.064	J	0.0025	U	0.16		0.0024	U	0.0024	U	0.12	U
p-Isopropyltoluene	NA	10	NA	NA	0.0012	U	0.0013	U	0.0012	U	0.0011	U	0.077	U	0.0012	U	0.14		0.0012	U	0.12		0.0012	U	0.0012	U	0.059	U
sec-Butylbenzene	11	11	100	100	0.0012	U	0.0013	U	0.0012	U	0.0011	U	0.077	U	0.0012	U	0.12		0.0012	U	0.12		0.0012	U	0.0012	U	0.059	U
Tetrachloroethene	1.3	1.3	5.5	19	0.053		0.097		0.0018		0.0011	U	0.077	U	0.0004	J	0.072	U	0.014		0.073	U	0.0017		0.0019		4.2	
Toluene	0.7	0.7	100	100	0.0017	U	0.002	U	0.0018	U	0.0017	U	0.033	J	0.0018	U	0.11	U	0.0018	U	0.044	J	0.0018	U	0.0018	U	0.018	J
Trichloroethene	0.47	0.47	10	21	0.0026		0.017		0.0012	U	0.0012		0.077	U	0.0012	U	0.072	U	0.0012	U	0.073	U	0.0012	U	0.0028		0.059	U
Trichlorofluoromethane	NA	NA	NA	NA	0.0018	J	0.001	J	0.0059	U	0.0057	U	0.38	U	0.006	U	0.36	U	0.0088		0.36	U	0.0059	U	0.0061	U	0.3	U
Vinyl chloride	0.02	0.02	0.21	0.9	0.0023	U	0.00095	J	0.0024	U	0.0023	U	0.15	U	0.0024	U	0.14	U	0.0025	U	0.15	U	0.0024	U	0.0024	U	0.12	U
1,4-Dioxane	0.1	0.1	9.8	13	0.12	U	0.13	U	0.12	U	0.11	U	7.7	U	0.12	U	7.2	U	0.12	U	7.3	U	0.12	U	0.12	U	5.9	U
1,2,3-Trichloropropane	NA	0.34	80	NA	0.012	U	0.013	U	0.012	U	0.011	U	0.77	U	0.012	U	0.72	U	0.012	U	0.73	U	0.012	U	0.012	U	0.59	U
1,3-Dichloropropane	NA	0.3	NA	NA	0.0058	U	0.0065	U	0.0059	U	0.0057	U	0.38	U	0.006	U	0.36	U	0.0062	U	0.36	U	0.0059	U	0.0061	U	0.3	U

ft bgs - Feet below ground surface.
mg/kg - milligrams per kilogram
U : Indicates the analyte was analyzed for but not detected.
J : Result is less than the RL but greater than or equal to the MDL. Concentration is estimated.
E- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

0.77	U - Analyte reported as not detected; however the MDL rexceeds one or more Soil Cleanup Criteria.
0.27	Result exceeds the Unrestricted Use Standard.
4.2	Result Exceeds the Restricted Residential Soil Cleanup Criteria.

Table 1A
Former AKZO-Nobel Pilot Plant
2014 Polychlorinated Biphenyls and Pesticides Results

Client ID	NY 375-6.8(a) & CP-51 Table 1				SB-64 (3.5-4)		SB-74A (3.5-4)		VB-8		VB-9		VB-10		VB-11		VB-12 (0-1.5')		VB-12 (2.5-4')		VB-13		VB-14		VB-16		VB-22		VB-22		VB-15	
Lab Sample ID	Unrestricted			Restricted	4/18/2014		4/17/2014		4/17/2014		4/17/2014		4/17/2014		4/17/2014		4/18/2014		4/18/2014		4/17/2014		4/17/2014		4/18/2014		4/18/2014		4/18/2014		4/18/2014	
Sampling Date	Use Soil	Groundwater	Residential	Residential	L1408315-07		L1408198-08		L1408198-06		L1408198-07		L1408198-10		L1408198-11		L1408315-04		L1408315-05		L1408198-12		L1408198-13		L1408315-08		L1408315-09		L1408315-09 R1		L1408315-10	
Matrix	Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Depth (ft. bgs)	Objective	Objective	Objective	Objective	3.5-4		3.5-4		0-2		0-2		0-2		0-2		0-1.5		2.5-4		0-1.5		0-1.5		0-1.5		0-1.5		0-1.5		0-1.5	
					Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
General Chemistry																																
Solids, Total					77.4		67.7		91.2		80.1		76.4		91.4		88.1		87.4		89.4		74.7		87.2		88.1		-		92	
Organochlorine Pesticides by GC																																
Delta-BHC	0.04	0.25	100	100	NR		NR		NR		0.00194	U	NR		NR		NR		NR		NR		NR		0.00179	U	NR		0.00897	U	0.0017	U
Lindane	0.1	0.1	0.28	1.3	NR		NR		NR		0.000809	U	NR		NR		NR		NR		NR		NR		0.000747	U	NR		0.00374	U	0.000707	U
Alpha-BHC	0.02	0.02	0.097	0.48	NR		NR		NR		0.000809	U	NR		NR		NR		NR		NR		NR		0.000747	U	NR		0.00374	U	0.000707	U
Beta-BHC	0.036	0.09	0.072	0.36	NR		NR		NR		0.00194	U	NR		NR		NR		NR		NR		NR		0.00179	U	NR		0.00897	U	0.0017	U
Heptachlor	0.042	0.38	0.42	2.1	NR		NR		NR		0.000971	U	NR		NR		NR		NR		NR		NR		0.000896	U	NR		0.00449	U	0.000848	U
Aldrin	0.005	0.19	0.019	0.097	NR		NR		NR		0.00194	U	NR		NR		NR		NR		NR		NR		0.00179	U	NR		0.00897	U	0.0017	U
Heptachlor epoxide	NA	0.02	0.077	NA	NR		NR		NR		0.00364	U	NR		NR		NR		NR		NR		NR		0.00336	U	NR		0.0168	U	0.00318	U
Endrin	0.014	0.06	2.2	11	NR		NR		NR		0.000809	U	NR		NR		NR		NR		NR		NR		0.000747	U	NR		0.00374	U	0.000707	U
Endrin ketone	NA	NA	NA	NA	NR		NR		NR		0.00194	U	NR		NR		NR		NR		NR		NR		0.00179	U	NR		0.00897	U	0.0017	U
Dieldrin	0.005	0.1	0.039	0.2	NR		NR		NR		0.00121	U	NR		NR		NR		NR		NR		NR		0.00112	U	NR		0.00561	U	0.00106	U
4,4'-DDE	0.0033	17	1.8	8.9	NR		NR		NR		0.00194	U	NR		NR		NR		NR		NR		NR		0.00179	U	NR		0.00897	U	0.0017	U
4,4'-DDD	0.0033	14	2.6	13	NR		NR		NR		0.00194	U	NR		NR		NR		NR		NR		NR		0.00179	U	NR		0.00897	U	0.0017	U
4,4'-DDT	0.0033	136	1.7	7.9	NR		NR		NR		0.0955		NR		NR		NR		NR		NR		NR		0.0123		NR		0.0351		0.00318	U
Endosulfan I	2.4	102	4.8	24	NR		NR		NR		0.00194	U	NR		NR		NR		NR		NR		NR		0.00179	U	NR		0.00897	U	0.0017	U
Endosulfan II	2.4	102	4.8	24	NR		NR		NR		0.00194	U	NR		NR		NR		NR		NR		NR		0.00179	U	NR		0.00897	U	0.0017	U
Endosulfan sulfate	2.4	1000	4.8	24	NR		NR		NR		0.000809	U	NR		NR		NR		NR		NR		NR		0.000747	U	NR		0.00374	U	0.000707	U
Methoxychlor	NA	900	100	NA	NR		NR		NR		0.00364	U	NR		NR		NR		NR		NR		NR		0.00336	U	NR		0.0168	U	0.00318	U
Toxaphene	NA	NA	NA	NA	NR		NR		NR		0.0364	U	NR		NR		NR		NR		NR		NR		0.0336	U	NR		0.168	U	0.0318	U
cis-Chlordane	0.094	2.9	0.91	4.2	NR		NR		NR		0.00243	U	NR		NR		NR		NR		NR		NR		0.00224	U	NR		0.0112	U	0.00212	U
trans-Chlordane	NA	14	0.54	NA	NR		NR		NR		0.00243	U	NR		NR		NR		NR		NR		NR		0.00224	U	NR		0.0112	U	0.00212	U
Chlordane	NA	NA	NA	NA	NR		NR		NR		0.0158	U	NR		NR		NR		NR		NR		NR		0.0146	U	NR		0.0729	U	0.0138	U
Polychlorinated Biphenyls by GC																																
Aroclor 1016	0.1	3.2	1	1	0.0424	U	0.464	U	0.0353	U	NR		0.835	U	0.174	U	0.0364	U	NR		0.0354	U	0.0437	U	NR		NR		NR		NR	
Aroclor 1221	0.1	3.2	1	1	0.0424	U	0.464	U	0.0353	U	NR		0.835	U	0.174	U	0.0364	U	NR		0.0354	U	0.0437	U	NR		NR		NR		NR	
Aroclor 1232	0.1	3.2	1	1	0.0424	U	0.464	U	0.0353	U	NR		0.835	U	0.174	U	0.0364	U	NR		0.0354	U	0.0437	U	NR		NR		NR		NR	
Aroclor 1242	0.1	3.2	1	1	0.0424	U	0.464	U	0.0353	U	NR		0.835	U	0.174	U	0.0364	U	NR		0.0354	U	0.0437	U	NR		NR		NR		NR	
Aroclor 1248	0.1	3.2	1	1	0.0424	U	0.464	U	0.0353	U	NR		0.835	U	0.174	U	0.0364	U	NR		0.0354	U	0.0437	U	NR		NR		NR		NR	
Aroclor 1254	0.1	3.2	1	1	0.0424	U	3.18		0.375		NR		7.1		1.74		0.522		NR		0.16		0.0677	P	NR		NR		NR		NR	
Aroclor 1260	0.1	3.2	1	1	0.0424	U	0.464	U	0.0353	U	NR		0.835	U	0.174	U	0.0364	U	NR		0.0354	U	0.0437	U	NR		NR		NR		NR	
Aroclor 1262	0.1	3.2	1	1	0.0424	U	0.464	U	0.0353	U	NR		0.835	U	0.174	U	0.0364	U	NR		0.0354	U	0.0437	U	NR		NR		NR		NR	
Aroclor 1268	0.1	3.2	1	1	0.0424	U	0.464	U	0.0353	U	NR		0.835	U	0.174	U	0.0364	U	NR		0.0354	U	0.0437	U	NR		NR		NR		NR	

NR - Not run.
ft bgs - Feet below ground surface.
mg/kg - milligrams per kilogram
U : Indicates the analyte was analyzed for but not detected.
J : Result is less than the RL but greater than or equal to the MDL. Concentration is estimated.
E- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

0.464	U - Analyte reported as not detected; however the MDL rexceeds one or more Soil Cleanup Criteria.
0.27	Result exceeds the Unrestricted Use Standard.
4.2	Result Exceeds the Restricted Residential Soil Cleanup Criteria.

TABLE 1B
Former AKZO-Nobel Pilot Plant
2014 Metals Soils Analytical Results

Client ID	NY 375-6.8(a) & CP-51 Table 1				VES-5		VES-7	
Lab Sample ID	Unrestricted		Restricted		L1404461-01		L1404461-05	
Sampling Date	Use Soil	Residential	Residential	Commerical	3/1/2014		3/1/2014	
Matrix	Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil		Soil	
Depth (ft. bgs)	Criteria	Criteria	Criteria	Criteria	3.25-4		43134	
Metals (mg/kg)					Result	Q	Result	Q
Aluminum	NA	NA	NA	NA	7,000		7,000	
Antimony	NA	NA	NA	NA	4	U	4.1	U
Arsenic	13	16	16	16	4		6.6	
Barium	350	350	400	400	38		42	
Beryllium	7.2	14	72	580	0.17	J	0.2	J
Cadmium	2.5	2.5	4.3	9.3	0.79	U	0.82	U
Calcium	NA	NA	NA	NA	41,000		21,000	
Chromium*	1/30	22/36	110/180	400/1,500	8.8		14	
Cobalt	NA	NA	NA	NA	2.5		4.4	
Copper	270	50	270	270	9.2		13	
Iron	NA	2,000	NA	NA	6,900		1,200	
Lead	63	400	400	1,000	12		5.2	
Magnesium	NA	NA	NA	NA	3,800		3,500	
Manganese	1,600	2,000	2,000	10,000	150		170	
Mercruy	0.18	0.81	0.81	2.8	0.06	J	0.07	U
Nickel	30	140	310	310	6.4		12	
Potassium	NA	NA	NA	NA	1,100		1,300	
Selenium	3.9	36	180	1,500	1.6	U	1.6	U
Silver	2	2	180	1,500	0.79	U	0.82	U
Sodium	NA	NA	NA	NA	290		120	J
Thallium	NA	NA	NA	NA	1.6	U	1.6	U
Vanadium	NA	NA	NA	NA	11		17	
Zinc	109	2,200	10,000	10,000	28		28	

* Cleanup criteria for chromium is provided as Hexavalent Chromium/Trivalent Chromium.
ft bgs - Feet below ground surface.
mg/kg - milligrams per kilogram
U : Indicates the analyte was analyzed for but not detected.
J : Result is less than the RL but greater than or equal to the MDL. Concentration is estimated.
6,900 Result exceeds Residential Soil Cleanup Criteria

Table 2
AKZO-Nobel Former Pilot Plant
2014 Groundwater
Volatile Organic Compound Results

Client ID	NYSDEC	VES-1 GWA		VES-9 GW		VES-10 GW		VES-11 GW		VES-12 GW		VES-13 GW	
Lab Sample ID	Ambient	L1408315-14		L1408315-03		L1408315-15		L1408315-11		L1408315-13		L1408315-12	
Samping Date	Groundwater	4/18/2014		4/18/2014		4/18/2014		4/18/2014		4/18/2014		4/18/2014	
	Quality Standards	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Semivolatile Organics by GC/MS (µg/L)													
1,2,4-Trichlorobenzene	5	-	-	-		-	-	5	U	-	-	-	-
Bis(2-chloroethyl)ether	1	-	-	-		-	-	2	U	-	-	-	-
1,2-Dichlorobenzene	3	-	-	-		-	-	2	U	-	-	-	-
1,3-Dichlorobenzene	3	-	-	-		-	-	2	U	-	-	-	-
1,4-Dichlorobenzene	3	-	-	-		-	-	2	U	-	-	-	-
3,3'-Dichlorobenzidine	5	-	-	-		-	-	5	U	-	-	-	-
2,4-Dinitrotoluene	5	-	-	-		-	-	5	U	-	-	-	-
2,6-Dinitrotoluene	5	-	-	-		-	-	5	U	-	-	-	-
4-Chlorophenyl phenyl ether	NA	-	-	-		-	-	2	U	-	-	-	-
4-Bromophenyl phenyl ether	NA	-	-	-		-	-	2	U	-	-	-	-
Bis(2-chloroisopropyl)ether	5	-	-	-		-	-	2	U	-	-	-	-
Bis(2-chloroethoxy)methane	5	-	-	-		-	-	5	U	-	-	-	-
Hexachlorocyclopentadiene	5	-	-	-		-	-	20	U	-	-	-	-
Isophorone	50	-	-	-		-	-	5	U	-	-	-	-
Nitrobenzene	0.4	-	-	-		-	-	2	U	-	-	-	-
NitrosoDiPhenylAmine(NDPA)/DPA	50	-	-	-		-	-	2	U	-	-	-	-
n-Nitrosodi-n-propylamine	NA	-	-	-		-	-	5	U	-	-	-	-
Bis(2-Ethylhexyl)phthalate	5	-	-	-		-	-	3	U	-	-	-	-
Butyl benzyl phthalate	50	-	-	-		-	-	5	U	-	-	-	-
Di-n-butylphthalate	50	-	-	-		-	-	5	U	-	-	-	-
Di-n-octylphthalate	50	-	-	-		-	-	5	U	-	-	-	-
Diethyl phthalate	50	-	-	-		-	-	5	U	-	-	-	-
Dimethyl phthalate	50	-	-	-		-	-	5	U	-	-	-	-
Biphenyl	5	-	-	-		-	-	2	U	-	-	-	-
4-Chloroaniline	5	-	-	-		-	-	5	U	-	-	-	-
2-Nitroaniline	5	-	-	-		-	-	5	U	-	-	-	-
3-Nitroaniline	5	-	-	-		-	-	5	U	-	-	-	-
4-Nitroaniline	5	-	-	-		-	-	5	U	-	-	-	-
Dibenzofuran	NA	-	-	-		-	-	2	U	-	-	-	-
1,2,4,5-Tetrachlorobenzene	5	-	-	-		-	-	10	U	-	-	-	-
Acetophenone	NA	-	-	-		-	-	5	U	-	-	-	-
2,4,6-Trichlorophenol	NA	-	-	-		-	-	5	U	-	-	-	-
P-Chloro-M-Cresol	NA	-	-	-		-	-	2	U	-	-	-	-
2-Chlorophenol	NA	-	-	-		-	-	2	U	-	-	-	-
2,4-Dichlorophenol	1	-	-	-		-	-	5	U	-	-	-	-
2,4-Dimethylphenol	50	-	-	-		-	-	5	U	-	-	-	-
2-Nitrophenol	NA	-	-	-		-	-	10	U	-	-	-	-
4-Nitrophenol	NA	-	-	-		-	-	10	U	-	-	-	-
2,4-Dinitrophenol	10	-	-	-		-	-	20	U	-	-	-	-
4,6-Dinitro-o-cresol	NA	-	-	-		-	-	10	U	-	-	-	-
Phenol	1	-	-	-		-	-	5	U	-	-	-	-
2-Methylphenol	NA	-	-	-		-	-	5	U	-	-	-	-
3-Methylphenol/4-Methylphenol	NA	-	-	-		-	-	5	U	-	-	-	-
2,4,5-Trichlorophenol	NA	-	-	-		-	-	5	U	-	-	-	-
Benzoic Acid	NA	-	-	-		-	-	50	U	-	-	-	-
Benzyl Alcohol	NA	-	-	-		-	-	2	U	-	-	-	-
Carbazole	NA	-	-	-		-	-	2	U	-	-	-	-
Polyaromatic Hydrocarbons (µg/L)													
Acenaphthene	20	-	-	-		-	-	0.09	J	-	-	-	-
2-Chloronaphthalene	10	-	-	-		-	-	0.2	U	-	-	-	-
Fluoranthene	50	-	-	-		-	-	0.09	J	-	-	-	-
Hexachlorobutadiene	0.5	-	-	-		-	-	0.5	U	-	-	-	-
Naphthalene	10	-	-	-		-	-	0.2	U	-	-	-	-
Benzo(a)anthracene	0.002	-	-	-		-	-	0.2	U	-	-	-	-
Benzo(a)pyrene	0	-	-	-		-	-	0.2	U	-	-	-	-
Benzo(b)fluoranthene	0.002	-	-	-		-	-	0.2	U	-	-	-	-
Benzo(k)fluoranthene	0.002	-	-	-		-	-	0.2	U	-	-	-	-
Chrysene	0.002	-	-	-		-	-	0.2	U	-	-	-	-
Acenaphthylene	NA	-	-	-		-	-	0.2	U	-	-	-	-
Anthracene	50	-	-	-		-	-	0.2	U	-	-	-	-
Benzo(ghi)perylene	NA	-	-	-		-	-	0.2	U	-	-	-	-
Fluorene	50	-	-	-		-	-	0.07	J	-	-	-	-
Phenanthrene	50	-	-	-		-	-	0.2	U	-	-	-	-
Dibenzo(a,h)anthracene	NA	-	-	-		-	-	0.2	U	-	-	-	-
Indeno(1,2,3-cd)Pyrene	0.002	-	-	-		-	-	0.2	U	-	-	-	-
Pyrene	50	-	-	-		-	-	0.08	J	-	-	-	-
2-Methylnaphthalene	NA	-	-	-		-	-	0.2	U	-	-	-	-
Pentachlorophenol	1	-	-	-		-	-	0.8	U	-	-	-	-
Hexachlorobenzene	0.04	-	-	-		-	-	0.8	U	-	-	-	-
Hexachloroethane	5	-	-	-		-	-	0.8	U	-	-	-	-

Table 2
AKZO-Nobel Former Pilot Plant
2014 Groundwater
Volatile Organic Compound Results

Client ID	NYSDEC	VES-1 GWA		VES-9 GW		VES-10 GW		VES-11 GW		VES-12 GW		VES-13 GW	
Lab Sample ID	Ambient	L1408315-14		L1408315-03		L1408315-15		L1408315-11		L1408315-13		L1408315-12	
Samping Date	Groundwater	4/18/2014		4/18/2014		4/18/2014		4/18/2014		4/18/2014		4/18/2014	
	Quality Standards	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
Volatile Organics by GC/MS (µg/L)													
Methylene chloride	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,1-Dichloroethane	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Chloroform	7	2.5	U	2.5	U	1.4	J	2.5		2.5	U	2.5	U
Carbon tetrachloride	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,2-Dichloropropane	1	1	U	1	U	1	U	1	U	1	U	1	U
Dibromochloromethane	50	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1,2-Trichloroethane	1	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U	1.5	U
Tetrachloroethene	5	4		0.5	U	7.4		13		0.5	U	0.5	U
Chlorobenzene	5	2	J	2.5	U	2.5	U	2.5	U	2.5	U	2.9	
Trichlorofluoromethane	5	2.5	U	2.5	U	3.5		4.6		2.5	U	2.5	U
1,2-Dichloroethane	0.6	0.5	U	0.5	U	0.32	J	0.5	U	0.5	U	0.49	J
1,1,1-Trichloroethane	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Bromodichloromethane	50	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,3-Dichloropropene	0.4	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
cis-1,3-Dichloropropene	0.4	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
1,1-Dichloropropene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Bromoform	50	2	U	2	U	2	U	2	U	2	U	2	U
1,1,2,2-Tetrachloroethane	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Benzene	1	0.51		0.5	U	0.5	U	0.5	U	0.5	U	0.16	J
Toluene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Ethylbenzene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Chloromethane	NA	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Bromomethane	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Vinyl chloride	2	1	U	1	U	1	U	1	U	1	U	2.3	
Chloroethane	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,1-Dichloroethene	5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
trans-1,2-Dichloroethene	5	2.1	J	2.5	U	2.5	U	2.5	U	2.5	U	3.4	
Trichloroethene	5	0.19	J	0.5	U	0.5	U	0.27	J	0.5	U	0.2	J
1,2-Dichlorobenzene	3	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,3-Dichlorobenzene	3	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,4-Dichlorobenzene	3	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Methyl tert butyl ether	10	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
p/m-Xylene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
o-Xylene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
cis-1,2-Dichloroethene	5	17		0.87	J	2.5	U	2.5	U	2.5	U	2.5	U
Dibromomethane	5	5	U	5	U	5	U	5	U	5	U	5	U
1,2,3-Trichloropropane	0.04	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Acrylonitrile	5	5	U	5	U	5	U	5	U	5	U	5	U
Styrene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Dichlorodifluoromethane	5	5	U	5	U	5	U	5	U	5	U	5	U
Acetone	50	5	U	5	U	1.3	J	5	U	5	U	1.3	J
Carbon disulfide	60	1.4	J	5	U	5	U	5	U	1.5	J	5	U
2-Butanone	50	5	U	5	U	5	U	5	U	5	U	5	U
Vinyl acetate	NA	5	U	5	U	5	U	5	U	5	U	5	U
4-Methyl-2-pentanone	NA	5	U	5	U	5	U	5	U	5	U	5	U
2-Hexanone	50	5	U	5	U	5	U	5	U	5	U	5	U
Bromochloromethane	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
2,2-Dichloropropane	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dibromoethane	0.0006	2	U	2	U	2	U	2	U	2	U	2	U
1,3-Dichloropropane	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,1,1,2-Tetrachloroethane	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Bromobenzene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
n-Butylbenzene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
sec-Butylbenzene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
tert-Butylbenzene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
o-Chlorotoluene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
p-Chlorotoluene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2-Dibromo-3-chloropropane	0.04	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Hexachlorobutadiene	0.5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Isopropylbenzene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
p-Isopropyltoluene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
Naphthalene	10	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
n-Propylbenzene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2,3-Trichlorobenzene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2,4-Trichlorobenzene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,3,5-Trimethylbenzene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,2,4-Trimethylbenzene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
1,4-Dioxane	NA	250	U	250	U	250	U	250	U	250	U	250	U
p-Diethylbenzene	NA	2	U	2	U	2	U	2	U	2	U	2	U
p-Ethyltoluene	NA	2	U	2	U	2	U	2	U	2	U	2	U
1,2,4,5-Tetramethylbenzene	NA	2	U	2	U	2	U	2	U	2	U	2	U
Ethyl ether	NA	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U
trans-1,4-Dichloro-2-butene	5	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U	2.5	U

17 Exceeds applicable NYSDEC Standards

2.5 Reporting Limit is eQ to or exceeds applicable NYSDEC Standard

TABLE 2A
Former AKZO-Nobel Pilot Plant
2014 Groundwater
Historic Metals, Pesticides, and Polychlroinated Biphenyls Results

Client Sample ID	NYSDEC	SB-74 GW		VES-12 GW		VES-14 GW		VES-15 GW	
Lab Sample ID	Ambient	L1408315-16		L1408315-13		L1408315-17		L1408315-02	
Sample Date	Groundwater Qualtiy	4/17/2014		4/18/2014		4/17/2014		4/18/2014	
Dissolved Metals (µg/L)									
Aluminum, Dissolved	NA	-	-	4.89	J	-	-	66	
Antimony, Dissolved	3	-	-	0.17	J	-	-	0.58	J
Arsenic, Dissolved	25	-	-	1.66		-	-	0.5	
Barium, Dissolved	1000	-	-	70.4		-	-	21.61	
Beryllium, Dissolved	3	-	-	0.5	U	-	-	0.5	U
Cadmium, Dissolved	5	-	-	0.2	U	-	-	0.12	J
Calcium, Dissolved	NA	-	-	188000		-	-	174000	
Chromium, Dissolved	50	-	-	0.36	J	-	-	0.58	J
Cobalt, Dissolved	NA	-	-	0.2	J	-	-	1.14	
Copper, Dissolved	200	-	-	1.07		-	-	2.15	
Iron, Dissolved	300	-	-	6550		-	-	351	
Lead, Dissolved	25	-	-	1	U	-	-	0.31	J
Magnesium, Dissolved	35000	-	-	96200		-	-	38200	
Manganese, Dissolved	300	-	-	1050		-	-	127.7	
Mercury, Dissolved	0.7	-	-	0.2	U	-	-	0.2	U
Nickel, Dissolved	100	-	-	1.74		-	-	7.96	
Potassium, Dissolved	NA	-	-	8820		-	-	10900	
Selenium, Dissolved	10	-	-	1.01	J	-	-	1.77	J
Silver, Dissolved	50	-	-	0.4	U	-	-	0.4	U
Sodium, Dissolved	20000	-	-	310000		-	-	27100	
Thallium, Dissolved	0.5	-	-	0.5	U	-	-	0.04	J
Vanadium, Dissolved		-	-	0.25	J	-	-	0.71	J
Zinc, Dissolved	2000	-	-	4.35	J	-	-	21.94	
Organochlorine Pesticides by GC (µg/L)									
Delta-BHC	0.04	-		-		0.02	U	-	
Lindane	0.05	-		-		0.03	P	-	
Alpha-BHC	0.01	-		-		0.023		-	
Beta-BHC	0.04	-		-		0.21		-	
Heptachlor	0.04	-		-		0.02	U	-	
Aldrin	0	-		-		0.039	P	-	
Heptachlor epoxide	0.03	-		-		0.02	U	-	
Endrin	0	-		-		0.077		-	
Endrin ketone	5	-		-		0.45		-	
Dieldrin	0.004	-		-		5.26		-	
4,4'-DDE	0.2	-		-		0.04	U	-	
4,4'-DDD	0.3	-		-		0.04	U	-	
4,4'-DDT	0.2	-		-		0.07		-	
Endosulfan I	NA	-		-		0.02	U	-	
Endosulfan II	NA	-		-		0.04	U	-	
Endosulfan sulfate	NA	-		-		0.04	U	-	
Methoxychlor	35	-		-		0.2	U	-	
Toxaphene	0.06	-		-		0.2	U	-	
cis-Chlordane	NA	-		-		0.02	U	-	
trans-Chlordane	NA	-		-		0.02	U	-	
Chlordane	0.05	-		-		0.2	U	-	
Polychlorinated Biphenyls by GC (µg/L)									
Aroclor 1016	0.09	0.1	U	-		-	-	-	
Aroclor 1221	0.09	0.1	U	-		-	-	-	
Aroclor 1232	0.09	0.1	U	-		-	-	-	
Aroclor 1242	0.09	0.1	U	-		-	-	-	
Aroclor 1248	0.09	0.1	U	-		-	-	-	
Aroclor 1254	0.09	0.1	U	-		-	-	-	
Aroclor 1260	0.09	0.1	U	-		-	-	-	
Aroclor 1262	0.09	0.1	U	-		-	-	-	
Aroclor 1268	0.09	0.1	U	-		-	-	-	

µg/L : micrograms per liter
J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U : Indicates the analyte was analyzed for but not detected.
6550 Result exceeds the NYSDEC Ambient Groundwater Quality Standard
0.1 Result is reported as not detected; however, MDL exceeds the NYSDEC Ambient Groundwater Quality Standard

TABLE 3
Former Akzo-Nobel Pilot Plant
Sampling Summary Table

Sample ID	Area of Concern	Sample Date	Sample Type	Laboratory	Matrix	Sample Depth (feet bgs)	PID Reading (ppm)	Analytical Parameters	Sampling Method
FE-SB-1(2.5-3)	Former Solvent Shed	7/18/2018	Grab	TestAmerica	Soil	2.5-3.0	7.8	VO+15	Geoprobe
FE-SB-2(2.5-3)		7/18/2018				2.5-3.0	6.4		
FE-SB-2A(2.5-3)		9/13/2018				2.5-3.0	1.9		
FE-SB-3(2.5-3)		7/17/2018				2.5-3.0	0.0		
FE-SB-4(2.5-3)		7/18/2018				2.5-3.0	0.0		
FE-SB-5(2.5-3)		7/18/2018				2.5-3.0	2.1		
VES-1(13.5-14)		7/18/2018				13.5-14.0	1.3		
VES-1A(22.5-23)		9/13/2018				22.5-23.0	1.3		
FE-SB-6(0-0.5)	Former RCRA Shed	7/17/2018	Grab	TestAmerica	Soil	0.0-0.5	0.0	PCBs	Geoprobe
FE-SB-6(1.5-2)		7/17/2017				1.0-1.5	0.0		
SB-74C(7.5-8)		7/18/2018				7.5-8.0	0.0		
FE-SB-7(8.-8.5)	Former Carbon Disulfide UST Vault	7/18/2018	Grab	TestAmerica	Soil	8.0-8.5	0.0	Lead	Geoprobe
FE-SB-8(8-8.5)		7/18/2018				8.0-8.5	0.0		
FE-SB-9(8-8..5)		7/17/2018				8.0-8.5	0.0		
FE-SB-10(8-8.5)		7/18/2018				8.0-8.5	0.0		
FE-SB-11(10-10.5)		7/18/2018				10.0-10.5	0.0		
FE-SB-12(5-5.5)	Former White House Building Vault	7/17/2018	Grab	TestAmerica	Soil	5.0-5.5	0.0	VO+15	Geoprobe
FE-SB-13(5-5.5)		7/18/2018				5.0-5.5	1.7		
FE-SB-14(5-5.5)		7/18/2018				5.0-5.5	0.0		
SB-49C(7.5-8)		7/17/2018				7.5-8.0	0.0		
SB-49C(9.5-10)		7/17/2018				9.5-10.0	0.0		
SB-10(4.0-4.5)	Pesticide Impacted Soil	7/17/2018	Grab	TestAmerica	Soil	4.0-4.5	0.0	Pesticides	Geoprobe
SB-10(10-10.5)		7/17/2018				10.0-10.5	0.0		
MW-1	Groundwater	8/16/2018	Grab	TestAmerica	Groundwater	19..0	0.0	VO+15	Low-Flow Purging
MW-2		8/16/2018				22	0.2		

Notes:
bgs - below ground surface
ppm - parts per million
VO+10 - Volatile Organic Compounds with a forward library search.
PCBs - Polychlorinated Biphenyls

MW-3 could not be located for sampling.

TABLE 4
Former AKZO-Nobel Pilot Plant
July and September 2018 Former Solvent Shed
Detected Volatile Organic Compounds

Client ID	NY 375-6.8(a) & CP-51 Table 1				FE-SB-1 (2.5-3)			FE-SB-2 (2.5-3)			FE-SB-2A(2.5-3)			FE-SB-3 (2.5-3)			FE-SB-4 (2.5-3)			FE-SB-5 (2.5-3)			VES-1 (13.5-14)			VES-1A(22.5-23)		
Lab Sample ID	Unrestricted		Restricted		460-160844-1			460-160844-2			460-164653-1			460-160782-1			460-160844-3			460-160844-4			460-160844-5			460-164653-3		
Sampling Date	Use Soil	Residential	Residential	Commercial	7/18/2018			7/18/2018			9/13/2018			7/17/2018			7/18/2018			7/18/2018			7/18/2018			9/13/2018		
Matrix	Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil			Soil			Soil			Soil			Soil			Soil			Soil			Soil		
Dilution Factor	Objective	Objective	Objective	Objective	50			50			1			50			1			50			50			1		
VOA-8260C-SOIL					Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
SOIL BY 8260C (mg/kg)																												
1,1-Dichloroethene	0.33	100	100	500	0.20	U	0.069	0.19	U	0.063	0.0017	U	0.00039	0.15	U	0.052	0.0011	J B	0.00045	0.19	U	0.064	0.54	U	0.18	0.00090	U	0.00020
1,2-Dichloroethane	0.02	2.3	3.1	30	**0.47**		0.051	**0.16**	J	0.046	0.0017	U	0.00051	**1.8**		0.038	0.0020	U	0.00059	0.19	U	0.047	0.54	U	0.14	0.00090	U	0.00027
2-Butanone (MEK)	0.12	100	NA	NA	1.0	U	0.45	0.93	U	0.41	0.0086	U	0.0019	0.77	U	0.34	0.0099	U	0.0022	0.95	U	0.42	2.7	U	1.2	0.0044	J	0.00099
Acetone	0.05	100	100	500	1.0	U	0.22	0.93	U	0.20	0.0086	U	0.0065	0.77	U	0.16	0.0084	J	0.0075	0.95	U	0.20	2.7	U	0.58	0.036		0.0034
Benzene	0.06	2.9	4.8	44	0.20	U	0.039	0.19	U	0.035	0.00057	J	0.00044	0.15	U	0.029	0.0020	U	0.00051	0.19	U	0.036	**0.26**	J	0.10	0.00025	J	0.00023
Carbon disulfide	NA	100	NA	NA	0.086	J	0.045	0.19	U	0.041	0.0017	U	0.00046	0.15	U	0.034	0.0020	U	0.00053	0.19	U	0.042	2.6		0.12	0.29		0.00024
Chlorobenzene	1.1	100	100	500	0.20	U	0.049	0.077	J	0.044	0.0017	U	0.00030	0.15	U	0.037	0.0020	U	0.00035	0.19	U	0.045	0.54	U	0.13	0.00031	J	0.00016
Chloroform	0.37	10	49	350	0.12	J	0.045	0.19	U	0.041	0.0055		0.00055	**0.58**		0.034	0.0020	U	0.00063	0.19	U	0.042	0.54	U	0.12	0.00090	U	0.00029
cis-1,2-Dichloroethene	0.25	59	100	500	0.20	U	0.053	0.19	U	0.048	0.0054		0.00026	0.15	U	0.040	0.0020	U	0.00030	0.19	U	0.049	0.54	U	0.14	0.00063	J	0.00014
Ethylbenzene	1	30	41	390	0.20	U	0.061	0.19	U	0.056	0.00052	J	0.00034	**1.1**		0.046	0.0020	U	0.00039	0.19	U	0.057	0.54	U	0.16	0.0011		0.00018
Methyl acetate	NA	NA	NA	NA	1.0	U	0.12	0.93	U	0.11	0.0086	U	0.0074	0.77	U	0.089	0.0099	U	0.0085	0.95	U	0.11	1.5	J	0.31	0.0045	U	0.0039
Methylcyclohexane	NA	NA	NA	NA	0.19	J	0.045	0.19	U	0.041	0.00046	J	0.00027	0.68		0.034	0.0020	U	0.00032	0.18	J	0.042	0.54	U	0.12	0.00090	U	0.00014
Methylene Chloride	0.05	51	100	500	**0.094**	J	0.043	0.19	U	0.039	0.0033		0.00028	**0.051**	J	0.032	0.0089	B	0.00032	0.19	U	0.040	0.54	U	0.11	0.0014		0.00015
m-Xylene & p-Xylene	NA	NA	NA	NA	0.084	J	0.057	0.19	U	0.052	0.0023		0.00030	3.9		0.043	0.0020	U	0.00034	0.19	U	0.053	0.54	U	0.15	0.0052		0.00016
o-Xylene	NA	NA	NA	NA	0.20	U	0.065	0.19	U	0.059	0.00068	J	0.00016	0.44		0.049	0.0020	U	0.00019	0.19	U	0.061	0.54	U	0.17	0.0019		0.000085
Tetrachloroethene	1.3	5.5	19	150	**92**		0.073	**25**		0.067	0.23		0.00025	**45**		0.055	0.0061		0.00028	**67**		0.068	**33**		0.20	0.0089		0.00013
Toluene	0.7	100	100	500	0.096	J	0.051	0.19	U	0.046	0.0020		0.0011	0.16		0.038	0.0020	U	0.0012	0.19	U	0.047	0.54	U	0.14	0.0025		0.00056
trans-1,2-Dichloroethene	0.19	100	100	500	0.20	U	0.037	0.19	U	0.033	0.0019		0.00042	0.15	U	0.028	0.0020	U	0.00049	0.19	U	0.034	0.54	U	0.098	0.00090	U	0.00022
Trichloroethene	0.47	10	21	200	0.25		0.045	0.17	J	0.041	0.010		0.00025	0.072	J	0.034	0.0020	U	0.00029	0.19	U	0.042	0.34	J	0.12	0.00050	J	0.00013
Total Conc	NA	NA	NA	NA	93.39			25.407			0.26263			54.283			0.0245			67.18			37.7			0.35309		
Total Estimated Conc. (TICs	NA	NA	NA	NA	0.0*T			0.0*T			0.0*T			0.0*T			0.0*T			0.0*T			0.0*T			0.0438		

Notes
mg/kg - milligrams per kilogram or parts per million (ppm)
*T There are no TICs reported for the sample
Highlighted Concentrations shown in bold type face exceed limits
B : Compound was found in the blank and sample.
J : Result is less than the RL but greater than or equal to the MDL. Concentration is estimated.
U : Indicates the analyte was analyzed for but not detected.

0.47	Result exceeds Unrestricted Use Soil Cleanup Criteria.
92	Result exceeds Restricted Residential Soil Cleanup Criteria.

TABLE 5
Former AKZO-Nobel Pilot Plant
Former Solvent Shed
July 2018 Polychlorinated Biphenys Results

Client ID	NY 375-6.8(a) & CP-51 Table 1				FE-SB-6 (0-0.5)			FE-SB-6 (1.5-2)			SB-74C (7.5-8)		
Lab Sample ID	Unrestricted	Restricted			460-160782-2			460-160782-3			460-160782-12		
Sampling Date	Use Soil	Residential	Residential	Commercial	7/17/2018			7/17/2018			7/18/2018		
Matrix	Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil			Soil			Soil		
Dilution Factor	Objective	Objective	Objective	Objective	1			2			1		
GCSVOA-8082A-SOIL					Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
SOIL BY 8082A (mg/kg)													
Aroclor 1016	NA	NA	NA	NA	0.089	U	0.012	0.18	U	0.024	0.11	U	0.015
Aroclor 1221	NA	NA	NA	NA	0.089	U	0.012	0.18	U	0.024	0.11	U	0.015
Aroclor 1232	NA	NA	NA	NA	0.089	U	0.012	0.18	U	0.024	0.11	U	0.015
Aroclor 1242	NA	NA	NA	NA	0.089	U	0.012	0.18	U	0.024	0.11	U	0.015
Aroclor 1248	NA	NA	NA	NA	0.089	U	0.012	0.18	U	0.024	0.11	U	0.015
Aroclor 1254	NA	NA	NA	NA	0.98		0.012	3.0		0.025	0.11	U	0.015
Aroclor 1260	NA	NA	NA	NA	0.089	U	0.012	0.18	U	0.025	0.11	U	0.015
Aroclor 1268	NA	NA	NA	NA	0.089	U	0.012	0.18	U	0.025	0.11	U	0.015
Aroclor-1262	NA	NA	NA	NA	0.089	U	0.012	0.18	U	0.025	0.11	U	0.015
Total PCBs	0.1	1	1	1	**0.98**		0.012	**3.0**		0.025	0.11	U	0.015

mg/kg - milligrams per kilogram
Highlightec Highlighted Concentrations shown in bold type face exceed limits
U : Indicates the analyte was analyzed for but not detected.
0.98 Result exceeds Unrestricted Use Soil Cleanup Criteria
3.0 Result exceeds Residiential Soil Cleanup Criteria

TABLE 6
Former AKZO-Nobel Pilot Plant
July 2018 Former Carbon Disulfide Shed
Lead Results

Client ID	NY 375-6.8(a) & CP-51 Table 1				FE-SB-7 (8-8.5)			FE-SB-8 (8-8.5)			FE-SB-9 (8-8.5)			FE-SB-10 (8-8.5)			FE-SB-11 (10-10.5)			FE-SB-11 (14.5-15)		
Lab Sample ID	UnRestricted	Restricted			460-160844-6			460-160844-7			460-160782-8			460-160782-13			460-160782-10			460-160844-8		
Sampling Date	Use Soil	Residential	Residential	Commercial	7/18/2018			7/18/2018			7/17/2018			7/18/2018			7/18/2018			7/18/2018		
Matrix	Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil			Soil			Soil			Soil			Soil			Soil		
Dilution Factor	Objective	Objective	Objective	Objective	1			1			1			1			1			1		
Unit	mg/kg	mg/kg	mg/kg	mg/kg																		
METALS-SOIL					Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
SOIL BY 6010D (mg/kg)																						
Lead	63	400	400	1000	**78.5**		0.61	47.7		0.64	30.4		0.71	6.5		0.55	2.5	U	0.64	1.7	J	0.58

Highlighted Concentrations shown in bold type face exceed limits
J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U : Indicates the analyte was analyzed for but not detected.
78.5 Result exceeds Unrestricted Use Soil Cleanup Criteria.

TABLE 7
Former AKZO-Nobel Pilot Plant
September 2018 Former White House Building Vault
Detected Volatile Organic Compounds

Client ID	NY 375-6.8(a) & CP-51 Table 1				FE-SB-12 (5-5.5)			FE-SB-13 (5-5.5)			FE-SB-14 (5-5.5)			SB-49C (7.5-8)			SB-49C (9.5-10)		
Lab Sample ID	Unrestricted	Restricted			460-160782-9			460-160782-11			460-160782-14			460-160782-6			460-160782-7		
Sampling Date	Use Soil	Residential	Residential	Commercial	07/17/2018 10:10:00			07/18/2018 10:35:00			07/18/2018 12:00:00			07/17/2018 10:55:00			07/17/2018 11:04:00		
Matrix	Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil			Soil			Soil			Soil			Soil		
Dilution Factor	Criteria	Criteria	Criteria	Criteria	1			1			1			1			1		
VOA-8260C-SOIL					Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
SOIL BY 8260C (mg/kg)																			
1,1-Dichloroethene	0.33	100	100	500	0.00058	J	0.00032	0.00049	J	0.00018	0.00098	U	0.00022	0.00093	J	0.00039	0.00043	J	0.00018
2-Butanone (MEK)	0.12	100	NA	NA	0.022		0.0016	0.0019	J	0.00090	0.0052		0.0011	0.0051	J	0.0019	0.0011	J	0.00091
Acetone	0.05	100	100	500	**0.11**	B	0.0054	0.011	B	0.0031	0.024	B	0.0037	0.026	B	0.0066	0.010	B	0.0031
Benzene	0.06	2.9	4.8	44	0.0014	U	0.00037	0.00045	J	0.00021	0.00098	U	0.00025	0.0017	U	0.00045	0.00049	J	0.00021
Carbon disulfide	NA	100	NA	NA	0.011		0.00038	0.087		0.00022	0.0018		0.00026	0.0062		0.00047	0.0022		0.00022
Chloroform	0.37	10	49	350	0.00046	J	0.00045	0.00081	U	0.00026	0.00098	U	0.00031	0.0017	U	0.00056	0.00082	U	0.00026
cis-1,2-Dichloroethene	0.25	59	100	500	0.0014	U	0.00022	0.00081	U	0.00012	0.00098	U	0.00015	0.0017	U	0.00027	0.00016	J	0.00012
Ethylbenzene	1	30	41	390	0.0014	U	0.00028	0.00068	J	0.00016	0.00098	U	0.00020	0.0017	U	0.00035	0.00028	J	0.00016
Isopropylbenzene	NA	100	NA	NA	0.0014	U	0.00018	0.0057		0.00010	0.00098	U	0.00012	0.00065	J	0.00022	0.012		0.00010
Methylene Chloride	0.05	51	100	500	0.0018	B	0.00023	0.00058	J	0.00013	0.00089	J B	0.00016	0.0047		0.00029	0.00026	J B	0.00013
m-Xylene & p-Xylene	NA	NA	NA	NA	0.0014	U	0.00025	0.00070	J	0.00014	0.00098	U	0.00017	0.0017	U	0.00030	0.00082	U	0.00014
o-Xylene	NA	NA	NA	NA	0.0014	U	0.00013	0.00036	J	0.000077	0.00098	U	0.000093	0.0017	U	0.00017	0.00082	U	0.000078
Styrene	NA	NA	NA	NA	0.0014	U	0.00017	0.00081	U	0.00010	0.00098	U	0.00012	0.00022	J	0.00022	0.00082	U	0.00010
Tetrachloroethene	1.3	5.5	19	150	0.00020	J	0.00020	0.0068		0.00012	0.00098	U	0.00014	0.00094	J	0.00025	0.0030		0.00012
Trichloroethene	0.47	10	21	200	0.0014	U	0.00020	0.00033	J	0.00012	0.00098	U	0.00014	0.00091	J	0.00025	0.00039	J	0.00012
Trichlorofluoromethane	NA	NA	NA	NA	0.0014	U	0.00058	0.00081	U	0.00033	0.00098	U	0.00040	0.0028		0.00071	0.0011		0.00033
Total Conc	NA	NA	NA	NA	0.14604			0.11599			0.03189			0.04845			0.03141		
Total Estimated Conc. (TICs)	NA	NA	NA	NA	0.0*T			0.1059			0.0*T			0.0*T			0.0119		

mg/kg - milligrams per kilogram
B : Compound was found in the blank and sample.
J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U : Indicates the analyte was analyzed for but not detected.
0.11 Result exceeds the Unrestricted Use Soil Cleanup Criteria.

TABLE 8
Former AKZO-Nobel Pilot Plant
July 2018 Pesticide Impacted Soil
Pesticide Analtyical Results

Client ID	NY 375-6.8(a) & CP-51 Table 1				SB-10 (4.0-4.5)			SB-10 (10-10.5)		
Lab Sample ID	Unrestricted	Restricted			460-160782-4			460-160782-5		
Sampling Date	Use Soil	Residential	Residential	Commercial	7/17/2018			7/17/2018		
Matrix	Cleanup	Soil Cleanup	Soil Cleanup	Soil Cleanup	Soil			Soil		
Dilution Factor	Objective	Objective	Objective	Objective	5			1		
GCSVOA-8081B-SOIL					Result	Q	MDL	Result	Q	MDL
SOIL BY 8081B										
4,4'-DDD	0.0033	2.6	13	92	**0.074**		0.0061	0.0025	J	0.0014
4,4'-DDE	0.0033	1.8	8.9	62	**0.0098**	J	0.0042	0.0084	U	0.0010
4,4'-DDT	0.0033	1.7	7.9	47	**0.15**		0.0066	**0.0073**	J	0.0015
Aldrin	0.005	0.019	0.097	0.68	0.036	U	0.0054	0.0084	U	0.0013
alpha-BHC	0.02	0.097	0.48	3.4	0.011	U	0.0036	0.0025	U	0.00086
beta-BHC	0.036	0.072	0.36	3	0.011	U	0.0040	0.0025	U	0.00094
Chlordane (n.o.s.)	NA	NA	NA	NA	0.36	U	0.087	0.084	U	0.020
delta-BHC	0.04	100	100	500	0.011	U	0.0022	0.0025	U	0.00052
Dieldrin	0.005	0.039	0.2	1.4	**0.47**		0.0047	**0.012**		0.0011
Endosulfan I	2.4	4.8	24	200	0.036	U	0.0055	0.0084	U	0.0013
Endosulfan II	2.4	4.8	24	200	0.036	U	0.0092	0.0084	U	0.0022
Endosulfan sulfate	2.4	4.8	24	200	0.036	U	0.0045	0.0084	U	0.0011
Endrin	0.014	2.2	11	89	0.036	U	0.0051	0.0084	U	0.0012
Endrin aldehyde	NA	NA	NA	NA	0.036	U	0.0085	0.0084	U	0.0020
Endrin ketone	NA	NA	NA	NA	0.036	U	0.0070	0.0084	U	0.0016
gamma-BHC (Lindane)	0.1	0.28	1.3	9.2	0.011	U	0.0033	0.0025	U	0.00078
Heptachlor	0.042	0.42	2.1	15	0.036	U	0.0042	0.0084	U	0.0010
Heptachlor epoxide	NA	0.077	NA	NA	0.036	U	0.0054	0.0084	U	0.0013
Methoxychlor	NA	100	NA	NA	0.036	U	0.0082	0.0084	U	0.0019
Toxaphene	NA	NA	NA	NA	0.36	U	0.13	0.084	U	0.030

NR: Not Analyzed
Highlighted Concentrations shown in bold type face exceed limits
J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U : Indicates the analyte was analyzed for but not detected.
0.074 Result exceeds the Unrestricterd Use Soil Cleanup Criteria.
0.47 Result exceeds the Restricted Residential Soil Cleanup Criteria.

TABLE 9
Former AKZO-Nobel Pilot Plant
August 2018 Groundwater
Volatile Organic Compound Results

Client ID	NYSDEC	MW-1			MW-2			TB			FB		
Lab Sample ID	Ambient	460-162858-2			460-162858-3			460-162858-4			460-162858-1		
Sampling Date	Groundwater	8/16/2018			8/16/2018			8/16/2018			8/16/2018		
Matrix	Qualtiy	Water			Water			Water			Water		
Dilution Factor	Standards	1			1			1			1		
VOA-8260C-WATER		Result	Q	MDL	Result	Q	MDL	Result	Q	MDL	Result	Q	MDL
WATER BY 8260C (µg/L)													
1,1,1-Trichloroethane	5	1.0	U	0.24	1.0	U	0.24	1.0	U	0.24	1.0	U	0.24
1,1,2,2-Tetrachloroethane	5	1.0	U	0.37	1.0	U	0.37	1.0	U	0.37	1.0	U	0.37
1,1,2-Trichloro-1,2,2-trifluoroethane	NA	1.0	U	0.31	1.0	U	0.31	1.0	U	0.31	1.0	U	0.31
1,1,2-Trichloroethane	NA	1.0	U	0.43	1.0	U	0.43	1.0	U	0.43	1.0	U	0.43
1,1-Dichloroethane	5	1.0	U *	0.26	1.0	U *	0.26	1.0	U *	0.26	1.0	U *	0.26
1,1-Dichloroethene	5	1.0	U *	0.12	1.0	U *	0.12	1.0	U *	0.12	1.0	U *	0.12
1,2,3-Trichlorobenzene	NA	1.0	U	0.36	1.0	U	0.36	1.0	U	0.36	1.0	U	0.36
1,2,4-Trichlorobenzene	5	1.0	U	0.37	1.0	U	0.37	1.0	U	0.37	1.0	U	0.37
1,2-Dibromo-3-Chloropropane	NA	1.0	U	0.38	1.0	U	0.38	1.0	U	0.38	1.0	U	0.38
1,2-Dichlorobenzene	4.7	1.0	U	0.43	1.0	U	0.43	1.0	U	0.43	1.0	U	0.43
1,2-Dichloroethane	5	1.0	U	0.43	1.0	U	0.43	1.0	U	0.43	1.0	U	0.43
1,2-Dichloropropane	NA	1.0	U	0.35	1.0	U	0.35	1.0	U	0.35	1.0	U	0.35
1,3-Dichlorobenzene	5	1.0	U	0.34	1.0	U	0.34	1.0	U	0.34	1.0	U	0.34
1,4-Dichlorobenzene	5	1.0	U	0.76	1.0	U	0.76	1.0	U	0.76	1.0	U	0.76
1,4-Dioxane	NA	0.20	U	0.016	0.20	U	0.016	0.20	U	0.016	50	U	28*
2-Butanone (MEK)	50	5.0	U	1.9	5.0	U	1.9	5.0	U	1.9	5.0	U	1.9
2-Hexanone	NA	5.0	U	2.9	5.0	U	2.9	5.0	U	2.9	5.0	U	2.9
4-Methyl-2-pentanone (MIBK)	50	5.0	U	2.7	5.0	U	2.7	5.0	U	2.7	5.0	U	2.7
Acetone	50	5.0	U	5.0	5.0	U	5.0	5.0	U	5.0	5.0		5.0
Benzene	0.7	1.0	U	0.43	1.0	U	0.43	1.0	U	0.43	1.0	U	0.43
Bromoform	NA	1.0	U	0.54	1.0	U	0.54	1.0	U	0.54	1.0	U	0.54
Bromomethane	NA	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0	1.0	U	1.0
Carbon disulfide	50	1.0	U	0.16	1.0	U	0.16	0.26	J B	0.16	0.25	J B	0.16
Carbon tetrachloride	5	1.0	U	0.21	1.0	U	0.21	1.0	U	0.21	1.0	U	0.21
Chlorobenzene	5	1.0	U	0.38	1.0	U	0.38	1.0	U	0.38	1.0	U	0.38
Chlorobromomethane	NA	1.0	U *	0.41	1.0	U *	0.41	1.0	U *	0.41	1.0	U *	0.41
Chlorodibromomethane	50	1.0	U	0.28	1.0	U	0.28	1.0	U	0.28	1.0	U	0.28
Chloroethane	50	1.0	U	0.32	1.0	U	0.32	1.0	U	0.32	1.0	U	0.32
Chloroform	7	1.0	U *	0.33	0.41	J *	0.33	1.0	U *	0.33	1.0	U *	0.33
Chloromethane	NA	1.0	U	0.14	1.0	U	0.14	1.0	U	0.14	1.0	U	0.14
cis-1,2-Dichloroethene	NA	1.0	U *	0.22	1.0	U *	0.22	1.0	U *	0.22	1.0	U *	0.22
cis-1,3-Dichloropropene	NA	1.0	U	0.46	1.0	U	0.46	1.0	U	0.46	1.0	U	0.46
Cyclohexane	NA	1.0	U	0.32	1.0	U	0.32	1.0	U	0.32	1.0	U	0.32
Dichlorobromomethane	NA	1.0	U	0.34	1.0	U	0.34	1.0	U	0.34	1.0	U	0.34
Dichlorodifluoromethane	NA	1.0	U	0.12	1.0	U	0.12	1.0	U	0.12	1.0	U	0.12
Ethylbenzene	5	1.0	U	0.30	1.0	U	0.30	1.0	U	0.30	1.0	U	0.30
Ethylene Dibromide	NA	1.0	U	0.50	1.0	U	0.50	1.0	U	0.50	1.0	U	0.50
Isopropylbenzene	NA	1.0	U	0.34	1.0	U	0.34	1.0	U	0.34	1.0	U	0.34
Methyl acetate	NA	5.0	U	0.31	5.0	U	0.31	5.0	U	0.31	5.0	U	0.31
Methyl tert-butyl ether	NA	1.0	U	0.47	1.0	U	0.47	1.0	U	0.47	1.0	U	0.47
Methylcyclohexane	NA	1.0	U	0.26	1.0	U	0.26	1.0	U	0.26	1.0	U	0.26
Methylene Chloride	5	1.0	U *	0.32	1.0	U *	0.32	0.34	J *	0.32	1.8	*	0.32
m-Xylene & p-Xylene	NA	1.0	U	0.30	1.0	U	0.30	1.0	U	0.30	1.0	U	0.30
o-Xylene	NA	1.0	U	0.36	1.0	U	0.36	1.0	U	0.36	1.0	U	0.36
Styrene	NA	1.0	U	0.42	1.0	U	0.42	1.0	U	0.42	1.0	U	0.42
Tetrachloroethene	5	1.0	U	0.25	4.3		0.25	1.0	U	0.25	1.0	U	0.25
Toluene	5	1.0	U	0.38	1.0	U	0.38	1.0	U	0.38	1.0	U	0.38
trans-1,2-Dichloroethene	5	1.0	U *	0.24	1.0	U *	0.24	1.0	U *	0.24	1.0	U *	0.24
trans-1,3-Dichloropropene	NA	1.0	U	0.49	1.0	U	0.49	1.0	U	0.49	1.0	U	0.49
Trichloroethene	5	1.0	U *	0.31	1.0	U *	0.31	1.0	U *	0.31	1.0	U *	0.31
Trichlorofluoromethane	NA	1.0	U	0.14	0.74	J	0.14	1.0	U	0.14	1.0	U	0.14
Vinyl chloride	2	1.0	U	0.17	1.0	U	0.17	1.0	U	0.17	1.0	U	0.17
Total Conc	NA	0.0			5.45			0.6			7.05		

µg/L - micrograms per liter.
* : LCS or LCSD is outside acceptance limits.
B : Compound was found in the blank and sample.
J : Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
U : Indicates the analyte was analyzed for but not detected.
28*: SIMS analsysis not performed on sample MDL exceeds standard.

ATTACHMENT 3

INCLUDED UNDER SEPARATE COVER

ATTACHMENT 4

Client: Enviro Analytics Group, LLC
Site: Former Akzo Nobel Plant, Ardsley,NY
Date Started: 7/18/2018
Elevation
Hole Diameter: 2 inches

Boring No.: FE-SB-1
Project No.: ENVLT008 D
Date Completed: 7/18/2018
Geologist: A. Attenborough
Boring Method: Direct Push

Elev. (ft.)	Depth (ft.)	PID (ppm)	Recovery (ft.)	Sample No.	Description	Comments
	0	3 7.4 3.3 2 2.1 2.1	3	FE-SB-1 (2.5-3)	Black, dry, c-f SAND, some Silt, trace Gravel	
	5					
	10					
	15					
	20					

Client: Enviro Analytics Group, LLC
Site: Former Akzo Nobel Plant, Ardsley,NY
Date Started: 7/18/2018
Elevation
Hole Diameter: 2 inches

Boring No.: FE-SB-2
Project No.: ENVLT008 D
Date Completed: 7/18/2018
Geologist: A. Attenborough
Boring Method: Direct Push

Elev. (ft.)	Depth (ft.)	PID (ppm)	Recovery (ft.)	Sample No.	Description	Comments
	0	0			0.5 Concrete	
		8.6			Black, dry, c-f SAND, some Silt, trace Gravel	
		20.9				
		18.1				
		10	3	FE-SB-2 (2.5-3)		
		6.4				
	5					
	10					
	15					
	20					

Client: Enviro Analytics Group, LLC
Site: Former Akzo Nobel Plant, Ardsley,NY
Date Started: 9/13/2018
Elevation
Hole Diameter: 2 inches

Boring No.: FE-SB-2A
Project No.: ENVLT008 D
Date Completed: 9/13/2018
Geologist: A. Attenborough
Boring Method: Direct Push

Elev. (ft.)	Depth (ft.)	PID (ppm)	Recovery (ft.)	Sample No.	Description	Comments
	0	2.2 1.2 1.2 1.2 1.7 1.9	3.5	FE-SB-2A (2.5-3)	1.0 Brick fragments, powedered concrete 2.5 Brown, damp, c-f SAND, little Silt	
	5					
	10					
	15					
	20					

Client: Enviro Analytics Group, LLC
Site: Former Akzo Nobel Plant, Ardsley,NY
Date Started: 9/13/2018
Elevation
Hole Diameter: 2 inches

Boring No.: FE-SB-2B
Project No.: ENVLT008 D
Date Completed: 9/13/2018
Geologist: A. Attenborough
Boring Method: Direct Push

Elev. (ft.)	Depth (ft.)	PID (ppm)	Recovery (ft.)	Sample No.	Description	Comments
	0					
		0.2			0.5 Brick fragments, powdered concrete	
		0.2			1.0 Black, moist, CLAYEY SILT, trace coarse Sand	
		0.2				
		0.2			0.5 Gray/Tan, dry SILT, trace fine Sand	
		0.2	3	FE-SB-2B (2.5-3)	1.0 Orange, dry fine SAND and Silt.	
		0.2				
	5					
	10					
	15					
	20					

Client: Enviro Analytics Group, LLC
Site: Former Akzo Nobel Plant, Ardsley,NY
Date Started: 7/17/2018
Elevation
Hole Diameter: 2 inches

Boring No.: FE-SB-3
Project No.: ENVLT008 D
Date Completed: 7/17/2018
Geologist: A. Attenborough
Boring Method: Direct Push

Elev. (ft.)	Depth (ft.)	PID (ppm)	Recovery (ft.)	Sample No.	Description	Comments
	0	0 0 0 0 0 0 0	3.5	FE-SB-3 (2.5-3)	0.5 - Concrete 0.7 Brown, dry, SILT, some m-f Sand, trace Gravel 1.2 - Black, damp, SILT, some f. Sand	
	5					
	10					
	15					
	20					

Client: Enviro Analytics Group, LLC
Site: Former Akzo Nobel Plant, Ardsley,NY
Date Started: 7/18/2018
Elevation
Hole Diameter: 2 inches

Boring No.: FE-SB-4
Project No.: ENVLT008 D
Date Completed: 7/18/2018
Geologist: A. Attenborough
Boring Method: Direct Push

Elev. (ft.)	Depth (ft.)	PID (ppm)	Recovery (ft.)	Sample No.	Description	Comments
	0	0 0 0 0 0 0	2.9	FE-SB-4 (2.5-3)	0.5 - Concrete Brown, m-f SAND, some Silt, trace Gravel.	
	5					
	10					
	15					
	20					

Client: Enviro Analytics Group, LLC
Site: Former Akzo Nobel Plant, Ardsley,NY
Date Started: 7/18/2018
Elevation
Hole Diameter: 2 inches

Boring No.: FE-SB-5
Project No.: ENVLT008 D
Date Completed: 7/18/2018
Geologist: A. Attenborough
Boring Method: Direct Push

Elev. (ft.)	Depth (ft.)	PID (ppm)	Recovery (ft.)	Sample No.	Description	Comments
	0	3 7.4 3.3 2 2.1 2.1	3	FE-SB-5 (2.5-3)	Black, damp, c-f SAND, some Silt, trace Gravel	
	5					
	10					
	15					
	20					

Client: Enviro Analytics Group, LLC
Site: Former Akzo Nobel Plant, Ardsley,NY
Date Started: 7/17/2018
Elevation
Hole Diameter: 2 inches

Boring No.: FE-SB-6
Project No.: ENVLT008 D
Date Completed: 7/17/2018
Geologist: A. Attenborough
Boring Method: Direct Push

Elev. (ft.)	Depth (ft.)	PID (ppm)	Recovery (ft.)	Sample No.	Description	Comments
	0	0			0.5 - Concrete	
		0		FE-SB-6 (0-0.5)	Black, damp, SILT, some m-f Sand, trace Gravel (bricks)	
		0				
		0				
		0				
		0	3	FE-SB-6 (1.5-2)		
	5					
	10					
	15					
	20					

Client: Enviro Analytics Group, LLC
Site: Former Akzo Nobel Plant, Ardsley,NY
Date Started: 7/18/2018
Elevation
Hole Diameter: 2 inches

Boring No.: FE-SB-7
Project No.: ENVLT008 D
Date Completed: 7/18/2018
Geologist: A. Attenborough
Boring Method: Direct Push

Elev. (ft.)	Depth (ft.)	PID (ppm)	Recovery (ft.)	Sample No.	Description	Comments
	0	0			0.5 - Brown ORGANIC SILT (Topsoil)	
		0			0.5 - Concrete	
		0			1.0 - Brick Fragments	
		0	2			
	5	0			Red Brown, wet, GRAVEL, little c-f Sand, trace Silt	
		0				
		0				
		0		FE-SB-7 (8-8.5)		Wet at 7.0 ft.
			2			
	10					
	15					
	20					

Client: Enviro Analytics Group, LLC
Site: Former Akzo Nobel Plant, Ardsley,NY
Date Started: 7/18/2018
Elevation
Hole Diameter: 2 inches

Boring No.: FE-SB-8
Project No.: ENVLT008 D
Date Completed: 7/18/2018
Geologist: A. Attenborough
Boring Method: Direct Push

Elev. (ft.)	Depth (ft.)	PID (ppm)	Recovery (ft.)	Sample No.	Description	Comments
	0	0			0.5 - ORGANIC SILT (Topsoil)	
		0			Light Brown, Grey, c-f SAND, some Silt, some Gravel	
		0				
		0				
		0	2.5			
	5	0			Same	Wet @ 5.5 ft.
		0			Light Grey, wet, c-f SAND, some Gravel, trace Silt	
			1	FE-SB-8 (8-8.5)		
	10					
	15					
	20					

Client: Enviro Analytics Group, LLC
Site: Former Akzo Nobel Plant, Ardsley,NY
Date Started: 7/17/2018
Elevation
Hole Diameter: 2 inches

Boring No.: FE-SB-9
Project No.: ENVLT008 D
Date Completed: 7/17/2018
Geologist: A. Attenborough
Boring Method: Direct Push

Elev. (ft.)	Depth (ft.)	PID (ppm)	Recovery (ft.)	Sample No.	Description	Comments
	0	0	2.5		Brown, dry, m-f SAND, some Silt (bricks, concrete)	
	5	0	2.5	FE-SB-9 (8-8.5)	Same	Wet at 7.0 ft.
	10					
	15					
	20					

Client: Enviro Analytics Group, LLC
Site: Former Akzo Nobel Plant, Ardsley,NY
Date Started: 7/17/2018
Elevation
Hole Diameter: 2 inches

Boring No.: FE-SB-10
Project No.: ENVLT008 D
Date Completed: 7/17/2018
Geologist: A. Attenborough
Boring Method: Direct Push

Elev. (ft.)	Depth (ft.)	PID (ppm)	Recovery (ft.)	Sample No.	Description	Comments
	0	0 0 0 0 0 0	2.3		0.5 - ORGANIC SILT (grass) Light Brown, dry, SILT, little m-f SAND (bricks, concrete)	-
	5	0 0 0 0 0 0	2.9	FE-SB-10 (8-8.5)	1.5 - Same 1.2 - Brown, moist, SILT. 0.4 - Brown, wet, c-f SAND, little Silt.	Wet @ 7.7 ft.
	10					
	15					
	20					

Client: Enviro Analytics Group, LLC
Site: Former Akzo Nobel Plant, Ardsley,NY
Date Started: 7/17/2018
Elevation
Hole Diameter: 2 inches

Boring No.: FE-SB-11
Project No.: ENVLT008 D
Date Completed: 7/17/2018
Geologist: A. Attenborough
Boring Method: Direct Push

Elev. (ft.)	Depth (ft.)	PID (ppm)	Recovery (ft.)	Sample No.	Description	Comments
	0	0	1.8		Brown, dry, m-f SAND, some Silt (bricks, concrete)	-
	5	0	2	FE-SB-11 (8-8.5)	Same	Wet at 7.0 ft.
	10	0	5	FE-SB-11 (14.5-15)	Red Brown, Wet, GRAVEL, little c-f Sand, trace Silt	
	15					
	20					

Client: Enviro Analytics Group, LLC
Site: Former Akzo Nobel Plant, Ardsley,NY
Date Started: 7/17/2018
Elevation
Hole Diameter: 2 inches

Boring No.: FE-SB-12
Project No.: ENVLT008 D
Date Completed: 7/17/2018
Geologist: A. Attenborough
Boring Method: Direct Push

Elev. (ft.)	Depth (ft.)	PID (ppm)	Recovery (ft.)	Sample No.	Description	Comments
	0	0 0 0 0 0 0	3		0.5 - Brown, dry, m-f SAND, and Silt 2.4 - Light Brown, SILT, some Gravel, trace Sand (Dry, Concrete)	-
	5	0 0	1	FE-SB-12 (5-5.5)	Brown - Tan, dry, SILT, some fine Sand.	Wet at 7.0 ft.
	10					
	15					
	20					

Client: Enviro Analytics Group, LLC
Site: Former Akzo Nobel Plant, Ardsley,NY
Date Started: 7/17/2018
Elevation
Hole Diameter: 2 inches

Boring No.: FE-SB-13
Project No.: ENVLT008 D
Date Completed: 7/17/2018
Geologist: A. Attenborough
Boring Method: Direct Push

Elev. (ft.)	Depth (ft.)	PID (ppm)	Recovery (ft.)	Sample No.	Description	Comments
	0	0	1		Brown, dry, SILT, some Gravel, trace Sand.	-
		0				
	5	1.7		FE-SB-13 (5-5.5)	0.5 - Same.	
		4.2	1		0.5 - Dark Grey, wet, c-f SAND, some Silt, little Gravel	Wet @ 5.5 ft.
	10					
	15					
	20					

Client: Enviro Analytics Group, LLC
Site: Former Akzo Nobel Plant, Ardsley,NY
Date Started: 7/17/2018
Elevation
Hole Diameter: 2 inches

Boring No.: FE-SB-14
Project No.: ENVLT008 D
Date Completed: 7/17/2018
Geologist: A. Attenborough
Boring Method: Direct Push

Elev. (ft.)	Depth (ft.)	PID (ppm)	Recovery (ft.)	Sample No.	Description	Comments
	0	0 0 0 0 0 0	2.9		Brown, dry, SILT, some Gravel, some Sand.	-
	5	0 0 0	1.5	FE-SB-14 (5-5.5)	Gray, dry, m-f SAND, some Silt, trace Gravel	
	10					
	15					
	20					

Client: Enviro Analytics Group, LLC
Site: Former Akzo Nobel Plant, Ardsley,NY
Date Started: 7/17/2018
Elevation
Hole Diameter: 2 inches

Boring No.: SB-49C
Project No.: ENVLT008 D
Date Completed: 7/17/2018
Geologist: A. Attenborough
Boring Method: Direct Push

Elev. (ft.)	Depth (ft.)	PID (ppm)	Recovery (ft.)	Sample No.	Description	Comments
	0	0 0 0 0 0 0	2.9		1.0 - Brown, dry, SILT, some fine Sand, little Gravel 1.5 - Black, dry, SAND and SILT, trace Gravel 0.4 - BRICKS	-
	5	0.5 0.4 0.4 0.5 0 0 0 0	4	SB-49C (7.5-8) SB-49C (9.5-10)	Brown to Grey, c-f SAND, some Silt, trace Gravel Alt. Brown SAND with Grey to Brown, SAND, some Silt, some Gravel (Wet, Weathered Brick)	Wet @ 5.5 ft.
	10					
	15					
	20					

Client: Enviro Analytics Group, LLC
Site: Former Akzo Nobel Plant, Ardsley,NY
Date Started: 7/17/2018
Elevation
Hole Diameter: 2 inches

Boring No.: SB-74C
Project No.: ENVLT008 D
Date Completed: 7/17/2018
Geologist: A. Attenborough
Boring Method: Direct Push

Elev. (ft.)	Depth (ft.)	PID (ppm)	Recovery (ft.)	Sample No.	Description	Comments
	0	0			0.5 - Concrete	
		0			Brown, dry, SILT, some m-f Sand, trace Gravel	-
		0				
		0	2			
	5	0			Black, damp, SILT, some f. Sand	
		0				
		0				
		0				
		0	3	SB-74C (7.5-8)	0.5 - Tan to Grey, SILT, some f. Sand	
	10					
	15					
	20					

Client: Enviro Analytics Group, LLC
Site: Former Akzo Nobel Plant, Ardsley,NY
Date Started: 7/18/2018
Elevation
Hole Diameter: 2 inches

Boring No.: VES-1 1A
Project No.: ENVLT008 D
Date Completed: 7/18/2018
Geologist: A. Attenborough
Boring Method: Direct Push

Elev. (ft.)	Depth (ft.)	PID (ppm)	Recovery (ft.)	Sample No.	Description	Comments
	0	0			0.5 - Concrete	-
			0.5			
	5	1			Black, moist, c-f SAND, some Silt, trace Gravel	
		4.7				
			0.7			
	10	2			Black, wet, c-f SAND, little Silt	
		2				
		4.6			Black to Brown, wet, c-f SAND, some Silt	
		18.1				
		22.5	4.4			
		36.1				
		14.3				
		1.3		VES-1		
		1.4		(13.5-14)		
	15	0			1.25 Black, wet, c-f SAND, some Silt	
		0				
		0				
		0			1.25 Black, wet, SILT, trace fine Sand	
		0	2.5			
	20					

Boring No. VES-1 1A
Project No.: ENVLT008 D

Elev. (ft.)	Depth (ft.)	PID (ppm)	Recovery (ft.)	Sample No.	Description	Comments
	20	0 0 0 0 0 0	3	VES-1A (2.5-3)	2.5 Same 0.5 Olive to Gray, interbedded SILT & Clay (running)	-
	25	0 0 0 0 0 0 0	3.5		1.0 Same 2.5 Gray, wet, SILT	
	30	0 0 0 0 0 0 0 0	4		Same	
	35	0 0 0 0 0 0 0 0	4		Same	
	40					

ATTACHMENT 5

FIRST ENVIRONMENT, INC.
LOW FLOW PURGING / SAMPLING LOG

Project Number: ENVLT 008 Client Name: Ardsley LLC

Location: LAWRENCE St. Ardsley NY. Date: 8/16/18

Field Team: GMC, AA

Well Information Well ID: MW-2 Total Well Depth (ft) 23.0

Location:

Low Flow Purge Data *(WELLS ONLY)*

Date / Time: 8/16/18 Pump Type: Bladder Init. Water Level: 12.07

Well Casing: Stick-up / ~~Flush Mount~~ Measuring Point (MP): TOC Tubing Depth (from MP): 14.6

Sampling Information

Sampling Data: Date: 8/16/18 Time: Parameters: Sample ID: MW-2

Field Observations:

Time	pH (+/-0.1)	SC (mS/cm) (+/-3%)	Turbidity (NTU) (+/-10%)	DO (mg/l) (+/-10%)	Temperature (°C) (+/-3%)	ORP (mV) (+/- 10 mV)	DTW (ft) (Δ <0.3 ft)	Notes: CPM/PSI
0856	5.32	0.735	0.0	8.46	25.20	260	12.03	CPM4/PSI 15
0901	5.34	0.742	0.0	6.61	21.35	262	12.03	
0906	5.32	0.754	0.0	6.31	19.64	265	12.03	
0911	5.26	0.757	800	5.59	19.42	271	12.03	
0916	5.11	0.763	776	5.43	19.17	283	12.03	
0921	5.03	0.762	561	5.24	19.24	293	12.03	
0926	4.96	0.756	434	5.31	19.78	304	12.03	
0931	4.95	0.756	340	4.93	19.97	308	12.03	
0936	4.89	0.753	289	4.75	20.15	315	12.03	
0941	4.87	0.749	173	4.58	20.29	320	12.03	
0946	4.85	0.748	150	4.45	20.36	325	12.03	
0951	4.82	0.749	133	4.33	20.32	330	12.03	
0956	4.81	0.746	115	4.18	20.45	333	12.03	
1001	4.80	0.743	97.7	4.05	20.67	335	12.03	
1006	4.79	0.742	78.5	3.91	20.85	337	12.03	

Signature: GMC

FIRST ENVIRONMENT, INC.
LOW FLOW PURGING / SAMPLING LOG

Project Number: ENVT0088 Client Name: Ardsley LLC

Location: LAWRENCE ST. Ardsley NY. Date: 8/16/18

Field Team: GMC, AA

Well Information Well ID: MW-1 Total Well Depth (ft) 20.0

Location: BACK NEAR Fence line ON Asphalt pad.

Low Flow Purge Data *(WELLS ONLY)*

Date / Time: 8/16/18 Pump Type: Bladder Init. Water Level: 5.10

Well Casing: Stick-up / Flush Mount Measuring Point (MP): TOC Tubing Depth (from MP): _____

Sampling Information

Sampling Data: Date: 8/16/18 Time: _____ Parameters: _____ Sample ID: MW-1

Field Observations: _____

Time	pH (+/-0.1)	SC (mS/cm) (+/-3%)	Turbidity (NTU) (+/-10%)	DO (mg/l) (+/-10%)	Temperature (°C) (+/-3%)	ORP (mV) (+/- 10 mV)	DTW (ft) (Δ <0.3 ft)	Notes: CPM/PSI
1135	6.82	0.134	190	4.45	26.47	159	5.15	CPM4/PSI 15
1140	6.60	0.286	16.0	0.54	22.80	165	5.15	
1145	6.55	0.370	8.2	0.0	21.86	188	5.15	
1150	6.54	0.428	0.0	0.0	21.57	200	5.15	
1155	6.34	0.449	0.0	0.0	21.53	204	5.15	
1200	6.54	0.451	0.0	0.0	21.45	204	5.15	

Signature: _____

FIRST ENVIRONMENT

Daily Sampling Calibration Log
QEH&S MS

PROJECT NUMBER: ENV1+008 Date: 8/16/18

Project Name/Location: Ardsley, LLC NY. PM/LSRP: ddL/AA

PID/FID Model and Unit ID: MINI RAE

Horiba Model and Unit ID: HORIBA U52 CERT#

PID/FID Calibration Time: 0650 Initials: GMC

Zero Reading	Span Gas Conc.	Span Reading
0.0	100 PPM	100.0 PPM

Horiba Auto Calibration* Not required in NJ; check with LSRP

Time: 0700 Initials: GMC

Analysis	Standard	Standard Value	Reading	Acceptable Reading	Recovery (%)	Acceptable Recovery
Temperature	°C/°F	Add adjustment value to Reading	25.95			
pH	Autocal Solution	4	4.00	3.9 – 4.1		
Dissolved Oxygen	Air	8-12 mg/l	8.2	8 – 12 mg/l		
Specific Conductance	Autocal Solution	4.49 mS/cm	4.47	4.35 – 4.63 mS/cm		+/- 3%
Turbidity	Autocal Solution	0.0 NTU	0.0	0.0 – 0.5 NTU		+/- 10%

Horiba Manual Check/Calibration - Required in NJ; non-NJ, check local requirements

Analysis	Standard	Reading	Time	Signature
Dissolved Oxygen				
	0 mg/l (Sodium Sulfite Solution)	0	0701	GMC
	8.8 mg/l summer/ 8.2 mg/l winter (Air)	8.2	0701	
Specific Conductance				
	0.0 mScm (air)	0.0	0702	GMC
	1.413 mScm	1.41	0702	

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC
92 North Main St, Building 20
Windsor, NJ 08561
Toll-free: (800) 301-9663

Pine Environmental Services, Inc.

Instrument ID 21708
Description MiniRAE 3000
Calibrated 8/15/2018 1:52:45PM

Manufacturer Rae Systems
Model Number MiniRAE 3000
Serial Number/ Lot Number 592-908251
Location New Jersey
Department

State Certified
Status Pass
Temp °C 24.9
Humidity % 53

Calibration Specifications

Group # 1
Group Name Isobutylene
Stated Accy Pct of Reading

Range Acc % 0.0000
Reading Acc % 3.0000
Plus/Minus 0.00

Nom In Val / In Val	In Type	Out Val	Out Type	Fnd As	Lft As	Dev%	Pass/Fail
100.00 / 100.00	PPM	100.00	PPM	104.10	101.20	1.20%	Pass

Test Instruments Used During the Calibration

(As Of Cal Entry Date)

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	Last Cal Date/ Opened Date	Next Cal Date / Expiration Date

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Simon Mendy

All instruments are calibrated by Pine Environmental Services LLC according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services LLC of any defect within 24 hours of receipt of equipment
Please call 800-301-9663 for Technical Assistance

ATTACHMENT 6

WELL ID: AKZO Nobel MW-1

Local ID: S-1292
Date: 8/14/1997
Time: 11:49

INPUT

Construction:

Casing dia. (d_c)	2	Inch
Annulus dia. (d_w)	6.25	Inch
Screen Length (L)	15	Feet

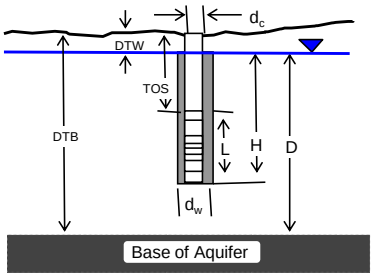
Depths to:

water level (DTW)	5	Feet
top of screen (TOS)	8	Feet
Base of Aquifer (DTB)	23	Feet

Annular Fill:

across screen -- Fine Sand
above screen -- Cement

Aquifer Material -- Till



COMPUTED

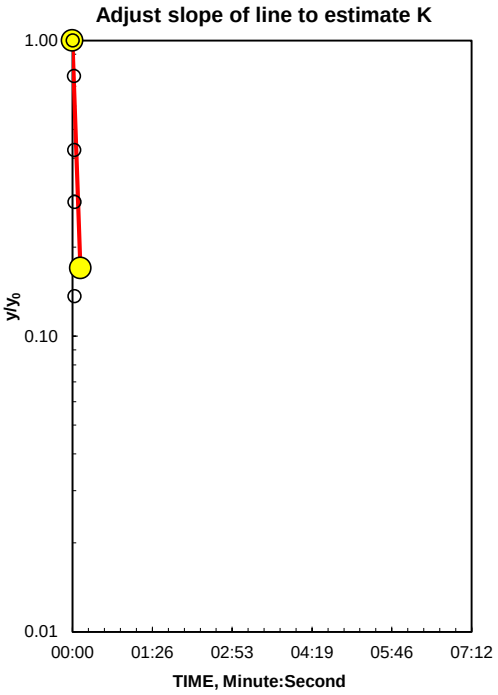
L_{wetted}	15	Feet
D =	18	Feet
H =	18	Feet
L/r_w =	57.60	
$y_{0\text{-DISPLACEMENT}}$ =	0.35	Feet
$y_{0\text{-SLUG}}$ =	1.25	Feet

From look-up table using L/r_w

Fully penetrate C =	3.007	
ln(Re/rw) =	3.206	
Re =	6.43	Feet
Slope =	0.089068	$\log_{10}$/sec
$t_{90\%}$ recovery =	11	sec

K= 13 is greater than extreme maximum of 0.6 for Till

K = Error Feet/Day



K= 13 is greater than likely maximum of 0.3 for Till

REMARKS: Bouwer and Rice analysis of slug test, WRR 1976

Second Test at MW-1 at Former Akzo Nobel Pilot Plant Ardsley, NY.

Reduced Data

Entry	Time, Hr:Min:Sec	Water Level
1	11:49:58.0	6.43
2	11:49:59.2	6.35
3	11:49:59.6	6.23
4	11:49:59.7	6.18
5	11:50:00.0	6.13
6	11:50:01.2	6.06
7	11:50:01.5	6.00
8	11:50:01.7	5.94
9	11:50:02.0	5.89
10	11:50:03.2	5.84
11	11:50:03.5	5.78
12	11:50:03.8	5.74
13	11:50:04.0	5.71
14	11:50:05.2	5.66
15	11:50:05.5	5.62
16	11:50:05.7	5.59
17	11:50:06.0	5.56
18	11:50:07.2	5.52
19	11:50:07.5	5.49
20	11:50:07.7	5.47
21	11:50:08.0	5.44
22	11:50:09.2	5.41
23	11:50:09.5	5.39
24	11:50:09.8	5.37
25	11:50:10.0	5.35
26	11:50:11.4	5.32
27	11:50:11.7	5.29
28	11:50:13.1	5.27
29	11:50:13.6	5.25
30	11:50:14.0	5.22
31	11:50:15.5	5.19
32	11:50:16.0	5.17
33	11:50:17.5	5.15
34	11:50:18.1	5.13
35	11:50:19.7	5.12
36	11:50:21.3	5.10
37	11:50:21.9	5.08
38	11:50:23.7	5.07
39	11:50:25.4	5.06
40	11:50:27.2	5.05
41	11:50:28.1	5.04
42	11:50:30.0	5.03
43	11:50:31.9	5.02
44	11:50:33.9	5.02
45	11:50:36.0	5.02

WELL ID: Akzo Nobel MW-2

Local ID: S-1292
Date: 8/14/1997
Time: 0:00

INPUT

Construction:

Casing dia. (d_c)	2	Inch
Annulus dia. (d_w)	6.25	Inch
Screen Length (L)	15	Feet

Depths to:

water level (DTW)	5	Feet
top of screen (TOS)	10	Feet
Base of Aquifer (DTB)	25	Feet

Annular Fill:

across screen -- Fine Sand
above screen -- Cement

Aquifer Material -- Till

COMPUTED

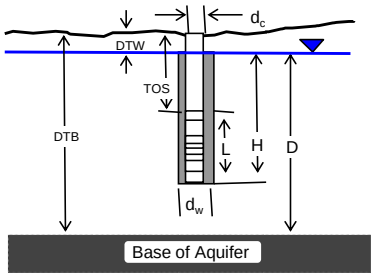
L_{wetted}	15	Feet
D =	20	Feet
H =	20	Feet
L/r_w =	57.60	
$y_{0\text{-DISPLACEMENT}}$ =	1.57	Feet
$y_{0\text{-SLUG}}$ =	1.25	Feet

From look-up table using L/r_w

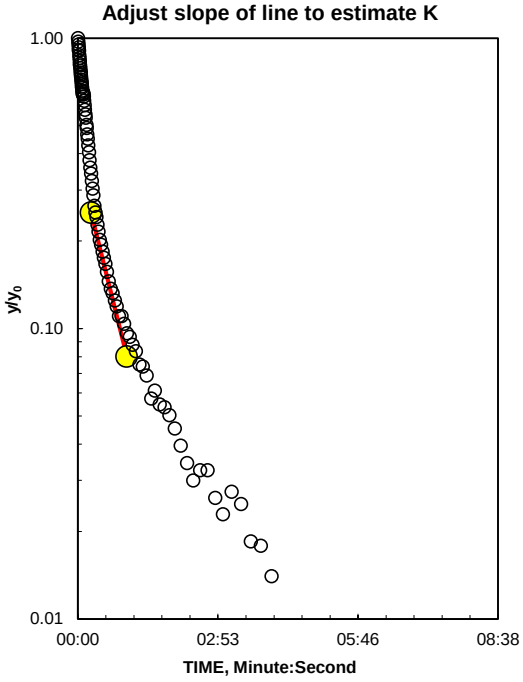
Fully penetrate C =	3.007	
ln(Re/rw) =	3.272	
Re =	6.87	Feet
Slope =	0.01123	$\log_{10}$/sec
$t_{90\%}$ recovery =	89	sec

K= 1.7 is greater than extreme maximum of 0.6 for Till

K = Error Feet/Day



Adjust slope of line to estimate K



K= 1.7 is greater than likely maximum of 0.3 for Till

REMARKS: Bouwer and Rice analysis of slug test, WRR 1976

MW-2 at Former Akzo Nobel Pilot Plant Ardsley, NY.

Entry	Reduced Data Time, Hr:Min:Sec	Water Level
1	0:00:00.0	13.42
2	0:00:00.5	13.34
3	0:00:01.0	13.28
4	0:00:01.5	13.22
5	0:00:02.0	13.16
6	0:00:02.5	13.11
7	0:00:03.0	13.06
8	0:00:03.5	13.02
9	0:00:04.0	12.98
10	0:00:04.5	12.94
11	0:00:05.0	12.91
12	0:00:05.5	12.88
13	0:00:06.0	12.86
14	0:00:06.7	12.86
15	0:00:07.6	12.80
16	0:00:08.5	12.74
17	0:00:09.5	12.69
18	0:00:10.7	12.62
19	0:00:11.9	12.56
20	0:00:13.4	12.49
21	0:00:15.2	12.41
22	0:00:16.9	12.36
23	0:00:19.0	12.30
24	0:00:21.3	12.24
25	0:00:23.9	12.21
26	0:00:26.8	12.17
27	0:00:30.2	12.14
28	0:00:33.7	12.11
29	0:00:37.9	12.08
30	0:00:42.5	12.06
31	0:00:47.6	12.04
32	0:00:53.5	12.02
33	0:01:00.3	12.00
34	0:01:07.2	11.99
35	0:01:15.6	11.97
36	0:01:24.6	11.96
37	0:01:34.8	11.95
38	0:01:46.8	11.93
39	0:01:59.4	11.92
40	0:02:14.4	11.90
41	0:02:30.6	11.90
42	0:02:49.2	11.89
43	0:03:09.6	11.89
44	0:03:33.0	11.88
45	0:03:58.8	11.87