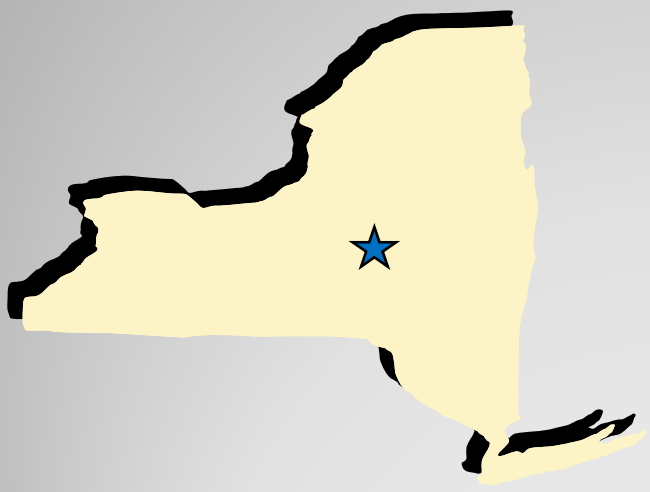
FINAL REMEDIAL INVESTIGATION REPORT

Marshall Transformer Site (633019)
Oneida County, Town of Marshall, New York



Prepared for:

New York State Department of Environmental Conservation
Division of Environmental Remediation

Prepared by:

EA ENGINEERING, P.C. and Its Affiliate
EA SCIENCE and TECHNOLOGY

May 2010

Marshall Transformer Site (633019)
Remedial Investigation Report
Town of Marshall, New York

Prepared for

New York State Department of Environmental Conservation
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Albany, New York 12233

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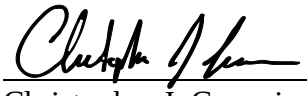
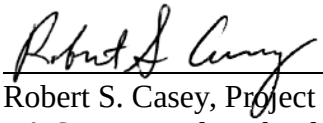


18 May 2010
Christopher J. Canonica, P.E., Program Manager — Date
EA Engineering, P.C.



18 May 2010
Robert S. Casey, Project Manager — Date
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CONTENTS

Page

LIST OF FIGURES

LIST OF TABLES

1. INTRODUCTION

1.1 PROJECT BACKGROUND

The New York State Department of Environmental Conservation (NYSDEC) tasked EA Engineering, P.C., and its affiliate EA Science and Technology (EA) to perform a remedial investigation (RI) at the Former Marshall Transformer Site (NYSDEC Site No. 6-33-019). The site is located in the Town of Marshall, Oneida County, New York (Figure 1).

The work assignment is being conducted under the NYSDEC State Superfund Standby Contract (Work Assignment No. D004438-17). EA performed initial field investigation activities between August and November 2007 and supplemental field investigation activities in December 2008.

1.2 OBJECTIVES

The purpose of the remedial investigation at the site was to characterize surface soil, subsurface soil, and groundwater conditions through observation and laboratory analysis. Remedial investigation activities included the collection of surface soil samples, exploratory test pits with subsurface soil sampling, the advancement of soil borings with subsurface soil sampling, the installation groundwater monitoring wells and groundwater sample collection. Figure 2 illustrates the locations of the test pits, monitoring wells, surface soil and soil boring sampling locations.

This remedial investigation report was completed to discuss the field investigation activities and summarize the analytical results.

1.3 REPORT ORGANIZATION

Section 2 provides a summary of the procedures and techniques used to complete the field investigation program. Section 3 presents a discussion of the findings of the remedial investigation. Section 4 presents a summary and conclusions of the remedial investigation based on the available data collected. Analytical results from the environmental sampling are summarized in table format.

The following are provided as appendices:

- Appendix A: Daily Field Reports
- Appendix B: Surface Soil Sample Logs
- Appendix C: Test Pit Logs
- Appendix D: Soil Boring/Well Logs
- Appendix E: Well Development Forms
- Appendix F: Groundwater Purging/Sampling Forms
- Appendix G: Site Survey Map
- Appendix H: Data Usability Summary Report

- Appendix I: Laboratory Analytical Data - Form Is.
- Appendix J: GIS Database

2. FIELD ACTIVITIES

This section presents the field investigation activities that were performed to meet the goals and objectives of the RI. EA's approach to implementing the RI included field sampling activities designed to evaluate the presence or absence of contaminants of concern (COC) at the site, and to summarize the concentrations of potential COC through laboratory analysis. This report also presents observational data recorded during the field investigation program in conjunction with analytical data.

An initial field investigation program was performed between August and November 2007. A supplemental field investigation was conducted in December 2008. Field investigations included the following:

- ***Site Grubbing and Subsurface Anomalies Survey***-Clearing and grubbing to provide access to all areas of concern, and a subsurface survey using a Schonstedt GA72 CD Magnetometer to locate any surface and/or subsurface anomalies was completed prior to mobilizing the drilling contractor.

- ***Surface Soil Sampling—***Collection and analysis of 29 surface soil samples located throughout the targeted area.

- ***Exploratory Test Pits—***Excavation of 18 test pits and collection and analysis of subsurface soil samples from within the test pit locations.

- ***Soil Borings—***Advancement of 21 soil borings with subsurface soil sample collection and analysis.

- ***Monitoring Well Installation—***Installation and development of three groundwater monitoring wells.

- ***Groundwater Sampling—***Collection and analysis of groundwater samples from three groundwater monitoring wells.

- ***Site Survey—***Survey of site topography, monitoring wells, test pits, surface soil sample locations, and soil boring locations for the preparation of a basemap.

Copies of the daily field reports are provided in Appendix A. Site sampling locations are shown in Figure 2.

2.1 SITE GRUBBING ACTIVITIES AND SUBSURFACE ANOMALIES SURVEY

In order to complete the field investigation activities, site grubbing and clearing was required to allow for access to areas of concern at the site. The access route to the site traverses a private landowner's property; therefore, special considerations were made to limit the impact on the property. The access route to the site was trimmed and cleared to allow for access of drill rigs and excavation equipment. In addition, overgrown areas where surficial transformer disposal was evident, clearing was performed to permit access of the excavation equipment and completion of exploratory test pits. These areas are illustrated on Figure 2. Upon completion of the field investigation activities any noticeable impacts (i.e. ruts, equipment and vehicle tracks) were re-graded and seeded.

In addition to grubbing and clearing activities, a surface and subsurface magnetic survey was performed using a Schonstedt GA72 CD Magnetometer to locate any anomalies within the targeted area. Numerous anomalies were detected throughout the open gravel pit area of the site due to the presence of small metal shards and other debris in the near surface soil. The presence of this debris interfered with the identification of subsurface magnetic anomalies.

2.2 SURFACE SOIL SAMPLING

Surface soil samples were collected on 18 September 2007 from the 0-2-in. interval using a stainless steel spoon. The soil samples were visually inspected and described according to the Unified Soil Classification System. Surface soil sampling logs are included in Appendix B. Twenty five surface soil samples were collected throughout the target area in September 2007 (Figure 2). Surface soil samples were selected based on visual inspection of the surface area, results of the magnetometer survey, field screening with a photo ionization detector (PID), and as directed by the NYSDEC Project Manager. Site screening for anomalies was performed on 17 September 2007. Once the sampling locations were determined a discrete surface soil sample was collected from the selected location. Four additional surface soil samples were collected on 11 December 2008 as a follow-up to the initial investigation activities.

To avoid cross-contamination of samples, all non-dedicated sampling equipment was cleaned initially and prior to being reused. The following decontamination procedures were performed between surface soil sampling locations:

- Wash and scrub with low phosphate laboratory grade detergent
- Rinse with deionized water
- Rinse with HNO_3
- Rinse with deionized water
- Rinse with isopropyl alcohol
- Rinse with deionized water
- Air dry
- Wrap in aluminum for transport.

Surface soil samples SS-01 through SS-25 were submitted to Life Science Laboratories (LSL), in East Syracuse, New York and analyzed for PCBs by USEPA Method 8082. Four surface soil samples (SS-05, SS-07, SS-14, and SS-22) were submitted for full Target Compound List (TCL) suite using the USEPA Contract Laboratory Program (CLP) OLM04.2. Additionally, three samples (SS-23, SS-24 and SS-25) were submitted for VOCs, SVOCs and Total Petroleum Hydrocarbon (TPH) by USEPA Methods 8260B, 8270C and NY310.13 respectively.

During the supplemental field investigation activities conducted in December 2008, surface soil samples SS-26 through SS-29 were submitted to Mitkem Laboratories (Mitkem) and analyzed for PCB s by USEPA Method 8082 and TPH by USEPA Method 8015B.

2.3 TEST PIT INSTALLATION

Exploratory test pits were excavated on 18-20 September 2007. A total of 18 exploratory test pits were excavated by Parratt Wolff Inc. to approximately 10-ft long, 4-ft wide and up to 22-ft deep for the purpose of characterizing and sampling the subsurface soil. Exploratory test pits locations were staked out before excavations began by the NYSDEC and EA. Figure 2 shows the locations of the exploratory test pits. During test pit excavation, soil was removed in 2-ft lifts and placed on plastic sheeting. Potentially impacted soil (i.e., oils, staining, odors) were separated from non-impacted soil. If no visual evidence (transformer parts) or elevated PID readings were encountered between 8-10 ft bgs the test pit excavation was terminated. If visual impact was encountered at 10-ft bgs, the test pit was then taken to a depth at which no impacts were detected (visual, PID readings).

During excavation activities, soil samples were classified and logged according to the Unified Soil Classification System. Field screening using a PID and field observations were recorded during excavation. A field record of soil types, classification, sampling intervals, PID readings, and other field observations were recorded on the test pit log forms provided in Appendix C. During test pit installation, a minimum of one soil sample was collected at a shallow interval (1-4 ft) and one sample at the base of the test pit in order to delineate soil characteristics and the vertical extent of potential impacts in the subsurface soil. If several distinct geologic formations or potentially impacted intervals were encountered during test pit installation, a soil sample was collected from each interval. A total of 49 soil samples were collected from the exploratory test pits.

Soil samples collected from the test pits were sent to LSL and analyzed for PCBs by U.S. Environmental Protection Agency (USEPA) Method 8082. Additionally, five samples were collected from test pits TP-03, TP-07, TP-09, TP-13 and TP-17 and analyzed for a full Target Compound List (TCL) suite using USEPA Contract Laboratory Program (CLP) OLM04.2. Analyses included VOCs (Method 8260B), SVOCs (Method 8270C), pesticides (Method 8081A), Target Analyte List (TAL) metals and mercury (Method 6010/7470).

The soil spoils generated during the exploratory test pit activities were placed back into the originating test pit.

2.4 SOIL BORING INSTALLATION

The purpose of the direct-push/geoprobe overburden evaluation at the site was to further define the nature and extent of potential impacts at the perimeter of the test pit limits. Soil borings were advanced under a separate mobilization effort on 25-26 October 2007 by Parratt Wolff Inc. Based on preliminary analytical results from the surface and subsurface soil samples collected from the test pits and the surface soil, a total of 12 soil borings were advanced from depths ranging from 2 to 12 ft bgs. During the supplemental investigation activities in December 2008 an additional nine soil borings were advanced in areas of concern as determined by an evaluation of analytical, visual, and olfactory data collected during the initial field investigation activities.

EA worked in conjunction with the NYSDEC Project Manager to determine the locations of the soil borings. Soil boring locations are shown on Figure 2.

During the direct-push drilling program, subsurface soil samples were collected continuously from each of the soil borings. Soil borings were screened with a PID and classified and logged according to the Unified Soil Classification System. Up to two soil samples were collected from each soil boring based on field PID screening and in conjunction with visual and olfactory observations. A field record of each soil boring, classification, sampling intervals, PID readings (SB-13 through SB-21), and other field observations were recorded on the soil boring log form provided in Attachment D.

Soil samples collected from soil boring SB-01 through SB-12 during the October 2007 field investigation were submitted to LSL for PCB analysis using USEPA Method 8082. Additionally, several samples were collected for VOC, SVOC and TPH by USEPA Methods 8260B, 8270C and 310.13 respectively, (see Appendix D for detail). The soil samples were collected from the most contaminated interval, (i.e., highest PID reading, visually impacted, strong odor) or, if no contamination was evident, a soil sample was collected from the bottom of the soil boring.

Soil samples collected from soil borings SB-13 through SB-21 during the December 2008 field investigation were submitted to Mitkem for analysis of PCBs by USEPA Method 8082 and TPH by USEPA Method 8015B.

In total, 36 soil samples were collected from the twenty-one soil boring locations. Upon completion of sampling activities, soil borings were backfilled with bentonite chips to prevent contamination of clean soil as necessary.

2.5 MONITORING WELL INSTALLATION

Three monitoring wells were installed (MW01 through MW03) on 23-25 October, 2007 (Figure 2). Monitoring wells were installed using a 4.25-in inner diameter (ID) Hollow-Stem Auger (HSA). Each borehole was over drilled at least 1.0 ft beyond the anticipated bottom of the monitoring well and backfilled with Morie # 0 sand. The total depths of the monitoring wells were largely determined by the water table conditions encountered during drilling, such that the well screen would intercept the water-table interface, approximately 20-30 feet bgs. The bottom

of each well screen was fitted with a new 2-inch well cap. All monitoring wells were constructed with 10 to 20-ft of new 2-inch ID threaded, flush-joint Schedule 40 PVC machine-slotted (slot size 0.010 inch) well screen and appropriate amount of new 2-inch ID PVC riser pipe to grade.

After each well screen and riser pipe was positioned at the desired depth, the annular space between the borehole and the PVC screen piping was packed with clean Morie #0 sand. The augers were raised while the filter pack was set, and the depth to the sand pack inside the augers was measured continuously to ensure that no air pockets or bridging formed. The top of the filter packs extended approximately 2-ft above the top of the screen. A 2-ft bentonite chip seal was set above the filter pack and hydrated. The remaining annular space was backfilled with a grout/bentonite mixture to grade. The well was finished with a protective steel stick-up casing. Well construction logs are provided in Appendix D. Monitoring well locations are illustrated on Figure 2.

2.5.1 Monitoring Well Development

Monitoring wells were developed no sooner than 24 hours following installation. The monitoring wells were developed using surging and pumping techniques. Well development was to be considered complete when temperature, conductivity, and pH had stabilized and a turbidity of less than 50 nephelometric turbidity units (NTU) was achieved, or the well was pumped dry.

During monitoring well development it was noted that the groundwater within the well casing was extremely turbid and was described as muddy. Development of the monitoring wells became inhibited by both turbidity and slow recharge rates observed during development. Groundwater recharge rates for the monitoring wells ranged from less than 0.25 to 0.50 gallons per minute (gpm). Low volumes of groundwater were removed from the monitoring wells during the development process. Development water purged from the monitoring wells was discharged to the ground surface away from the monitoring well. No non-aqueous phase liquid (NAPL) or odor was observed during monitoring well development. Monitoring well development logs are provided in Appendix E.

2.6 GROUNDWATER SAMPLING

Three groundwater samples were collected from the monitoring wells on 15 November 2007 using a dedicated polyethylene bailer. Prior to sampling, monitoring wells were gauged for depth to water in order to obtain groundwater elevation. The monitoring wells were purged until groundwater parameters (pH, conductivity, oxygen reduction potential, temperature, dissolved oxygen and turbidity) stabilized or the monitoring well was purged dry, whichever occurred first. It was noted during monitoring well purging that monitoring wells MW-01 and MW-02 were heavily turbid. Monitoring wells MW-01 and MW-03 were purged until stabilization of groundwater parameters occurred, except for turbidity at monitoring well MW-01 where elevated readings for turbidity persisted throughout the purging process. Purging using a peristaltic pump at monitoring well MW-02 was prohibited due to very silty conditions within the monitoring well casing, therefore the monitoring well was purged using a dedicated bailer, allowed to recharge

and then sampled. Monitoring wells were allowed to recharge and settle prior to collecting groundwater samples. Groundwater purging and sampling forms are provided in Appendix F.

Groundwater samples were sent to LSL, East Syracuse, New York and analyzed for PCBs and TPH by USEPA Method 8082 and 8100, respectively. The groundwater sample collected from MW-01 was also submitted for full TCL suite using USEPA CLP OLM04.2. Analyses included VOCs (Method 8260), SVOCs (Method 8270), pesticides (Method 8081A), and TAL metals and mercury (Method 6010/7470) in accordance with the NYSDEC Analytical Services Protocol. LSL is an approved New York State Department of Health Environmental Laboratories Approval Program (ELAP)-certified laboratory for full TCL suite analysis and in accordance with the NYSDEC Analytical Services Protocol (ASP).

2.7 SITE SURVEY

The site monitoring wells, test pits, surface soil, and soil boring locations completed during the first phase of the remedial investigation program were surveyed upon completion by Popli Consulting Engineers and Surveyors, Penfield, New York (a New York State licensed surveyor) on 15 November 2007. Horizontal and vertical coordinates for each location were integrated onto the site basemap. The surveyor established elevations with respect to benchmarks currently installed at the site. The elevations for all monitoring well locations were established both for land surface and for the top of casing at a measuring point notch. All vertical measurements were referenced to the National Geodetic Vertical Datum of 1988 and reported to the nearest 0.01 ft. A copy of the survey map is provided as Appendix G.

Horizontal control was established by traverse runs to establish location with respect to the New York State planar horizontal coordinate grid system and provided in New York State planar and UTM coordinates (NAD83). Horizontal traverses were tied into established permanent benchmarks. Horizontal traverse runs were tied back to initial control points as a check for closure, and error of closure was recorded. The horizontal location of wells was reported to within 0.1 ft.

The site survey basemap was imported into ArcGIS® 9.2 and geo-referenced based on the coordinate system used to develop the basemap. Figures presented in this RI were developed utilizing ArcGIS® 9.2 software and are overlain with site basemap features including prominent site feature surface features such as surface contours and tree lines.

Several test pit, surface soil, and soil boring locations were not surveyed. Surface soil locations SS-1, SS-5, SS-7, SS-9, SS-15, SS-16, and SS-20 and test pit locations TP-15 and TP-18 were not surveyed because the flags indicating these locations were either missing or had been moved at the time of the survey. Supplemental surface soil locations SS-26 through SS-29 and supplemental soil boring locations SB-13 through SB-21 were not surveyed because samples were collected after the survey was completed.

The locations of all sampling points were recorded using a high precision Global Positioning System (GPS) receiver at the time of sampling. For sampling locations that were not surveyed,

GPS measurements are presented instead on all figures and the Site Survey. Electronic versions of all survey and GPS data collected during the Remedial Investigation are provided in Appendix J.

3. FIELD SAMPLING RESULTS

This section presents the findings of the field sampling activities conducted during the remedial investigation. Aqueous and non-aqueous samples were analyzed for VOCs, SVOCs, pesticide/PCBs, TAL metals, mercury, and Total Petroleum Hydrocarbons. Analytical methods were performed by Environmental Laboratory Approval Program (ELAP)-certified laboratories. In addition, the laboratory followed the quality assurance/quality control (QA/QC), holding time and reporting requirements as defined in the NYSDEC Analytical Services Protocol of June 2000. Aqueous and non-aqueous analyses of samples collected during the initial field investigation (August through November 2007) were performed by Life Science Laboratories Inc., of East Syracuse, New York. Non-aqueous analyses of samples collected during the supplemental field investigation (December 2008) were performed by Mitkem Laboratories, of Warwick, Rhode Island. Laboratory analytical data were reported using Category B deliverables and the standard electronic data deliverable.

During the first phase of the remedial investigation program non-aqueous analytical samples were submitted to Life Science Laboratories for analysis of PCBs. Surface soil samples SS-01 through SS-25, subsurface soil samples from soil borings SB-01 through SB-12, and subsurface soil samples from test pits TP-01 through TP-18 and the associated quality assurance/quality control samples were submitted under sample delivery groups (SDGs) 0709089, 0709103, and 0709108. These samples were analyzed utilizing method detection limits (MDLs) higher than the respective 6 New York Code of Rule and Regulations (NYCRR) Part 375 Soil Cleanup Objective for Unrestricted Use (0.1 ppm). Therefore, at the direction of the NYSDEC, EA was instructed to evaluate the entire RI analytical group in the following manor:

- Surface soil analytical results reported only detections of Aroclor 1254 and Aroclor 1260, while subsurface soil (test pits and soil borings) analytical results reported only detections of Aroclor 1248, Aroclor 1254, and Aroclor 1260 above their respective MDLs.
- Where non-detect values were reported for an Aroclor identified above, ½ the MDL concentration value was used for determining the total Aroclor concentration value.
- The surface and subsurface soil tables and figures contained within this RI that denote concentration values for total Aroclor have been determined using the quantification method described.

The quantification method was utilized to demonstrate that while elevated MDLs were used during the analytical process, the analytical results of the entire data set indicated low level concentrations of PCBs.

Analytical data collected during the remedial investigation were validated by Environmental Data Services, Inc. an independent third party. Analytical data was reviewed for completeness; field and laboratory QC sample results were evaluated; significant laboratory control problems were assessed; and data qualifiers were assigned. The Data Usability Summary Reports (DUSRs) are presented in Appendix H.

Standards, criteria and guidance (SCGs) are promulgated requirements and non-promulgated guidance which govern activities that may affect the environment and are widely used at different stages of an investigation and remediation of a site. The SCGs applicable for the data set collected during this remedial investigation are 6 NYCRR Subpart 375-6 Soil Cleanup Objectives (unrestricted-use), and Division of Water Technical and Operational Guidance Series 1.1.1 (TOGS 1.1.1).

3.1 GEOLOGY

3.1.1 Surficial and Overburden

During the subsurface investigation, surficial geology was classified and logged according to the Unified Soil Classification System. The surficial geology was classified on-site as topsoil and sand with silts. On-site overburden material was defined as till material and was generally of variable texture (boulders to silt), and usually consisted of large amounts of poorly sorted sand, rock fragments, with trace amounts of silt.

With the exception of test pits TP-01 and TP-03 most of the test pits were excavated to a depth of approximately 10 ft bgs. Test pit logs documented on-site overburden material as till with sandy-silt and containing many cobbles and rock fragments throughout the pits. Similarly, the soil boring logs identified overburden material as mainly till material with sand and silt. Soil borings were advanced to an approximate depth of 8 – 10 ft bgs on-site.

3.1.2 Bedrock

Bedrock was not encountered during the monitoring well installation program conducted during this remedial investigation. Monitoring wells were installed to a depth of approximately 36 ft bgs. According to the U.S. Geologic Survey (USGS), the Marshall Transformer Site lies within two geologic groups; the Helderberg and the Colbeskill Limestone and Salina Group. The Helderberg group consists of the Alsen, Becroft, New Scotland, Kalkberg, Coeymans and Manulis Limestones, as well as the Rondout Dolstone. The Cobleskill Limestone consists of parts of the Bertie, Camillus and Syracuse Limestone formations, as well as the Brayman Shale, and Dolstone.

3.2 HYDROLOGY

As part of this remedial investigation, three monitoring wells were installed with the purpose of examining groundwater quality and providing groundwater level information for evaluating local groundwater flow direction on-site. The screened intervals for each monitoring well are provided on the monitoring well installation logs contained in Appendix D. Groundwater level measurements were taken prior to the initiation of the groundwater sampling event in November 2007. Groundwater measurements were taken from the top of the inner PVC casing using an oil/water interface probe. Groundwater was encountered from 23.33 (MW-1) to 31.62 (MW-2) ft bgs on 15 November 2007. Table 1 shows the depth to groundwater recorded at each monitoring

well location during the gauging event. The groundwater flow direction based on the groundwater level measurements indicates that groundwater flow is generally in a westward direction with a hydraulic gradient of 0.050. An interpreted groundwater elevation surface map illustrating the direction of groundwater flow for the gauging event is shown in Figure 3.

3.3 SURFACE SOIL SAMPLE RESULTS

PCBs were detected above the 6 NYCRR Part 375 Soil Cleanup Objective Unrestricted Use (0.1 ppm) in 10 of 29 surface soil sampling locations. Aroclor 1254 was the most prevalent PCB detected, 9 of 29 surface samples were above the SCG for this compound. Aroclor 1260 was detected above the SCG in two of the surface soil samples. Aroclor 1254 detection results ranged from 0.120 ppm to 6.80 ppm, and Aroclor 1260 was reported at 0.14 ppm and 0.41 ppm. The total Aroclor concentration range for the surface soil samples above SCG was 0.26 ppm and 6.80 ppm, this concentration range includes ½ MDL concentration values for Aroclors (1254 or 1260) that were non-detect within the same sample. The surface soil samples detected above SCGs were generally located within two areas located in central portion of the site.

As presented in the introduction to this section, surface soil samples that reported non-detections of PCBs were evaluated utilizing ½ the MDL concentration values to quantify total Aroclor concentrations. Based on this evaluation, surface soil samples that were non-detect were assumed to be likely less than the 0.1 ppm SCG. The concentration range for non-detect surface soil samples including the ½ MDL concentration values was 0.005 ppm to 0.151 ppm.

One metal, mercury, was detected above the SCG in surface soil sample SS-05. In addition, elevated concentrations were reported for aluminum, calcium, iron, magnesium, manganese, and potassium in each surface soil sample collected and analyzed for TAL metals.

No VOC's or SVOC's were detected above SCGs. However, TPH was detected is surface soil samples SS-27, SS-28, and SS-29 ranging in concentration from 41 ppm to 110 ppm.

A summary of all detected analytes in surface soil samples is provided in Table 2. Figure 4 illustrates a summary of PCB and metal detections above SCGs for surface soil samples. Laboratory analytical Form Is are provided in Appendix I.

3.4 SUBSURFACE SOIL RESULTS

3.4.1 Test Pit Sample Results

PCBs were detected above the 6 NYCRR Part 375 Soil Cleanup Objective (0.1 ppm) in 9 of the 49 test pit subsurface soil samples. The nine test pit subsurface soil samples above SCGs were collected from 5 of the 18 test pits. The test pit subsurface soil samples detected above SCGs were collected from test pits TP-04, TP-05, TP-10, TP-16, and TP-17. Aroclor 1248 was detected in 2 of 49 test pit subsurface soil samples, Aroclor 1254 was detected in 4 of 49 test pit subsurface soil samples, and Aroclor 1260 was detected in 4 of 49 test pit subsurface soil samples. One of the test pit subsurface soil samples (TP-16-10') detected both Aroclor 1254 and

1260. The total Aroclor concentration range for the nine subsurface soil samples above SCG was 0.343 ppm to 3.40 ppm, this concentration range includes ½ MDL concentration values for Aroclors (1248, 1254 or 1260) that were non-detect within the same sample.

Four of the nine test pit subsurface soil samples above the SCG were collected in the 0-2 foot sampling interval, three of nine were from the 4-6 foot sampling interval and two of nine were from the 9-10 ft sampling interval. Test pits TP-16 and TP-17 which reported the most subsurface soil samples above SCGs were located adjacent to one another in the northwest portion of the site. Test pits TP-04 and TP-05 were also located in close proximity to each other but in the southeast portion of the site while test pit TP-10 was located in the central portion of the site.

As previously mentioned, test pit subsurface soil samples that reported non-detections of PCBs were evaluated utilizing ½ the MDL concentration values to quantify total Aroclor concentrations. Based on this evaluation, test pit subsurface soil samples that were non-detect were assumed to be likely less than the 0.1 ppm SCG. The concentration range for non-detect test pit subsurface soil samples including the ½ MDL concentration values was 0.161 ppm to 0.194 ppm.

Acetone was the only VOC detected above the SCG in test pit subsurface soil sample TP-03-8'. Concentrations of zinc and copper slightly exceeded unrestricted soil cleanup objectives at TP-3 and TP-7 respectively. No SVOCs were above SCGs in subsurface soil samples collected from the test pits.

Pesticides dieldrin and 4,4'-DDT were detected above the SCGs in 3 of the 49 test pit subsurface soil samples. Dieldrin was detected at a concentration of 0.019 ppm in test pit subsurface soil sample TP17 - 1.5'. 4,4'-DDT was also detected above its SCG of 0.0033 ppm in TP-03-8'at a concentration of 0.01 ppm and at an estimated concentration of 0.0033 ppm in TP-09-7'.

A summary of all detected analytes from the test pit subsurface soil samples are provided in Table 3. Figure 5 illustrates the test pit subsurface soil sampling results that were reported above the SCGs. Laboratory analytical Form Is are provided in Appendix I.

3.4.2 Soil Boring Sample Results

PCBs were detected above the 6 NYCRR Part 375 Soil Cleanup Objectives (0.1 ppm) in 6 of the 36 soil boring soil samples collected from twenty-one soil borings advanced during the remedial investigation. Subsurface soil samples collected from soil borings SB-04, SB-08, SB-16, SB-17, and SB-19 were above the SCG. Three detections of Aroclor 1260 were reported at concentrations ranging from 0.120 ppm to 0.379 ppm and three detections of Aroclor 1254 were reported at concentrations ranging from 0.140 ppm to 1.20 ppm, respectively. Soil boring SB-04 with PCB detection in the 4-6' sampling depth interval was located in the northwest portion of the site which is in the same general area as test pits TP-16 and TP-17 where test pit subsurface soil samples were reported above SCG for PCBs as well. The PCB detection at soil boring SB-08 was located in the southeast portion of the site just east of test pit TP-05. Similarly test pit

subsurface soil sampling at TP-05 reported concentrations of PCBs above the SCG as well. Soil borings SB-16, SB-17, and SB-19 were located in the central portion of the site surrounding test pit TP-10 where a duplicate sample (DUP03) reported concentrations of PCBs above the SCG as well. Total Aroclor concentrations for the soil borings subsurface soil samples detected above the PCB SCG were 0.124 ppm to 1.21 ppm and included ½ MDL concentration values for Aroclors (1248, 1254 or 1260) that were non-detect within the same sample.

Soil boring subsurface soil samples that reported non-detections of PCBs were evaluated utilizing ½ the MDL concentration values to quantify total Aroclor concentrations. Based on this evaluation, soil boring subsurface soil samples that were non-detect were assumed to be likely less than the 0.1 ppm SCG. The concentration range for non-detect soil boring subsurface soil samples including the ½ MDL concentration values was 0.007 ppm to 0.184 ppm.

Acetone was the only VOC detected above the SCG. No SVOCs were above SCGs in the soil boring soil samples collected from the test pits.

TPH was detected in 11 of 28 soil boring soil samples. TPH concentrations in soil boring soil samples ranged from 130 ppm to 7,000 ppm. Currently there is no applicable SCG for TPH. TPH is a common term for an extensive group of chemical compounds that originate from crude oil. Soil boring samples (SB-01 through SB-08, SB-10, and SB-11) submitted to LSL for TPH analysis identified the TPH concentrations as No. 6 fuel oil. No. 6 fuel is commonly referred to as a heavy oil or residual oil, as it is what remains of crude oil after gasoline and the distillate fuel oils are extracted through the distillation process. No 6 fuel oil is very persistent and does not degrade readily in the environment; it was typically used in power plants and industrial facilities during the first part of the 20th century. However, soil boring samples (SB-13 through SB-21) submitted to Mitkem for TPH analysis identified the TPH concentrations as transformer oil. Transformer oil is a highly-refined mineral oil that is stable at high temperatures and good electrical insulating properties. Transformer oil is commonly used in high voltage transformers as a cooling agent.

A summary of all detected analytes in the test soil borings are provided in Table 4. Figure 5 illustrates the soil boring soil sampling locations that were detected above the SCGs. Laboratory analytical Form Is are provided in Appendix I.

3.5 GROUNDWATER SAMPLE RESULTS

For comparing the groundwater results to appropriate SCGs, all groundwater results were compared to New York State Departments of Environmental Conservation Ambient Water Quality Standards (NYSDEC AWQS) for Class GA waters. Groundwater grab samples were collected from each monitoring well during the groundwater sampling event conducted on 15 November 2007. The monitoring wells were installed so that the screened interval intercepted the groundwater table within the overburden unit. When discussing groundwater quality, this remedial investigation report is referring to the water bearing zone at depths ranging from approximately 21 to 31 feet bgs.

No PCBs, TPHs, VOCs, SVOCs, or pesticides were reported above the SCGs for groundwater water. No groundwater quality impacts appear to be occurring from the low level concentrations of PCBs, VOCs, pesticides, and TPHs observed in the overlying soil.

Several TAL metals were detected above their respective AWQS standards in monitoring well MW-1. The elevated concentrations of calcium, iron, magnesium, manganese, and potassium detected in the groundwater sample and associated duplicate sample were also detected at elevated concentrations in the surface and subsurface soil at the site.

A summary of detected analytes in the groundwater samples is provided in Table 5. Because no detections of TPH compounds were reported, no summary table is provide for TPH groundwater results. Laboratory analytical Form Is are provided in Appendix I.

3.6 DATA VALIDATION

Analytical data results were submitted to Environmental Data Services, Inc. for validation. This validation included a review of pertinent QA/QC data such as sample extraction and analysis, holding times, calibration, a review of laboratory blanks and QA/QC sample results, and a review of the analytical case narrative. A Data Usability Summary Report (DUSR) was prepared which includes a compliance chart, a list of samples included in each sample delivery group and recalculations of sample results. Nonconforming QA/QC results were evaluated with respect to their implications for data reliability and usability, and data results were flagged accordingly on the results sheets. These qualifiers were entered into the site-specific database and appear in the summary tables presented in this report. Data summary and usability reports for the analytical data packages are provided in Appendix H.

4. SUMMARY OF FINDINGS AND CONCLUSIONS

This chapter provides a summary of the conditions at the Marshall Transformer Site, as determined by the completion of the remedial investigation activities.

4.1 SUMMARY OF IMPACTS AT MARSHALL TRANSFORMER SITE

The following sections summarize the environmental impacts at the Marshall Transformer Site. This section is organized by areas of potential concern for the site. Areas of concern and the impacts associated with the environmental media are based on analytical results and their comparison with appropriate and applicable SCGs. Table 6 summarizes the degree of impacts of the Contaminants of Concern (COCs), and compares the data with SCGs for the site.

4.2 POLYCHLORINATED BIPHENYLS IN SURFACE AND SUBSURFACE SOIL

Analytical results from the surface and subsurface soil samples collected during this remedial investigation reveal that concentrations of PCBs above unrestricted use SCGs exist in both the surface and subsurface soil. The surface soil reported a higher percentage, 34 percent, of PCB detections above SCGs than did the subsurface soil which reported 18 percent above SCGs. Additionally, of the 18 percent of subsurface soil samples above SCG, 6 percent of those samples were collected in the 0 to 2 ft bgs sampling interval which likely included surface soil.

In addition to the laboratory analytical data reported in Section 3 of this report, both olfactory and PID readings recorded during the test pitting and soil boring activities were used to develop a delineation of impacts associated with subsurface soil. Tables 7 and 8 compare the analytical data results with field observations recorded during the remedial investigation. While there is not definitive correlation between these data sets it should be noted that olfactory evidence and intermittent PID readings did indicate a potential for subsurface contamination. Figure 7 depicts the observational data and suggests that the former gravel pit in the center of the site contains the limits of the olfactory delineation. This area of the site also correlates with the both the PCB and TPH analytical data collected during the RI.

4.2.1 Surface Soil

Surface soil impacts appear to be confined to the central portion of the site into two general areas. Figure 8 depicts theses two areas with concentration contours for 1 ppm and 0.1 ppm based on an interpolation of the surface soil analytical results. It should be noted that surface soil samples that were processed at elevated MDLs but resulted in non-detect concentrations are likely less than the 0.1 ppm SCG and were therefore not included within the 0.1 ppm contours.

The impacted surface soil at the site presents the most potential threat and possible exposure pathway to human populations. However, the concentrations observed in the surface soil are very low and only two samples (SS-11 and SS-28) were reported above the 6 NYCRR Part 375 Soil Cleanup Objective for residential use, which is 1 ppm. Based on the SCG threshold contour lines

illustrated in Figure 8, approximately 331 cubic yards of surface soil are above SCG for unrestricted use at the site. This estimate is based on an excavation area down to one foot below ground surface.

4.2.2 Subsurface Soil

Subsurface soil impacts identified at the site were intermittent, making it difficult to delineate both vertically and horizontally across the site. PCB detections above SCG were identified in four areas of the site; the northwestern portion of the former gravel pit in test pits TP-16 and TP-17 as well as soil boring SB-04; the central portion of the former gravel pit in test pits TP-04 and TP-10 and soil boring SB-17; at soil boring SB-16; and in the southeastern portion of the former gravel pit in test pit TP-05 and soil boring SB-08. Figure 9 depicts the PCB concentration contours based on an interpolation of the subsurface soil analytical results. Approximately 2,316 cubic yards of subsurface soil are above SCG for unrestricted use at the site. This estimate is based on an excavation down to ten feet below ground surface within the 0.1 ppm contour line depicted in Figure 9.

Analogous with the surface soil, the concentrations observed in the subsurface soil are very low and only four samples (TP-16-2', TP-16-10', TP-17-4', and SB-16-2-4') were reported above the 6 NYCRR Part 375 Soil Cleanup Objective for residential use, which is 1 ppm. In addition, the subsurface soil does not present an immediate or potential exposure risk to either human health or the environment.

In addition to the PCB impacts, subsurface soils revealed concentrations of TPH in a number of samples collected during the RI. TPH concentrations were typically encountered in the western portion of the former gravel pit area with higher concentrations observed in the southwestern portion of the site. Currently, there are no applicable SCGs for TPH under 6 NYCRR Part 375. Figure 10 illustrates the estimated limits of impacts of TPH in subsurface soil. Analytical results for TPH identified the chemical compounds detected as transformer oil which is consistent with historical operations and use of the site as a transformer disposal area.

4.3 GROUNDWATER QUALITY

Analytical results from the groundwater sampling program completed under this remedial investigation revealed concentrations of TAL metals above SCGs were present in groundwater at monitoring well MW-01. No other monitoring well was sampled or analyzed for TAL metals during the remedial investigation. TAL metals reported at the highest concentrations in monitoring well MW-01 included calcium, iron, magnesium, manganese, and potassium, and are considered naturally occurring metals. However, several Resource Conservation and Recovery Act (RCRA) metals were also above the SCGs. Surface and subsurface soil samples collected from the site did indicate that elevated concentrations of the same TAL metals observed in groundwater were present in the overburden unit which indicates that groundwater concentration are likely associated with the geochemistry observed in overlying soil. Additional groundwater sampling and analysis would be required to further identify groundwater impacts from metals.

No other impacts were observed or reported for the groundwater samples collected at the site.

4.4 CONCLUSIONS

Based on the site data collected during this remedial investigation, EA concludes the following:

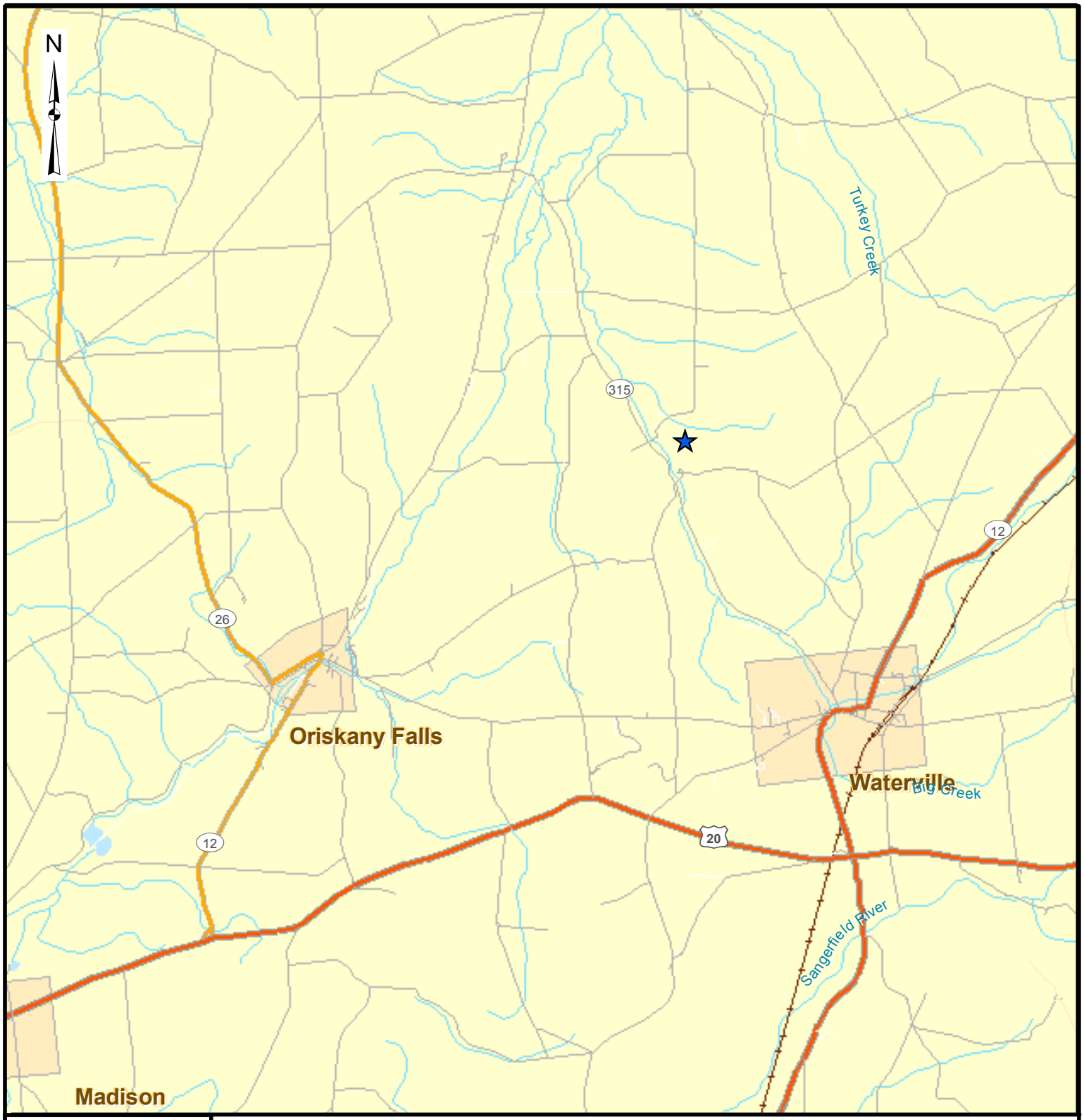
- PCBs were detected in 10 of 29 surface soil samples above soil cleanup objective SCGs for unrestricted-use (0.1 ppm) and in 2 of 29 surface soil samples above soil cleanup objective SCGs for residential-use (1 ppm). Exceedence of unrestricted-use SCGs was delineated to two general areas of concern located in the central portion of the site.

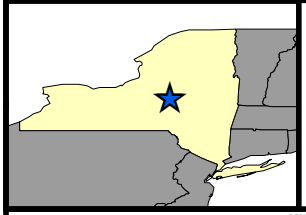
- PCBs were detected intermittently in subsurface soil samples collected from test pits and soil borings located across the site. Four general areas of concern were characterized both horizontally and vertically within the site boundary and the former gravel pit area. The sporadic nature and low-level concentrations of PCB contamination in subsurface soil inhibits a definitive delineation of PCB concentrations to the unrestricted-use SCGs (0.1 ppm).

- TPH concentrations were detected in a number of subsurface soil borings. The detections of TPH were typically encountered in the western portion of the former gravel pit area with the highest concentrations being reported in the southwestern portion of the site. Unlike PCB concentrations in soil and based on the supplemental field investigation, TPH concentrations appear to decrease with depth and are likely the result of surface discharge. Subsurface soil TPH concentrations are not subject to evaluation based on current 6 NYCRR Part 375 Soil Cleanup Objectives.

- The subsurface soil within the former gravel pit area of the site revealed widespread olfactory evidence, relatively low and intermittent PID detections above 1 ppm, and significant TPH concentrations predominantly in the western and southwestern portions of the former gravel pit. Observational, PID, and TPH subsurface soil evidence of contamination does not correlate spatially with PCB detections.

- This RI generated no analytical data identifying on-site soil classifiable as hazardous waste.





Legend

★ Site Location

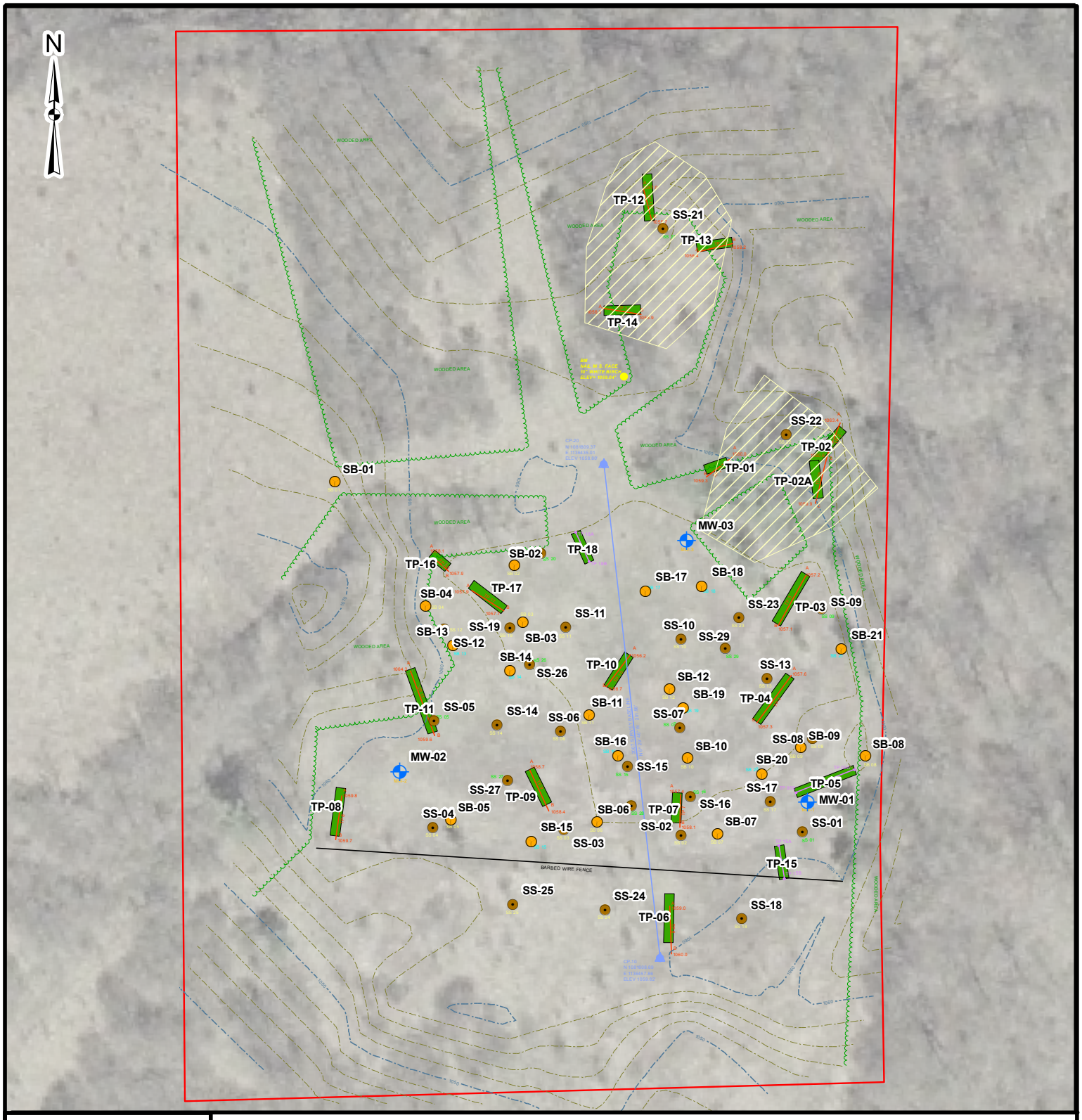
0 0.375 0.75 1.5 2.25 3 Miles

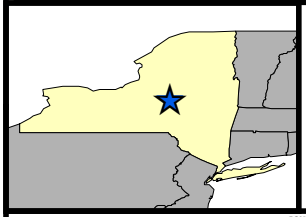
Source: StreetMap USA

MARSHALL TRANSFORMER SITE (6-33-019)
REMEDIAL INVESTIGATION REPORT
TOWN OF MARSHALL, NEW YORK

FIGURE 1
Site Location Map

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
RSC	CJS	FDJR	JAV	AS SHOWN	MAY 2010	14368.17	GIS/PROJECTS/ FIGURE1.MXD





Legend

- Test Pit Location
- Soil Boring Location
- Surface Soil Location
- Monitoring Well Location
- Site Boundary
- Areas of Clearing and Grubbing

Feet: 0 12.5 25 50 75 100

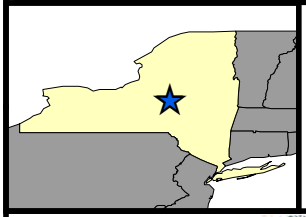
Note: *Geolocation used for SB-13 through SB-21, SS-26 through SS-29, SS-1,SS-5, SS-7, SS-9, SS-15, SS-16, SS-20, SS-21 and TP-15 and TP18.

Source: NYS GIS Clearinghouse

MARSHALL TRANSFORMER SITE (6-33-019)
REMEDIAL INVESTIGATION REPORT
TOWN OF MARSHALL, NEW YORK

FIGURE 2
Site Sampling Locations

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
RSC	CJS	FDJR	JAV	AS SHOWN	MAY 2010	14368.17	GIS/PROJECTS/ FIGURE2.MXD



Legend

- Monitoring Well
- Site Boundary
- Interpreted Groundwater Contour
- (1033) Groundwater Elevation (ft AMSL)
- Groundwater Flow Direction

Feet
0 5 10 20 30 40

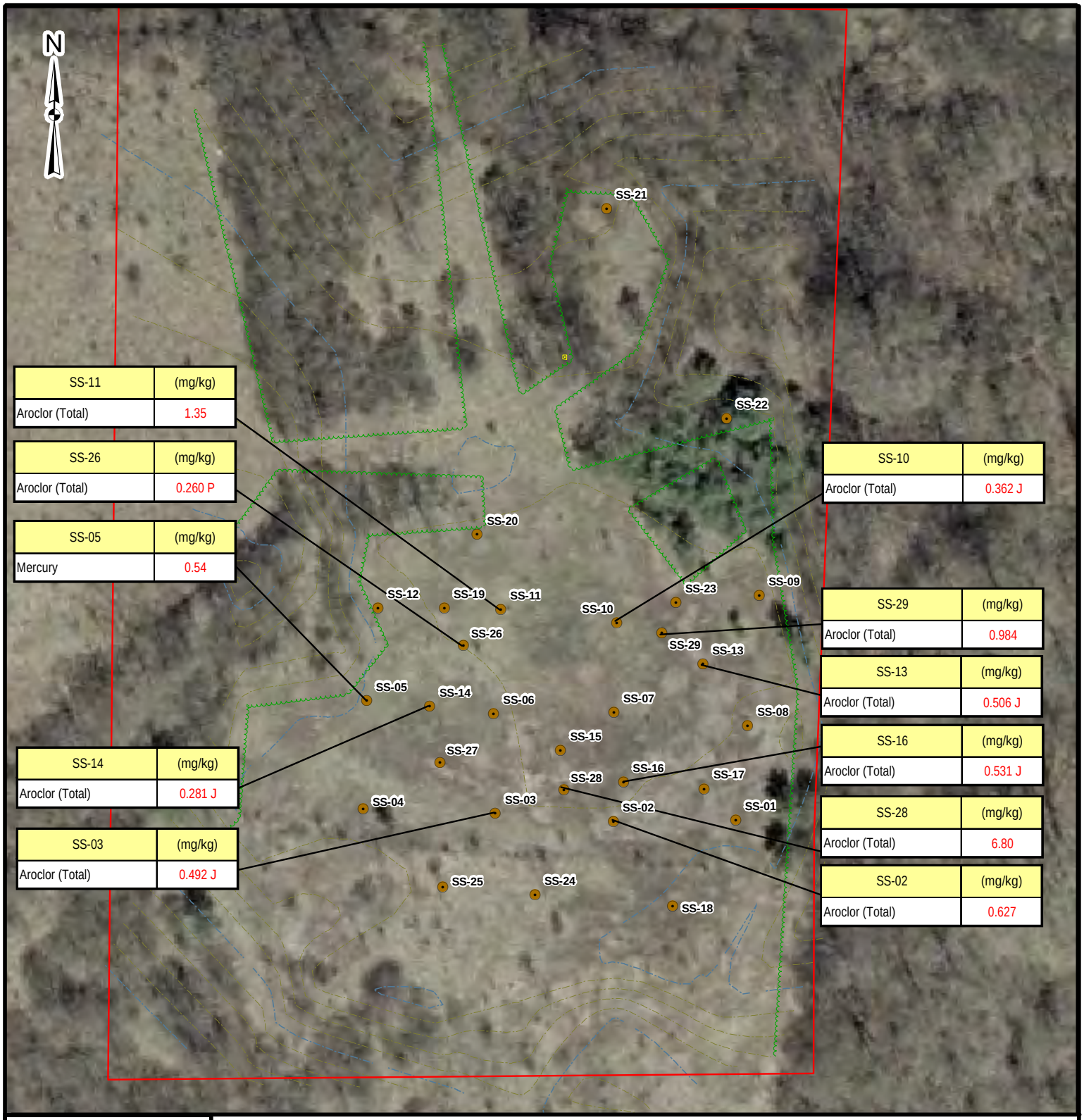
Horizontal Datum: NAD 83 (96) NYSPCS WEST ZONE
Vertical Datum: NAVD 88

Source: NYS GIS Clearinghouse

MARSHALL TRANSFORMER SITE (6-33-019)
REMEDIAL INVESTIGATION REPORT
TOWN OF MARSHALL, NEW YORK

FIGURE 3
Interpreted Groundwater Elevation Surface Map

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
RSC	CJS	FDJR	JAV	AS SHOWN	MAY 2010	14368.17	GIS/PROJECTS/ FIGURE3.MXD



Legend

- Surface Soil Sampling Location
- Site Boundary

0 15 30 60 90 120 Feet

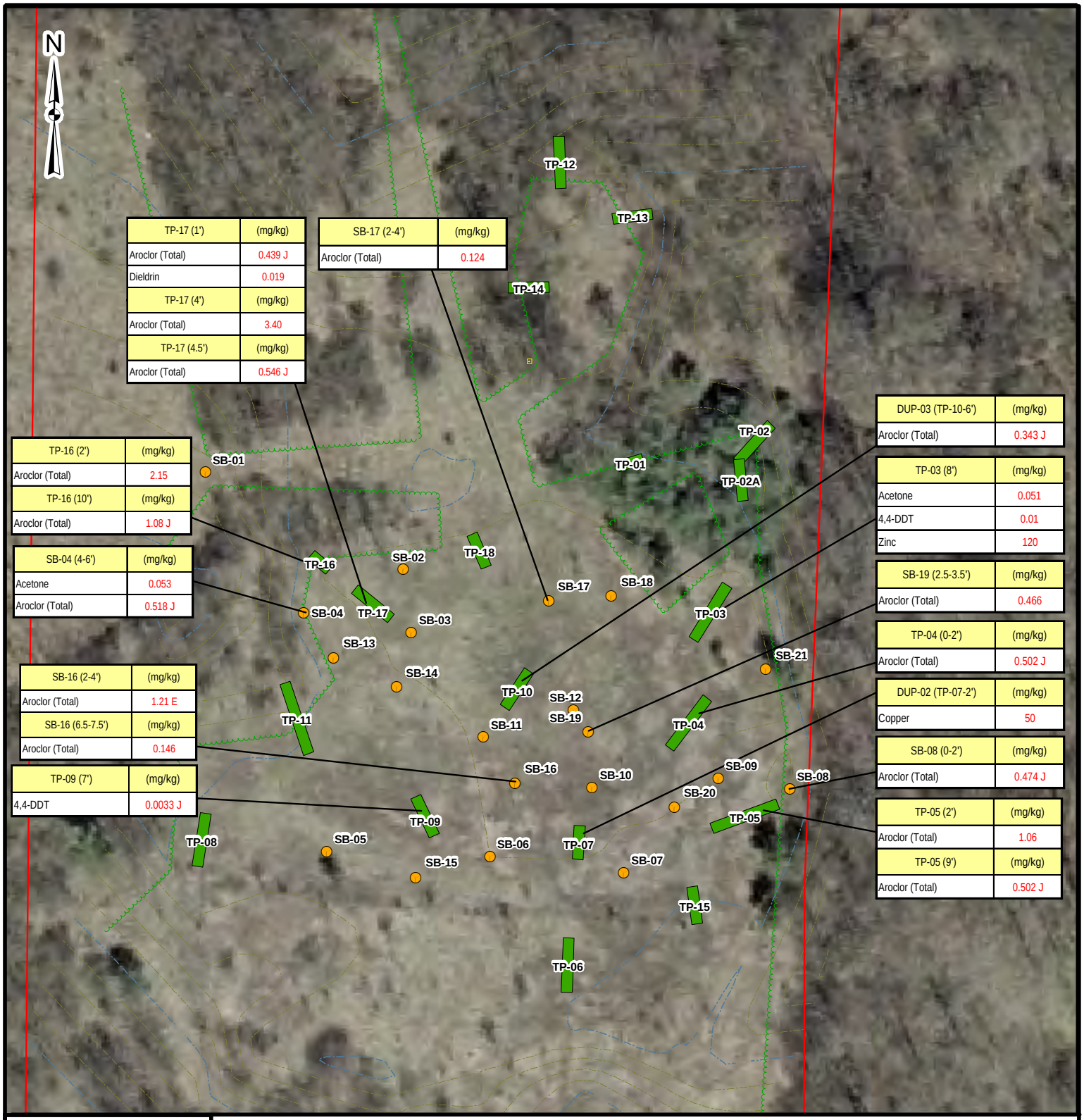
Note: Aroclor (Total) concentration values shown include 1/2 MDL concentration values for either Aroclor 1254 or Aroclor 1260 whichever was reported below the MDL.

Source: NYS GIS Clearinghouse

MARSHALL TRANSFORMER SITE (6-33-019)
REMEDIAL INVESTIGATION REPORT
TOWN OF MARSHALL, NEW YORK

FIGURE 4
Summary of Detected Constituents above 6 NYCRR Part 375 Unrestricted SCOs in Surface Soil

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
RSC	CJS	FDJR	JAV	AS SHOWN	MAY 2010	14368.17	GIS/PROJECTS/ FIGURE4.MXD



Legend

- Test Pit Location
- Soil Boring Location
- Site Boundary

Feet
0 12.5 25 50 75 100

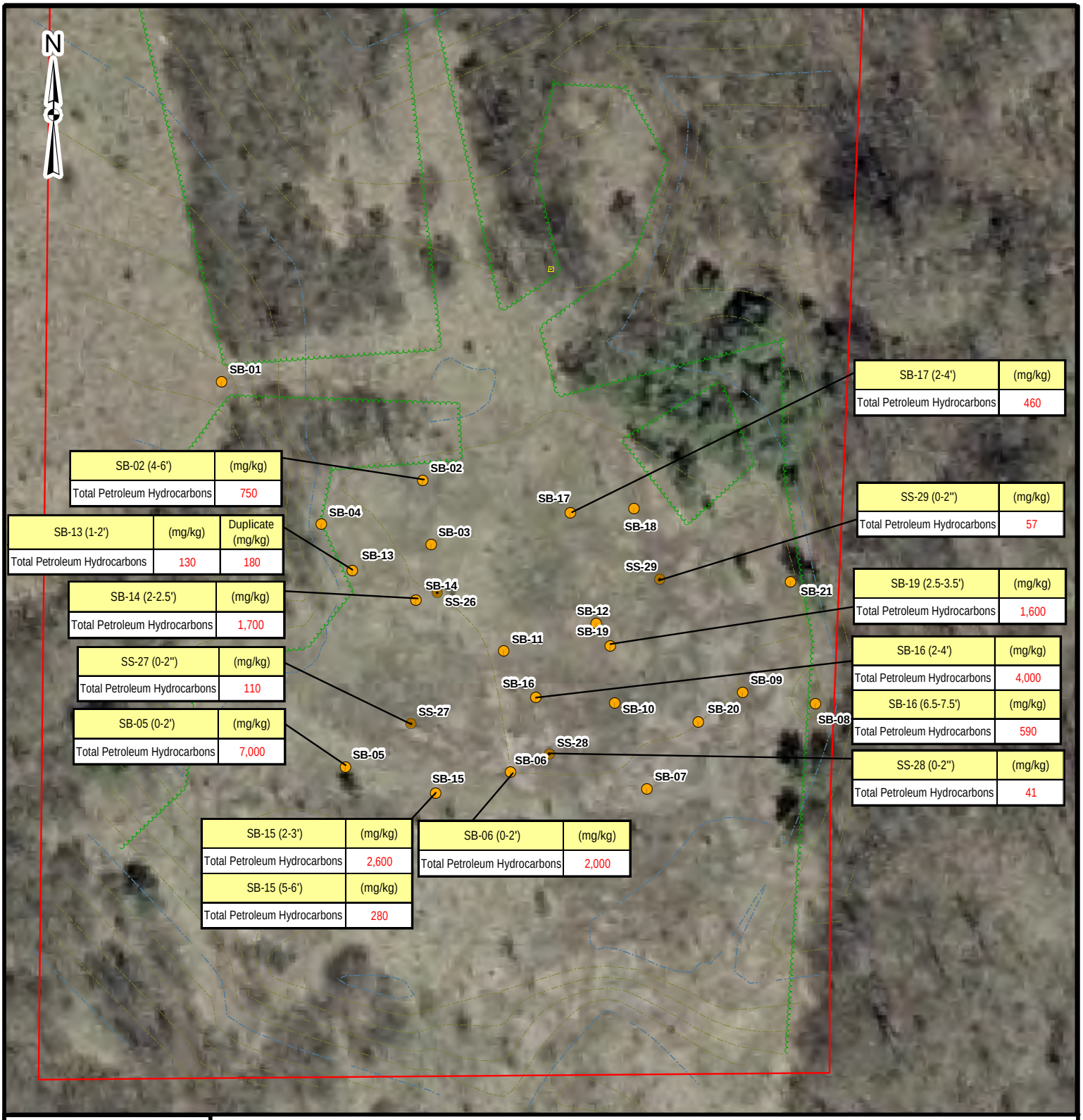
Note: Aroclor (Total) concentration values shown include 1/2 MDL concentration values for Aroclor 1248, Aroclor1254 or Aroclor 1260 if reported below the MDL.

Source: NYS GIS Clearinghouse

MARSHALL TRANSFORMER SITE (6-33-019)
REMEDIAL INVESTIGATION REPORT
TOWN OF MARSHALL, NEW YORK

FIGURE 5
Summary of Detected Constituents above 6 NYCRR Part 375 SCOs in Subsurface Soil

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
RSC	CJS	FDJR	JAV	AS SHOWN	MAY 2010	14368.17	GIS/PROJECTS/ FIGURE5.MXD

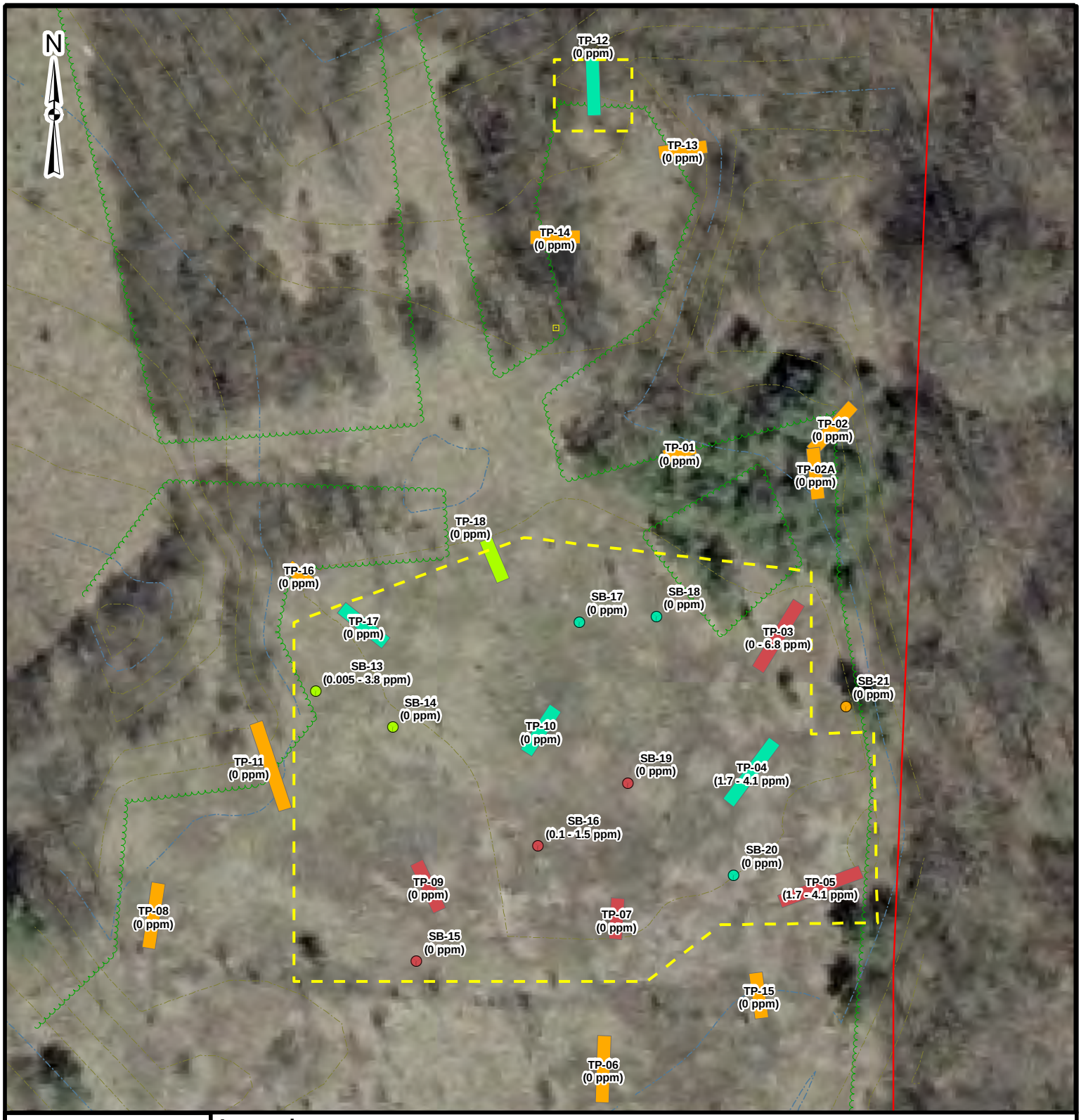


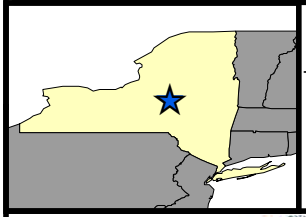
Source: NYS GIS Clearinghouse

MARSHALL TRANSFORMER SITE (6-33-019)
REMEDIAL INVESTIGATION REPORT
TOWN OF MARSHALL, NEW YORK

FIGURE 6
Total Petroleum Hydrocarbons
Sampling Results

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
RSC	CJS	FDJR	JAV	AS SHOWN	MAY 2010	14368.17	GIS/PROJECTS/ FIGURE6.MXD





Legend

Approximate Limits of Observed Subsurface Odors

Test Pit Location	Soil Boring Location
- No Odor	- No Odor
- Light Odor	- Light Odor
- Moderate Odor	- Moderate Odor
- Strong Odor	- Strong Odor

(1.7 - 4.1 ppm) PID Readings of Soil

Site Boundary

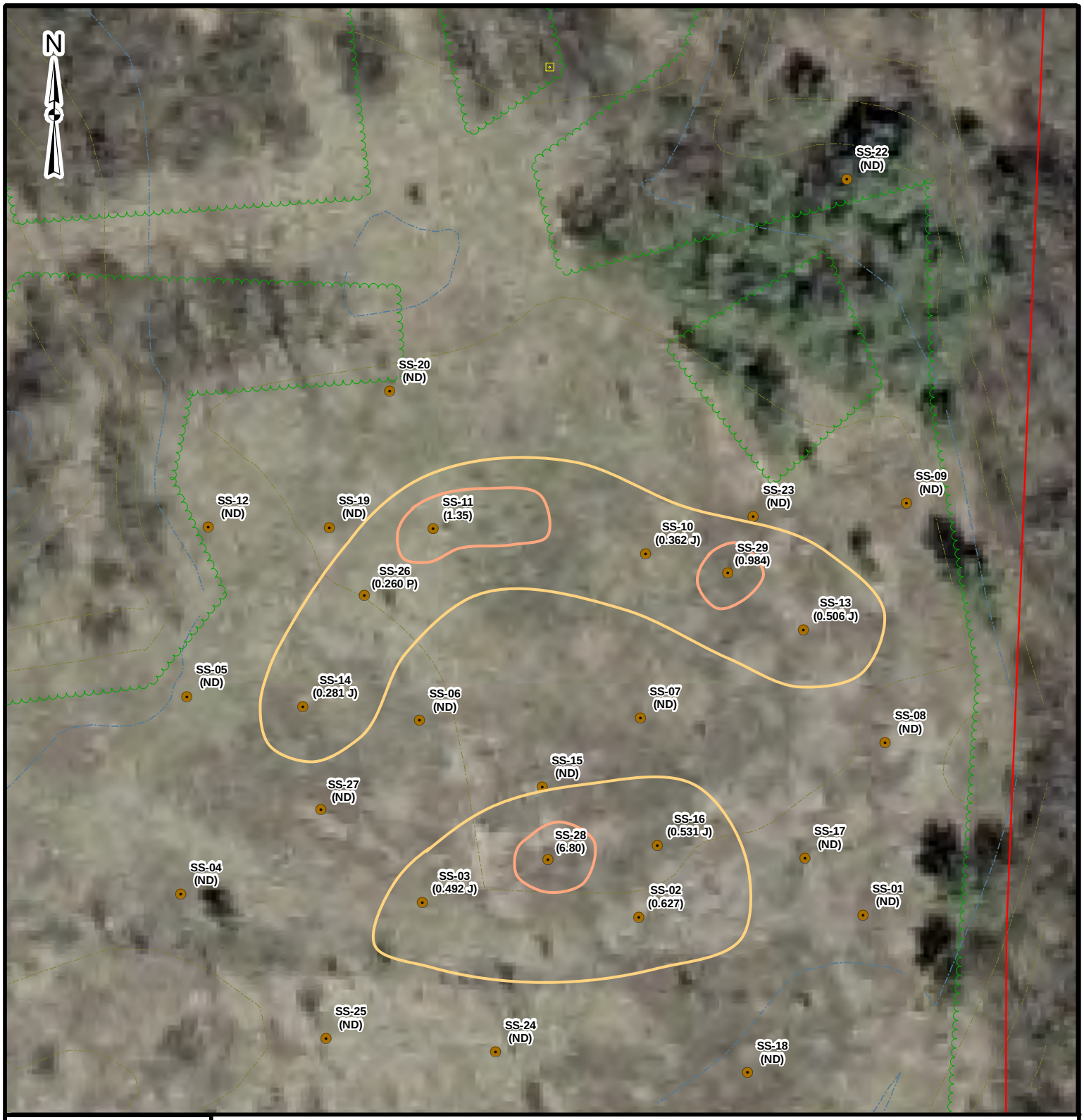
0 12.5 25 50 75 100 Feet

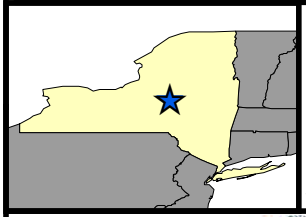
Source: NYS GIS Clearinghouse

MARSHALL TRANSFORMER SITE (6-33-019)
REMEDIAL INVESTIGATION REPORT
TOWN OF MARSHALL, NEW YORK

FIGURE 7
Estimated Extent of Olfactory and PID Subsurface Impacts

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
RSC	CJS	FDJR	JAV	AS SHOWN	MAY 2010	14368.17	GIS/PROJECTS/ FIGURE7.MXD





Legend

- Surface Soil Sampling Location
- (0.111) Total Aroclor Concentration - ppm
- PCBs 1 ppm Contour
- PCBs 0.1 ppm Contour
- Site Boundary

Note: Aroclor (Total) concentration values shown include 1/2 MDL concentration values for Aroclor 1254 or Aroclor 1260 if reported below the MDL.

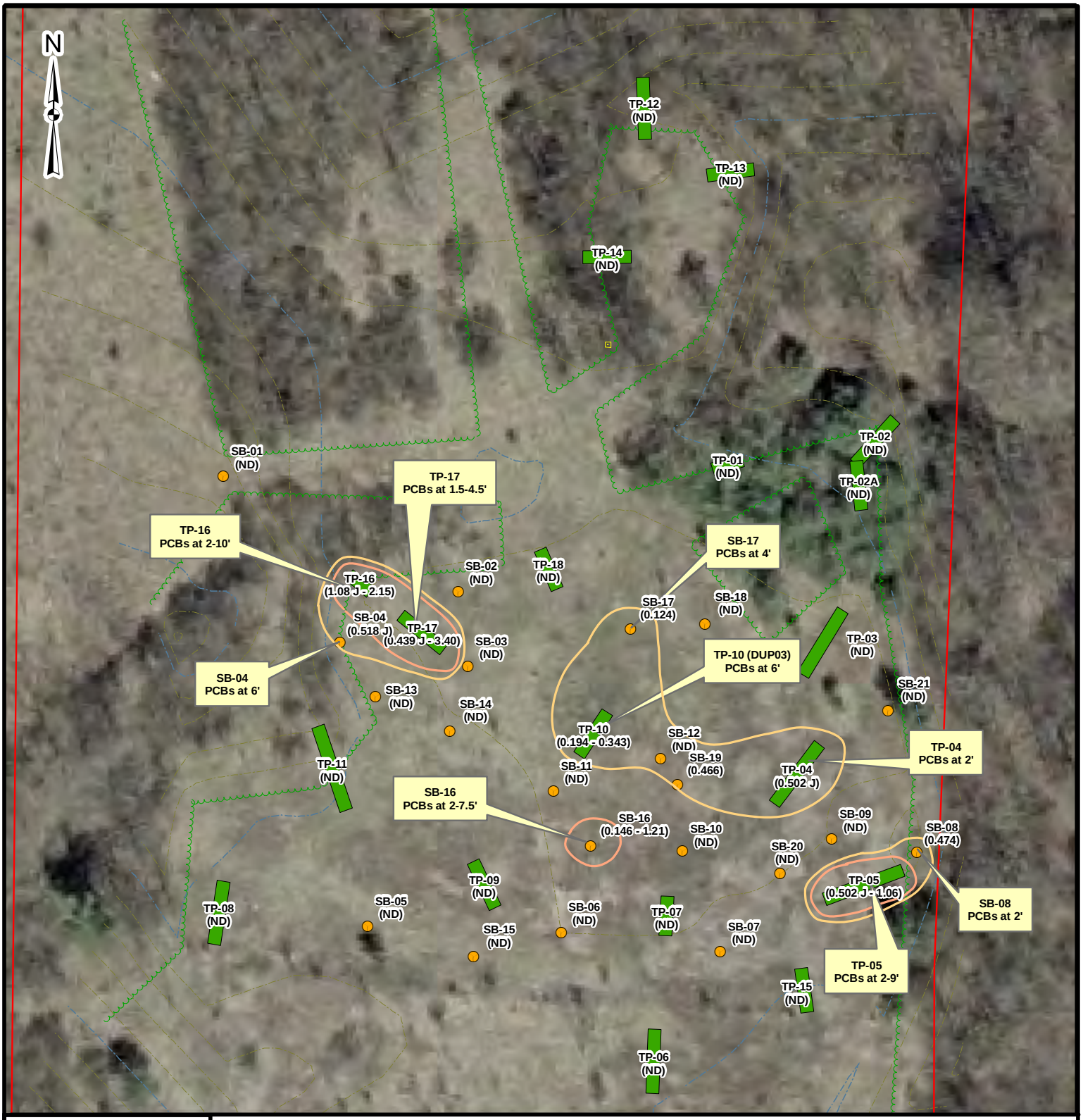
Feet
0 5 10 20 30 40

Source: NYS GIS Clearinghouse

MARSHALL TRANSFORMER SITE (6-33-019)
REMEDIAL INVESTIGATION REPORT
TOWN OF MARSHALL, NEW YORK

FIGURE 8
Estimated Extent of Total PCB Concentrations in Surface Soil

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
RSC	CJS	FDJR	JAV	AS SHOWN	MAY 2010	14368.17	GIS/PROJECTS/ FIGURE8.MXD



Legend

- Test Pit Location
- Soil Boring Location
- (0.173) Total Aroclor Concentration
- PCBs 1 ppm Contour
- PCBs 0.1 ppm Contour
- Site Boundary

Feet: 0 12.5 25 50 75 100

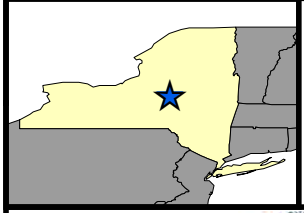
Note: Aroclor (Total) concentration values shown include 1/2 MDL concentration values for Aroclor 1248, Aroclor1254 or Aroclor 1260 if reported below the MDL.

Source: NYS GIS Clearinghouse

MARSHALL TRANSFORMER SITE (6-33-019)
REMEDIAL INVESTIGATION REPORT
TOWN OF MARSHALL, NEW YORK

FIGURE 9
Estimated Extent of Total PCB Concentrations in Subsurface Soil

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
RSC	CJS	FDJR	JAV	AS SHOWN	MAY 2010	14368.17	GIS/PROJECTS/ FIGURE9.MXD



Legend

- Soil Boring Location
- (2,600) TPH Concentration - ppm
- TPH Area of Impact
- Site Boundary

0 10 20 40 60 80 Feet

Source: NYS GIS Clearinghouse

MARSHALL TRANSFORMER SITE (6-33-019)
REMEDIAL INVESTIGATION REPORT
TOWN OF MARSHALL, NEW YORK

FIGURE 10
Estimated Extent of TPH Impacts

PROJECT MGR:	DESIGNED BY:	CREATED BY:	CHECKED BY:	SCALE:	DATE:	PROJECT NO:	FILE NO:
RSC	CJS	FDJR	JAV	AS SHOWN	MAY 2010	14368.17	GIS/PROJECTS/ FIGURE10.MXD

TABLE 1 GROUNDWATER ELEVATION DATA, NOVEMBER 2007

Monitoring Well Identification	Top of Riser Elevation (ft AMSL)	Depth to Groundwater (ft btoc)	Groundwater Table Elevation (ft AMSL) 15 November 2007
6-33-019-MW01	1060.78	25.38	1035.40
6-33-019-MW02	1061.26	33.42	1027.84
6-33-019-MW03	1060.11	26.16	1033.95

NOTES: ft AMSL = feet above mean sea level
ft btoc = feet below top of PVC casing

TABLE 2 DETECTED POLYCHLORINATED BIPHENYLS SURFACE SOIL ANALYTICAL DATA

Parameter List EPA Method 8082	Sample ID	633019-SS01-0-2"		633019-SS02-0-2"		633019-SS03-0-2"		633019-SS04-0-2"		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709089-001A		0709089-004A		0709089-008A		0709089-011A		
	Sample Type	Surface Soil		Surface Soil		Surface Soil		Surface Soil		
	Sample Date	9/18/2007		9/18/2007		9/18/2007		9/18/2007		
Aroclor 1254	(mg/kg)	(<0.158)	U	0.594		(<0.163)	U	(<0.163)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.0668)	U	(<0.0654)	U	0.41	J	(<0.0687)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.112**		0.627		0.492	J	**0.116**		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-SS05-0-2"		633019-SS06-0-2"		633019-SS07-0-2"		633019-SS08-0-2"		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709089-012B		0709089-009A		0709089-006B		0709089-022A		
	Sample Type	Surface Soil		Surface Soil		Surface Soil		Surface Soil		
	Sample Date	9/18/2007		9/18/2007		9/18/2007		9/18/2007		
Aroclor 1254	(mg/kg)	(<0.0837)	U	(<0.156)	U	(<0.163)	U	(<0.156)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.198)	U	(<0.0658)	U	(<0.069)	U	(<0.0656)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.141**		**0.111**		**0.116**		**0.111**		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-SS09-0-2"		633019-SS10-0-2"		633019-SS11-0-2"		633019-SS12-0-2"		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709089-021A		0709089-018A		0709089-019A		0709089-013A		
	Sample Type	Surface Soil		Surface Soil		Surface Soil		Surface Soil		
	Sample Date	9/18/2007		9/18/2007		9/18/2007		9/18/2007		
Aroclor 1254	(mg/kg)	(<0.156)	U	0.328	J	1.31		(<0.186)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.0723)	U	(<0.0683)	U	(<0.0743)	U	(<0.0786)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.114**		0.362	J	1.35		**0.132**		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-SS13-0-2"		633019-SS14-0-2"		633019-SS15-0-2"		633019-SS16-0-2"		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709089-020A		0709103-032B		0709089-007A		0709089-005A		
	Sample Type	Surface Soil		Surface Soil		Surface Soil		Surface Soil		
	Sample Date	9/18/2007		9/18/2007		9/18/2007		9/18/2007		
Aroclor 1254	(mg/kg)	0.473	J	0.25	J	(<0.16)	U	0.497	J	*NA*
Aroclor 1260	(mg/kg)	(<0.0667)	U	(<0.0618)	U	(<0.0677)	U	(<0.0677)	U	*NA*
Aroclor (Total)	(mg/kg)	0.506	J	0.281	J	**0.114**		0.531	J	*0.1*

Parameter List EPA Method 8082	Sample ID	633019-SS17-0-2"		633019-SS18-0-2"		633019-SS19-0-2"		633019-SS20-0-2"		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709089-002A		0709089-003A		0709089-014A		0709089-015A		
	Sample Type	Surface Soil		Surface Soil		Surface Soil		Surface Soil		
	Sample Date	9/18/2007		9/18/2007		9/18/2007		9/18/2007		
Aroclor 1254	(mg/kg)	(<0.155)	U	(<0.157)	U	(<0.167)	U	(<0.154)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.0654)	U	(<0.0662)	U	(<0.0707)	U	(<0.0649)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.110**		**0.112**		**0.119**		**0.109**		*0.1*

NOTE: Analytical data results provided by Life Science Laboratories, Inc. and Mitkem Laboratories. Data validation completed by Environmental Data Services, Inc.
Concentration values highlighted in gray indicate the concentration was above the 6 NYRCC Part 375 Soil Cleanup Objective.
EPA = Environmental Protection Agency
NYCRR = New York Code of Rules and Regulation
J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
mg/kg = Milligrams per kilograms = Parts Per Million (ppm)

Only Aroclors with at least one detection are shown; Method detection limits for individual Aroclors in surface soil samples SS-01 through SS-25 were above site SCGs, therefore one-half of the MDL value was used to determine Total Aroclor concentration values. These concentration values are highlighted in **bold** in the table. In addition, surface soil samples that had at least one Aroclor detection above the MDL, one-half of a non-detect MDL was added to the detected concentration value to determine the Total Aroclor concentration value.

TABLE 2 DETECTED POLYCHLORINATED BIPHENYLS SURFACE SOIL ANALYTICAL DATA

Parameter List EPA Method 8082	Sample ID	633019-SS21-0-2"		633019-SS22-0-2"		633019-SS23-0-2"		633019-SS24-0-2"		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709089-017A		0709089-016B		0710178-019A		0710178-020A		
	Sample Type	Surface Soil		Surface Soil		Surface Soil		Surface Soil		
	Sample Date	9/18/2007		9/18/2007		10/26/2007		10/26/2007		
Aroclor 1254	(mg/kg)	(<0.213)	U	(<0.181)	U	(<0.180)	U	(<0.174)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.0897)	U	(<0.0763)	U	(<0.0761)	U	(<0.0734)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.151**		**0.129**		**0.128**		**0.124**		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-SS25-0-2"		633019-SS26-0-2"		633019-SS27-0-2"		633019-SS28-0-2"		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0710178-021A								
	Sample Type	Surface Soil		Surface Soil		Surface Soil		Surface Soil		
	Sample Date	10/26/2007		12/11/2008		12/11/2008		12/11/2008		
Aroclor 1254	(mg/kg)	(<0.169)	U	0.120	P	(<0.0023)	U	6.80		*NA*
Aroclor 1260	(mg/kg)	(<0.0715)	U	0.140		(<0.0072)	U	(<0.0072)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.120**		0.260	P	**0.005**		6.80		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-SS29-0-2"		633019-DUP01		633019-DUP04		633019-Rinsate01-SS		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID			0709089-023A		0710178-025A		0709089-024A		
	Sample Type	Surface Soil		Duplicate/QAQC		Duplicate/QAQC		Rinse Blank/QAQC		
	Sample Date	12/11/2008		9/18/2007		10/26/2007				
Aroclor 1254	(mg/kg)	0.98		(<0.154)	U	(<0.179)	U	(<0.142)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.0085)	U	(<0.0651)	U	(<0.0756)	U	(<0.017)	U	*NA*
Aroclor (Total)	(mg/kg)	0.984		**0.109**		**0.127**		**0.080**	U	*0.1*

NOTE: Analytical data results provided by Life Science Laboratories, Inc. and Mitkem Laboratories. Data validation completed by Environmental Data Services, Inc.
Concentration values highlighted in gray indicate the concentration was above the 6 NYRCC Part 375 Soil Cleanup Objective.
EPA = Environmental Protection Agency
NYCRR = New York Code of Rules and Regulation
J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
mg/kg = Milligrams per kilograms = Parts Per Million (ppm)
633019-DUP01 was collected at 633019-SS15-0-2"
633019-DUP04 was collected at 633019-SS23-0-2"

Only Aroclors with at least one detection are shown; Method detection limits for individual Aroclors in surface soil samples SS-01 through SS-25 were above site SCGs, therefore one-half of the MDL value was used to determine Total Aroclor concentration values. These concentration values are highlighted **bold** in the table. In addition, surface soil samples that had at least one Aroclor detection above the MDL, one-half of a non-detect MDL was added to the detected concentration value to determine the Total Aroclor concentration value.

TABLE 2 DETECTED VOLATILE ORGANIC COMPOUNDS SURFACE SOIL ANALYTICAL DATA

Parameter List EPA Method 8260B	Sample ID	633019-SS05-0-2"		633019-SS07-0-2"		633019-SS14-0-2"		633019-SS22-0-2"		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709089-012A		0709089-006A		0709103-032A		0709089-016A		
	Sample Type	Surface Soil		Surface Soil		Surface Soil		Surface Soil		
	Sample Date	9/18/2007		9/18/2007		9/18/2007		9/18/2007		
Acetone	(mg/kg)		U		U	0.00075	J		U	*0.05*
1,2,4-Trichlorobenzene	(mg/kg)		U		U		U		U	*NA*

Parameter List EPA Method 8260B	Sample ID	633019-SS23-0-2"		633019-SS24-0-2"		633019-SS25-0-2"		633019-Rinsate01-SS		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0710178-020B		0710178-020B		0710178-021B		0709089-024A		
	Sample Type	Surface Soil		Surface Soil		Surface Soil		Rinsate Blank/QAQC		
	Sample Date	10/26/2007		10/26/2007		10/26/2007		9/18/2007		
Acetone	(mg/kg)		U		U		U	0.0052		*0.05*
1,2,4-Trichlorobenzene	(mg/kg)	0.009	J		U		U		U	*NA*

NOTE: Analytical data results provided by Life Science Laboratories, Inc. Data validation completed by Environmental Data Services, Inc.
Concentration values highlighted in gray indicate the concentration was above the 6 NYRCC Part 375 Soil Cleanup Objective.
EPA = Environmental Protection Agency
NYCRR = New York Code of Rules and Regulation
J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
mg/kg = Milligrams per kilograms = Parts Per Million (ppm)

TABLE 2 DETECTED SEMIVOLATILE ORGANIC COMPOUNDS SURFACE SOIL ANALYTICAL DATA

Parameter List EPA Method 8270C	Sample ID	633019-SS05-0-2"		633019-SS07-0-2"		633019-SS14-0-2"		633019-SS22-0-2"		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709089-012A		0709089-006A		0709103-032A		0709089-016A		
	Sample Type	Surface Soil		Surface Soil		Surface Soil		Surface Soil		
	Sample Date	9/18/2007		9/18/2007		9/18/2007		9/18/2007		
Benzaldehyde	(mg/kg)	0.51			U		U	1.3		*NA*
Benzo(a)anthracene	(mg/kg)		U		U		U		U	*1*
Benzo(a)pyrene	(mg/kg)		U		U		U		U	*1*
Benzo(b)fluoroanthene	(mg/kg)		U		U		U		U	*1*
Benzo(k)fluoroanthene	(mg/kg)		U		U		U		U	*0.8*
bis(2 - Ethylhexyl)phthalate	(mg/kg)		U		U		U	0.043	J	*NA*
Chrysene	(mg/kg)		U		U		U		U	*1*
Diethyl Phthalate	(mg/kg)		U		U		U		U	*NA*
Fluoranthene	(mg/kg)	0.047	J		U		U		U	*100*
Pyrene	(mg/kg)		U		U		U		U	*100*

Parameter List EPA Method 8270C	Sample ID	633019-SS23-0-2"		633019-SS24-0-2"		633019-SS25-0-2"		633019-Rinsate01-SS		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0710178-020B		0710178-020B		0710178-021B		0709089-024A		
	Sample Type	Surface Soil		Surface Soil		Surface Soil		Rinsate Blank/QAQC		
	Sample Date	10/26/2007		10/26/2007		10/26/2007		10/26/2007		
Benzaldehyde	(mg/kg)	0.11	J	0.06	J	0.11	J		U	*NA*
Benzo(a)anthracene	(mg/kg)	0.056	J		U		U		U	*1*
Benzo(a)pyrene	(mg/kg)	0.086	J		U		U		U	*1*
Benzo(b)fluoroanthene	(mg/kg)	0.16	J		U		U		U	*1*
Benzo(k)fluoroanthene	(mg/kg)	0.063	J		U		U		U	*0.8*
bis(2 - Ethylhexyl)phthalate	(mg/kg)		U		U	0.1	J		U	*NA*
Chrysene	(mg/kg)	0.076	J		U		U		U	*1*
Diethyl Phthalate	(mg/kg)	0.046	J	0.044	J	0.042	J		U	*NA*
Fluoranthene	(mg/kg)	0.071	J		U		U		U	*100*
Pyrene	(mg/kg)	0.083	J		U		U		U	*100*

NOTE: Analytical data results provided by Life Science Laboratories, Inc. Data validation completed by Environmental Data Services, Inc.
Concentration values highlighted in gray indicate the concentration was above the 6 NYRCC Part 375 Soil Cleanup Objective.
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NYCRR = New York Code of Rules and Regulation
J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
mg/kg = Milligrams per kilograms = Parts Per Million (ppm)

TABLE 2 DETECTED TARGET ANALYTE METALS SURFACE SOIL ANALYTICAL DATA

Parameter List EPA Method 6010B/7470A	Sample ID	633019-SS05-0-2"		633019-SS07-0-2"		633019-SS14-0-2"		633019-SS22-0-2"		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709089-012B		0709089-006B		0709103-032B		0709089-016B		
	Sample Type	Surface Soil		Surface Soil		Surface Soil		Surface Soil		
	Sample Date	9/18/2007		9/18/2007		9/18/2007		9/18/2007		
Aluminum	(mg/kg)	9,400		6,400		7,300		11,000		*NA*
Antimony	(mg/kg)	0.27	J	0.38	J	0.21	J	0.36	J	*NA*
Arsenic	(mg/kg)	7.8		5.5		6		7.4		*NA*
Barium	(mg/kg)	52		32		51		65		*350*
Beryllium	(mg/kg)	0.47	J	0.32	J	0.35	J	0.52	J	*7.2*
Calcium	(mg/kg)	18,000		42,000		70,000		2,900		*NA*
Chromium	(mg/kg)	15		10		11		15		*NA*
Cobalt	(mg/kg)	9.2		6.8		7.1		9.7		*NA*
Copper	(mg/kg)	47		38		30		33		*50*
Iron	(mg/kg)	24,000		18,000		20,000		26,000		*NA*
Lead	(mg/kg)	20		13		8.6		15		*63*
Magnesium	(mg/kg)	11,000		17,000		21,000		4,600		*NA*
Manganese	(mg/kg)	870		600		700		1,200		*1,600*
Mercury	(mg/kg)	**0.54**		0.011	J	0.0089	J	0.071	J	*0.18*
Nickel	(mg/kg)	18		15		16		19		*30*
Potassium	(mg/kg)	1,800		1,300		1,200		1,400		*NA*
Selenium	(mg/kg)	1.2	J	0.81		0.82		1.6		*3.9*
Sodium	(mg/kg)	41	J	62		75		25	J	*NA*
Thallium	(mg/kg)		U					0.8	J	*NA*
Vandium	(mg/kg)	18		12		14		19		*NA*
Zinc	(mg/kg)	81		58		68		77		*109*

Parameter List EPA Method 6010B/7470A	Sample ID	633019-Rinsate01-SS								6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709089-024B								
	Sample Type	Rinsate Blank/QAQC								
	Sample Date	9/18/2007								
Aluminum	(mg/kg)	0.075	J							*NA*
Antimony	(mg/kg)		U							*NA*
Arsenic	(mg/kg)		U							*NA*
Barium	(mg/kg)	0.0028	J							*350*
Beryllium	(mg/kg)		U							*7.2*
Calcium	(mg/kg)	0.55	J							*NA*
Chromium	(mg/kg)		U							*NA*
Cobalt	(mg/kg)		U							*NA*
Copper	(mg/kg)		U							*50*
Iron	(mg/kg)		U							*NA*
Lead	(mg/kg)		U							*63*
Magnesium	(mg/kg)		U							*NA*
Manganese	(mg/kg)		U							*1,600*
Mercury	(mg/kg)		U							*0.18*
Nickel	(mg/kg)		U							*30*
Potassium	(mg/kg)		U							*NA*
Selenium	(mg/kg)		U							*3.9*
Sodium	(mg/kg)	0.79	J							*NA*
Thallium	(mg/kg)		U							*NA*
Vandium	(mg/kg)		U							*NA*
Zinc	(mg/kg)	0.035								*109*

NOTE: Analytical data results provided by Life Science Laboratories, Inc. Data validation completed by Environmental Data Services, Inc.
Concentration values highlighted in gray indicate the concentration was above the 6 NYRCC Part 375 Soil Cleanup Objective.
EPA = Environmental Protection Agency
NYCRR = New York Code of Rules and Regulation
J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
mg/kg = Milligrams per kilograms = Parts Per Million (ppm)

TABLE 2 DETECTED TOTAL PETROLEUM HYDROCARBONS SURFACE SOIL ANALYTICAL DATA

Parameter List EPA Method 8260B	Sample ID	633019-SS26	633019-SS27	633019-SS28	633019-SS29	6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	G2349-20	G2349-27	G2349-22	G2349-29	
	Sample Type	Surface Soil	Surface Soil	Surface Soil	Surface Soil	
	Sample Date	12/11/2008	12/11/2008	12/11/2008	12/11/2008	
Total Petroleum Hydrocarbons	(mg/kg)	U	110	41	57	*NA*

NOTE: Analytical data results provided by Life Science Laboratories, Inc. Data validation completed by Environmental Data Services, Inc.
Concentration values highlighted in gray indicate the concentration was above the 6 NYRCC Part 375 Soil Cleanup Objective.
EPA = Environmental Protection Agency
NYCRR = New York Code of Rules and Regulation
J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
mg/kg = Milligrams per kilograms = Parts Per Million (ppm)

TABLE 3 DETECTED POLYCHLORINATED BIPHYNELS TEST PIT ANALYTICAL DATA

Parameter List EPA Method 8082	Sample ID	633019-TP01-0-2'		633019-TP01-6-8'		633019-TP02-0-2'		633019-TP02-8-10'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709089-025A		0709089-026A		0709089-027A		0709089-028A		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	9/18/2007		9/18/2007		9/18/2007		9/18/2007		
Aroclor 1248	(mg/kg)	(<0.115)	U	(<0.111)	U	(<0.111)	U	(<0.111)	U	*NA*
Aroclor 1254	(mg/kg)	(<0.153)	U	(<0.148)	U	(<0.148)	U	(<0.148)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.0646)	U	(<0.0622)	U	(<0.0622)	U	(<0.0624)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.166**		**0.161**		**0.161**		**0.161**		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-TP02A-0-2'		633019-TP03-2'		633019-TP03-6'		633019-TP03-8'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709089-029A		0709103-001A		0709103-002A		0709103-003B		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	9/18/2007		9/19/2007		9/19/2007		9/19/2007		
Aroclor 1248	(mg/kg)	(<0.12)	U	(<0.132)	U	(<0.116)	U	(<0.116)	U	*NA*
Aroclor 1254	(mg/kg)	(<0.16)	U	(<0.176)	U	(<0.154)	U	(<0.154)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.0674)	U	(<0.0741)	U	(<0.0649)	U	(<0.0651)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.174**		**0.191**		**0.167**		**0.168**		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-TP03-16'		633019-TP04-2'		633019-TP04-9'		633019-TP04-12'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709103-004A		0709103-005A		0709103-006A		0709103-007A		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	9/19/2007		9/19/2007		9/19/2007		9/19/2007		
Aroclor 1248	(mg/kg)	(<0.131)	U	0.392	J	(<0.113)	U	(<0.116)	U	*NA*
Aroclor 1254	(mg/kg)	(<0.173)	U	(<0.155)	U	(<0.149)	U	(<0.154)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.0732)	U	(<0.0654)	U	(<0.063)	U	(<0.065)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.189**		0.502	J	**0.163**		**0.168**		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-TP05-2'		633019-TP05-9'		633019-TP05-12.5'		633019-TP06-2'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709103-008A		0709103-009A		0709103-010A		0709103-013A		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	9/19/2007		9/19/2007		9/19/2007		9/19/2007		
Aroclor 1248	(mg/kg)	(<0.113)	U	0.388	J	(<0.126)	U	(<0.113)	U	*NA*
Aroclor 1254	(mg/kg)	(<0.151)	U	(<0.16)	U	(<0.168)	U	(<0.149)	U	*NA*
Aroclor 1260	(mg/kg)	0.932		(<0.0673)	U	(<0.0708)	U	(<0.063)	U	*NA*
Aroclor (Total)	(mg/kg)	1.06		0.502	J	**0.182**		**0.163**		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-TP06-10'		633019-TP07-2'		633019-TP07-6'		633019-TP07-9'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709103-014A		0709103-015A		0709103-016A		0709103-017A		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	9/19/2007		9/19/2007		9/19/2007		9/19/2007		
Aroclor 1248	(mg/kg)	(<0.12)	U	(<0.112)	U	(<0.111)	U	(<0.129)	U	*NA*
Aroclor 1254	(mg/kg)	(<0.159)	U	(<0.148)	U	(<0.148)	U	(<0.171)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.067)	U	(<0.0626)	U	(<0.0622)	U	(<0.0722)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.173**		**0.161**		**0.161**		**0.186**		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-TP08-2'		633019-TP08-9'		633019-TP09-2'		633019-TP09-4'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709103-018A		0709103-019A		0709103-020A		0709103-021B		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	9/19/2007		9/19/2007		9/19/2007		9/19/2007		
Aroclor 1248	(mg/kg)	(<0.115)	U	(<0.13)	U	(<0.118)	U	(<0.12)	U	*NA*
Aroclor 1254	(mg/kg)	(<0.153)	U	(<0.172)	U	(<0.156)	U	(<0.16)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.0645)	U	(<0.0727)	U	(<0.066)	U	(<0.0675)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.166**		**0.187**		**0.170**		**0.174**		*0.1*

NOTE: Analytical data results provided by Life Science Laboratories, Inc. Data validation completed by Environmental Data Services, Inc.
Concentration values highlighted in gray indicate the concentration was above the 6 NYRCC Part 375 Soil Cleanup Objective.
EPA = Environmental Protection Agency
NYCRR = New York Code of Rules and Regulation
J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
mg/kg = Milligrams per kilograms = Parts Per Million (ppm)

Only Aroclors with at least one detection are shown; Method detection limits for individual Aroclors in test pit soil samples TP-01 through TP-18 were above site SCGs, therefore one-half of the MDL value was used to determine Total Aroclor concentration values. These concentration values are highlighted in **bold** in the table. In addition, surface soil samples that had at least one Aroclor detection above the MDL, one-half of a non-detect MDL was added to the detected concentration value to determine the Total Aroclor concentration value.

TABLE 3 DETECTED POLYCHLORINATED BIPHYNELS TEST PIT ANALYTICAL DATA

Parameter List EPA Method 8082	Sample ID	633019-TP09-7'		633019-TP09-11'		633019-TP10-3.5'		633019-TP10-6'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709103-022B		0709103-023A		0709103-025A		0709103-026A		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	9/19/2007		9/19/2007		9/19/2007		9/19/2007		
Aroclor 1248	(mg/kg)	(<0.128)	U	(<0.12)	U	(<0.129)	U	(<0.121)	U	*NA*
Aroclor 1254	(mg/kg)	(<0.169)	U	(<0.159)	U	(<0.171)	U	(<0.161)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.0714)	U	(<0.0671)	U	(<0.0721)	U	(<0.0678)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.184**		**0.173**		**0.186**		**0.175**		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-TP10-9'		633019-TP11A-2'		633019-TP11A-10'		633019-TP11B-5'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709103-027A		0709103-028A		0709103-029A		0709103-030A		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	9/19/2007		9/19/2007		9/19/2007		9/19/2007		
Aroclor 1248	(mg/kg)	(<0.134)	U	(<0.116)	U	(<0.12)	U	(<0.112)	U	*NA*
Aroclor 1254	(mg/kg)	(<0.178)	U	(<0.154)	U	(<0.159)	U	(<0.149)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.075)	U	(<0.0649)	U	(<0.0672)	U	(<0.0627)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.194**		**0.167**		**0.173**		**0.162**		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-TP11B-10'		633019-TP12-2'		633019-TP12-10'		633019-TP13-2'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709103-031A		0709108-001A		0709108-002A		0709108-003B		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	9/19/2007		9/20/2007		9/20/2007		9/20/2007		
Aroclor 1248	(mg/kg)	(<0.12)	U	(<0.123)	U	(<0.114)	U	(<0.114)	U	*NA*
Aroclor 1254	(mg/kg)	(<0.16)	U	(<0.164)	U	(<0.152)	U	(<0.152)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.0675)	U	(<0.069)	U	(<0.064)	U	(<0.064)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.174**		**0.178**		**0.165**		**0.165**		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-TP13-8.5'		633019-TP14-2'		633019-TP14-9'		633019-TP15-1'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709108-004A		0709108-005A		0709108-006A		0709108-007A		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	9/20/2007		9/20/2007		9/20/2007		9/20/2007		
Aroclor 1248	(mg/kg)	(<0.112)	U	(<0.121)	U	(<0.122)	U	(<0.113)	U	*NA*
Aroclor 1254	(mg/kg)	(<0.148)	U	(<0.16)	U	(<0.162)	U	(<0.15)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.0626)	U	(<0.0676)	U	(<0.0685)	U	(<0.0631)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.161**		**0.174**		**0.176**		**0.163**		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-TP15-2.5'		633019-TP16-2'		633019-TP16-10'		633019-TP17-1.5'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709108-008A		0709108-009A		0709108-010A		0709108-012B		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	9/20/2007		9/20/2007		9/20/2007		9/20/2007		
Aroclor 1248	(mg/kg)	(<0.119)	U	(<0.113)	U	(<0.113)	U	(<0.117)	U	*NA*
Aroclor 1254	(mg/kg)	(<0.159)	U	(<0.15)	U	0.651		(<0.155)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.0669)	U	2.02		0.375	J	0.303	J	*NA*
Aroclor (Total)	(mg/kg)	**0.172**		2.15		1.08	J	0.439	J	*0.1*

Parameter List EPA Method 8082	Sample ID	633019-TP17-4'		633019-TP17-4.5'		633019-TP18-2'		633019-TP18-6'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709108-013A		0709108-014A		0709108-015A		0709108-016A		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	9/20/2007		9/20/2007		9/20/2007		9/20/2007		
Aroclor 1248	(mg/kg)	(<0.113)	U	(<0.127)	U	(<0.123)	U	(<0.113)	U	*NA*
Aroclor 1254	(mg/kg)	3.31		0.447	J	(<0.163)	U	(<0.15)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.063)	U	(<0.0713)	U	(<0.0688)	U	(<0.0631)	U	*NA*
Aroclor (Total)	(mg/kg)	3.40		0.546	J	**0.177**		**0.163**		*0.1*

NOTE: Analytical data results provided by Life Science Laboratories, Inc. Data validation completed by Environmental Data Services, Inc.
Concentration values highlighted in gray indicate the concentration was above the 6 NYRCC Part 375 Soil Cleanup Objective.
EPA = Environmental Protection Agency
NYCRR = New York Code of Rules and Regulation
J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
mg/kg = Milligrams per kilograms = Parts Per Million (ppm)

Only Aroclors with at least one detection are shown; Method detection limits for individual Aroclors in test pit soil samples TP-01 through TP-18 were above site SCGs, therefore one-half of the MDL value was used to determine Total Aroclor concentration values. These concentration values are highlighted in **bold** in the table. In addition, surface soil samples that had at least one Aroclor detection above the MDL, one-half of a non-detect MDL was added to the detected concentration value to determine the Total Aroclor concentration value.

TABLE 3 DETECTED POLYCHLORINATED BIPHYNELS TEST PIT ANALYTICAL DATA

Parameter List EPA Method 8082	Sample ID	633019-TP18-8'		633019-Duplicate#1		633019-Duplicate#2		633019-DUP03		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709108-017A		0709103-012A		0709103-011B		0709103-033A		
	Sample Type	Subsurface Soil		Duplicate/QAQC		Duplicate/QAQC		Duplicate/QAQC		
	Sample Date	9/20/2007		9/20/2007		9/20/2007		9/20/2007		
Aroclor 1248	(mg/kg)	(<0.117)	U	(<0.116)	U	(<0.112)	U	(<0.113)	U	*NA*
Aroclor 1254	(mg/kg)	(<0.155)	U	(<0.154)	U	(<0.148)	U	0.255	J	*NA*
Aroclor 1260	(mg/kg)	(<0.0654)	U	(<0.065)	U	(<0.0626)	U	(<0.0634)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.169**		**0.168**		**0.161**		0.343	J	*0.1*

Parameter List EPA Method 8082	Sample ID	633019-Rinsate01		633019-Rinsate#2		633019-Rinsate03				6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709089-030A		0709103-024C		0709108-011A				
	Sample Type	Rinsate Blank/QAQC		Rinsate Blank/QAQC		Rinsate Blank/QAQC				
	Sample Date	9/20/2007		9/20/2007		9/20/2007				
Aroclor 1248	(µg/L)	(<0.13)	U	(<0.134)	U	(<0.019)	U			*NA*
Aroclor 1254	(µg/L)	(<0.141)	U	(<0.145)	U	(<0.159)	U			*NA*
Aroclor 1260	(µg/L)	(<0.016)	U	(<0.017)	U	(<0.019)	U			*NA*
Aroclor (Total)	(µg/L)	**0.144**		**0.148**		**0.099**				*0.1*

NOTE: Analytical data results provided by Life Science Laboratories, Inc. Data validation completed by Environmental Data Services, Inc.
Concentration values highlighted in gray indicate the concentration was above the 6 NYRCC Part 375 Soil Cleanup Objective.
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NYCRR = New York Code of Rules and Regulation
J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
mg/kg = Milligrams per kilograms = Parts Per Million (ppm)
633019-Duplicate#1 collected at 633019-TP03-6'
633019-Duplicate#2 collected at 633019-TP07-2'
633019-DUP03 collected at 633019-TP10-6'

Only Aroclors with at least one detection are shown; Method detection limits for individual Aroclors in test pit soil samples TP-01 through TP-18 were above site SCGs, therefore one-half of the MDL value was used to determine Total Aroclor concentration values. These concentration values are highlighted in **bold** in the table. In addition, surface soil samples that had at least one Aroclor detection above the MDL, one-half of a non-detect MDL was added to the detected concentration value to determine the Total Aroclor concentration value.

TABLE 3 DETECTED VOLATILE ORGANIC COMPOUNDS TEST PIT ANALYTICAL DATA

Parameter List EPA Method 8260B	Sample ID	633019-TP03-8'		633019-TP07-2'		633019-TP09-4'		633019-TP09-7'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709103-003A		0709103-015A		0709103-021A		0709103-022A		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	9/19/2007		9/19/2007		9/19/2007		9/19/2007		
Acetone	(mg/kg)	**0.051**			U		U		U	*0.05*
2- Butanone	(mg/kg)	0.0075	J		U		U		U	*NA*
Carbon Disulfide	(mg/kg)	0.0011	J		U		U		U	*NA*
Methylene Chloride	(mg/kg)		U		U		U		U	*0.05*
1,2,4- Trichlorobenzene	(mg/kg)		U		U		U	0.0076	J	*NA*

Parameter List EPA Method 8260B	Sample ID	633019-TP13-2'		633019-TP17-1.5'		633019-Duplicate#2		633019-Rinsate#2 [(a)]		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709108-003A		0709108-012A		0709103-011A		0709103-024A		
	Sample Type	Subsurface Soil		Subsurface Soil		Duplicate/QAQC		Rinsate Blank/QAQC		
	Sample Date	9/20/2007		9/20/2007		9/20/2007		9/20/2007		
Acetone	(mg/kg)		U	0.0049	J	0.0048	J		U	*0.05*
2- Butanone	(mg/kg)		U		U		U		U	*NA*
Carbon Disulfide	(mg/kg)		U		U		U		U	*NA*
Methylene Chloride	(mg/kg)		U		U		U	0.0065		*0.05*
1,2,4- Trichlorobenzene	(mg/kg)		U		U		U		U	*NA*

NOTE: Analytical data results provided by Life Science Laboratories, Inc. Data validation completed by Environmental Data Services, Inc.
Concentration values highlighted in gray indicate the concentration was above the 6 NYRCC Part 375 Soil Cleanup Objective.
EPA = Environmental Protection Agency
NYCRR = New York Code of Rules and Regulation
J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
mg/kg = Milligrams per kilograms = Parts Per Million (ppm)
(a) Rinsate Blank results are in µg/L = parts per billion
633019-Duplicate#2 collected at 633019-TP07-2'

TABLE 3 DETECTED TARGET ANALYTE METALS TEST PIT ANALYTICAL DATA

Parameter List EPA Method 6010B/7470A	Sample ID	633019-TP03-8'		633019-TP07-2'		633019-TP09-4'		633019-TP09-7'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709103-003B		0709103-015B		0709103-021B		0709103-022B		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	9/19/2007		9/19/2007		9/19/2007		9/19/2007		
Aluminum	(mg/kg)	7,900		5,000		4,500		4,900		*NA*
Antimony	(mg/kg)		U		U		U		U	*NA*
Arsenic	(mg/kg)	5.8		4.8		4.8		5.7		*NA*
Barium	(mg/kg)	51		57		21		26		*350*
Beryllium	(mg/kg)	0.34	J	0.27	J	0.26	J	0.27	J	*7.2*
Calcium	(mg/kg)	61,000		64,000		54,000		47,000		*NA*
Chromium	(mg/kg)	11		8.1		7.5		8		*NA*
Cobalt	(mg/kg)	6.9		5.4		5	J	5.6	J	*NA*
Copper	(mg/kg)	34		27		26		32		*50*
Iron	(mg/kg)	21,000		15,000		14,000		17,000		*NA*
Lead	(mg/kg)	7.4		5.2		5.2		6.2		*63*
Magnesium	(mg/kg)	24,000		18,000		15,000		22,000		*NA*
Manganese	(mg/kg)	820		540		430		720		*1,600*
Mercury	(mg/kg)	0.012	J	0.0086		0.0086	J		J	*0.18*
Nickel	(mg/kg)	17		12		11		12		*30*
Potassium	(mg/kg)	1,100		1,200		1,100		1,100		*NA*
Selenium	(mg/kg)	0.85	J	0.51	J	0.43	J	0.75	J	*3.9*
Sodium	(mg/kg)	69	J	72	J	63	J	69	J	*NA*
Vandium	(mg/kg)	13		9.6		9.4		11		*NA*
Zinc	(mg/kg)	**120**		44		39		41		*109*

Parameter List EPA Method 6010B/7470A	Sample ID	633019-TP13-2'		633019-TP17-1.5'		633019-Duplicate#2		633019-Rinsate#2 [(a)]		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709108-003B		0709108-012B		0709103-011B		0709103-024B		
	Sample Type	Subsurface Soil		Subsurface Soil		Duplicate/QAQC		Rinsate Blank/QAQC		
	Sample Date	9/20/2007		9/20/2007		9/20/2007		9/20/2007		
Aluminum	(mg/kg)	7,600		6,700		4,900			U	*NA*
Antimony	(mg/kg)	0.19	J		U		U		U	*NA*
Arsenic	(mg/kg)	7.9		6.4		4.9			U	*NA*
Barium	(mg/kg)	34		29		59			U	*350*
Beryllium	(mg/kg)	0.34	J	0.35	J	0.28	J		U	*7.2*
Calcium	(mg/kg)	82,000		53,000		67,000		0.22	J	*NA*
Chromium	(mg/kg)	11		10		7.9			U	*NA*
Cobalt	(mg/kg)	7.9		6.9		5.1	J		U	*NA*
Copper	(mg/kg)	48		32		**50**			U	*50*
Iron	(mg/kg)	21,000		22,000		15,000			U	*NA*
Lead	(mg/kg)	10		7.5		6			U	*63*
Magnesium	(mg/kg)	27,000		20,000		18,000			U	*NA*
Manganese	(mg/kg)	740		900		470			U	*1,600*
Mercury	(mg/kg)	0.017	J	0.0093	J	0.0088	J		U	*0.18*
Nickel	(mg/kg)	16		15		12			U	*30*
Potassium	(mg/kg)	1,600		1,200		1,100			U	*NA*
Selenium	(mg/kg)	0.75	J	1.1		0.51	J		U	*3.9*
Sodium	(mg/kg)	92	J	62	J	68	J	0.5	J	*NA*
Vandium	(mg/kg)	13		13		9.6			U	*NA*
Zinc	(mg/kg)	84		95		47		0.019	J	*109*

NOTE: Analytical data results provided by Life Science Laboratories, Inc. Data validation completed by Environmental Data Services, Inc.
Concentration values highlighted in gray indicate the concentration was above the 6 NYRCC Part 375 Soil Cleanup Objective.
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NYCRR = New York Code of Rules and Regulation
J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
mg/kg = Milligrams per kilograms = Parts Per Million (ppm)
(a) Rinsate Blank results are in µg/L = parts per billion
633019-Duplicate#2 collected at 633019-TP07-2'

TABLE 3 DETECTED PESTICIDES TEST PIT ANALYTICAL DATA

Parameter List EPA Method 8081A	Sample ID	633019-TP03-8'		633019-TP07-2'		633019-TP09-4'		633019-TP09-7'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709103-003B		0709103-015B		0709103-021B		0709103-022B		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	9/19/2007		9/19/2007		9/19/2007		9/19/2007		
4,4'-DDT	(mg/kg)	**0.01**		0.00038	J		U	**0.0033**	**J**	*0.0033*
Aldrin	(mg/kg)		U		U		U	0.00079	J	*0.005*
alpha-Chlordane	(mg/kg)		U		U		U	0.001	J	*0.094*
Dieldrin	(mg/kg)		U		U		U	0.0042		*0.005*
Endosulfan II	(mg/kg)		U		U		U	0.00021	J	*2.4*
Endrin	(mg/kg)		U		U		U	0.0021	J	*0.014*
Endrin aldehyde	(mg/kg)		U		U		U	0.001	J	*NA*
gamma-BHC	(mg/kg)	0.047	J		U		U	0.00028	J	*NA*
Methoxychlor	(mg/kg)		U		U		U		U	*NA*

Parameter List EPA Method 8081A	Sample ID	633019-TP13-2'		633019-TP17-1.5'		633019-Duplicate#2		633019-Rinsate#2 [(a)]		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0709108-003B		0709108-012B		0709103-011B		0709103-024B		
	Sample Type	Subsurface Soil		Subsurface Soil		Duplicate/QAQC		Rinsate Blank/QAQC		
	Sample Date	9/20/2007		9/20/2007		9/20/2007		9/20/2007		
4,4'-DDT	(mg/kg)		U		U	0.00025	J		U	*0.0033*
Aldrin	(mg/kg)		U		U		U		U	*0.005*
alpha-Chlordane	(mg/kg)		U		U		U		U	*0.094*
Dieldrin	(mg/kg)	0.00046	J	**0.019**			U		U	*0.005*
Endosulfan II	(mg/kg)		U	0.0022	J		U		U	*2.4*
Endrin	(mg/kg)		U	0.0055			U		U	*0.014*
Endrin aldehyde	(mg/kg)		U		U		U		U	*NA*
gamma-BHC	(mg/kg)		U		U		U		U	*NA*
Methoxychlor	(mg/kg)		U	0.061	J		U		U	*NA*

NOTE: Analytical data results provided by Life Science Laboratories, Inc. Data validation completed by Environmental Data Services, Inc.
Concentration values highlighted in gray indicate the concentration was above the 6 NYRCC Part 375 Soil Cleanup Objective.
EPA = Environmental Protection Agency
NYCRR = New York Code of Rules and Regulation
J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
mg/kg = Milligrams per kilograms = Parts Per Million (ppm)
(a) Rinsate Blank results are in µg/L = parts per billion
633019-Duplicate#2 collected at 633019-TP07-2'

TABLE 4 DETECTED POLYCHLORINATED BIPHENLYS SUBSURFACE SOIL ANALYTICAL DATA

Parameter List EPA Method 8082	Sample ID	633019-SB01-4-6'		633019-SB02-4-6'		633019-SB02-8-10'		633019-SB03-4-6'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0710178-001A		0710178-002A		0710178-003A		0710178-004A		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	10/25/2007		10/25/2007		10/25/2007		10/25/2007		
Aroclor 1248	(mg/kg)	(<0.119)	U	(<0.118)	U	(<0.117)	U	(<0.12)	U	*NA*
Aroclor 1254	(mg/kg)	(<0.158)	U	(<0.157)	U	(<0.155)	U	(<0.16)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.0665)	U	(<0.0664)	U	(<0.0654)	U	(<0.0673)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.172**		**0.171**		**0.169**		**0.174**		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-SB03-8-9.5'		633019-SB04-4-6'		633019-SB04-8-10'		633019-SB05-0-2'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0710178-005A		0710178-006A		0710178-007A		0710178-008A		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	10/25/2007		10/25/2007		10/25/2007		10/25/2007		
Aroclor 1248	(mg/kg)	(<0.113)	U	(<0.119)	U	(<0.115)	U	(<0.114)	U	*NA*
Aroclor 1254	(mg/kg)	(<0.15)	U	(<0.158)	U	(<0.153)	U	(<0.151)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.0634)	U	0.379	J	(<0.0644)	U	(<0.0637)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.163**		0.518	J	**0.166**		**0.164**		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-SB06-0-2'		633019-SB07-0-2'		633019-SB08-0-2'		633019-SB08-8-10'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0710178-009A		0710178-010A		0710178-011A		0710178-012A		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	10/25/2007		10/25/2007		10/25/2007		10/25/2007		
Aroclor 1248	(mg/kg)	(<0.115)	U	(<0.122)	U	(<0.117)	U	(<0.112)	U	*NA*
Aroclor 1254	(mg/kg)	(<0.152)	U	(<0.163)	U	(<0.156)	U	(<0.149)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.0642)	U	(<0.0686)	U	0.337	J	(<0.063)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.166**		**0.177**		0.474	J	**0.162**		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-SB09-2'		633019-SB09-8-9.5'		633019-SB10-2-4'		633019-SB10-10-12'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0710178-013A		0710178-014A		0710178-015A		0710178-016A		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	9/19/2007		10/25/2007		10/25/2007		10/25/2007		
Aroclor 1248	(mg/kg)	(<0.12)	U	(<0.125)	U	(<0.112)	U	(<0.127)	U	*NA*
Aroclor 1254	(mg/kg)	(<0.159)	U	(<0.166)	U	(<0.148)	U	(<0.169)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.067)	U	(<0.0699)	U	(<0.0625)	U	(<0.0713)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.173**		**0.180**		**0.161**		**0.184**		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-SB11-0-2'		633019-SB12-6-8'		633019-SB13-1-2'		633019-SB13-4.5-5'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0710178-017A		0710178-018A		G2349-03A		G2349-01A		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	10/25/2007		10/25/2007		12/11/2008		12/11/2008		
Aroclor 1248	(mg/kg)	(<0.116)	U	(<0.118)	U	(<0.0054)	U	(<0.0055)	U	*NA*
Aroclor 1254	(mg/kg)	(<0.154)	U	(<0.156)	U	(<0.0022)	U	(<0.0022)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.0649)	U	(<0.0659)	U	(<0.0069)	U	(<0.0069)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.167**		**0.170**		**0.007**		**0.007**		*0.1*

NOTE: Analytical data results provided by Life Science Laboratories, Inc. and Mitkem Laboratories. Data validation completed by Environmental Data Services, Inc.
Concentration values highlighted in gray indicate the concentration was above the 6 NYRCC Part 375 Soil Cleanup Objective.
EPA = Environmental Protection Agency
NYCRR = New York Code of Rules and Regulation
J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
mg/kg = Milligrams per kilograms = Parts Per Million (ppm)

Only Aroclors with at least one detection are shown; Method detection limits for individual Aroclors in subsurface soil samples SB-01 through SB-12 were above site SCGs, therefore one-half of the MDL value was used to determine Total Aroclor concentration values. These concentration values are highlighted i**bold** in the table. In addition, subsurface soil samples that had at least one Aroclor detection above the MDL, one-half of a non-detect MDL was added to the detected concentration value to determine the Total Aroclor concentration value.

TABLE 4 DETECTED POLYCHLORINATED BIPHENLYS SUBSURFACE SOIL ANALYTICAL DATA

Parameter List EPA Method 8082	Sample ID	633019-SB14-2-2.5'		633019-SB14-7-8'		633019-SB15-2-3'		633019-SB15-5-6'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	G2349-05A		G2349-06A		G2349-07A		G2349-08A		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	12/11/2008		12/11/2008		12/11/2008		12/11/2008		
Aroclor 1248	(mg/kg)	(<0.0055)	U	(<0.0057)	U	(<0.0051)	U	(<0.0055)	U	*NA*
Aroclor 1254	(mg/kg)	(<0.0022)	U	(<0.0023)	U	(<0.0021)	U	(<0.0022)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.0069)	U	(<0.0072)	U	(<0.0064)	U	(<0.0069)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.007**		**0.008**		**0.007**		**0.007**		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-SB16-2-4'		633019-SB16-6.5-7.5		633019-SB17-2-4'		633019-SB17-5-6'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	G2349-01A		G2349-04A		G2349-09A		G2349-10A		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	12/11/2008		12/11/2008		12/11/2008		12/11/2008		
Aroclor 1248	(mg/kg)	(<0.0052)	U	(<0.0055)	U	(<0.0052)	U	(<0.0051)		*NA*
Aroclor 1254	(mg/kg)	1.20	E	0.140		(<0.0021)	U	(<0.0021)		*NA*
Aroclor 1260	(mg/kg)	(<0.0066)	U	(<0.0069)	U	0.120		(<0.0064)		*NA*
Aroclor (Total)	(mg/kg)	1.21	E	0.146		0.124		**0.007**		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-SB18-2.5-3.5		633019-SB18-5-6'		633019-SB19-2.5-3.5		633019-SB19-7-8'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	G2349-11A		G2349-12A		G2349-13A		G2349-14A		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	12/11/2008		12/11/2008		12/11/2008		12/11/2008		
Aroclor 1248	(mg/kg)	(<0.0053)	U	(<0.0051)	U	(<0.0055)	U	(<0.0057)	U	*NA*
Aroclor 1254	(mg/kg)	(<0.0022)	U	(<0.0021)	U	0.460		(<0.0023)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.0067)	U	(<0.0064)	U	(<0.0069)	U	(<0.0072)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.007**		**0.007**		0.466		**0.008**		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-SB20-3-4'		633019-SB20-5-6'		633019-SB21-1-2'		633019-SB21-5-6'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	G2349-15A		G2349-16A		G2349-17A		G2349-18A		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	12/11/2008		12/11/2008		12/11/2008		12/11/2008		
Aroclor 1248	(mg/kg)	(<0.0052)	U	(<0.0051)	U	(<0.0053)	U	(<0.0057)	U	*NA*
Aroclor 1254	(mg/kg)	(<0.0021)	U	(<0.0021)	U	(<0.0022)	U	(<0.0023)	U	*NA*
Aroclor 1260	(mg/kg)	(<0.0065)	U	(<0.0064)	U	(<0.0067)	U	(<0.0073)	U	*NA*
Aroclor (Total)	(mg/kg)	**0.007**		**0.007**		**0.007**		**0.008**		*0.1*

Parameter List EPA Method 8082	Sample ID	633019-DUP01								6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0710178-022A								
	Sample Type	Subsurface Soil								
	Sample Date	10/25/2007								
Aroclor 1248	(mg/kg)	(<0.115)	U							*NA*
Aroclor 1254	(mg/kg)	(<0.153)	U							*NA*
Aroclor 1260	(mg/kg)	(<0.0644)	U							*NA*
Aroclor (Total)	(mg/kg)	**0.166**								*0.1*

NOTE: Analytical data results provided by Life Science Laboratories, Inc. and Mitkem Laboratories. Data validation completed by Environmental Data Services, Inc.
Concentration values highlighted in gray indicate the concentration was above the 6 NYRCC Part 375 Soil Cleanup Objective.
EPA = Environmental Protection Agency
NYCRR = New York Code of Rules and Regulation
J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
mg/kg = Milligrams per kilograms = Parts Per Million (ppm)
633019-DUP01 was collected at 633019-SB-03-4-6'

Only Aroclors with at least one detection are shown; Method detection limits for individual Aroclors in subsurface soil samples SB-01 through SB-12 were above site SCGs, therefore one-half of the MDL value was used to determine Total Aroclor concentration values. These concentration values are highlighted in **bold** in the table. In addition, subsurface soil samples that had at least one Aroclor detection above the MDL, one-half of a non-detect MDL was added to the detected concentration value to determine the Total Aroclor concentration value.

TABLE 4 DETECTED VOLATILE ORGANIC COMPOUNDS SUBSURFACE SOIL ANALYTICAL DATA

Parameter List EPA Method 8260B	Sample ID	633019-SB03-4-6'		633019-SB04-4-6'		633019-SB05-0-2'		633019-SB08-0-2'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0710178-004B		0710178-006B		0710178-008B		0710178-011B		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	10/25/2007		10/25/2007		10/25/2007		10/25/2007		
Acetone	(mg/kg)	0.01	J	**0.053**		0.0098	J	0.041		*0.05*

Parameter List EPA Method 8260B	Sample ID	633019-SB10-10-12'		633019-SB12-6-8'		633019-DUP02				6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0710178-016B		0710178-018B		0710178-023A				
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil				
	Sample Date	10/25/2007		10/25/2007		10/25/2007				
Acetone	(mg/kg)	0.011	J	0.02		0.011	J			*0.05*

NOTE: Analytical data results provided by Life Science Laboratories, Inc.. Data validation completed by Environmental Data Services, Inc.
Concentration values highlighted in gray indicate the concentration was above the 6 NYRCC Part 375 Soil Cleanup Objective.
EPA = Environmental Protection Agency
NYCRR = New York Code of Rules and Regulation
J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
mg/kg = Milligrams per kilograms = Parts Per Million (ppm)
633019-DUP02 was collected at 633019-SB05-0-2'

TABLE 4 DETECTED SEMIVOLATILE ORGANIC COMPOUNDS SUBSURFACE SOIL ANALYTICAL DATA

Parameter List EPA Method 8270C	Sample ID	633019-SB03-8-9.5'		633019-SB04-8-10'		633019-SB05-0-2'		633019-SB10-2-4'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0710178-005A		0710178-007A		0710178-008A		0710178-015A		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	10/25/2007		10/25/2007		10/25/2007		10/25/2007		
bis(2 - Ethylhexyl)phthalate	(mg/kg)	0.15	J	0.17	J	0.21	J	0.28	J	*NA*
Diethyl Phthalate	(mg/kg)	0.043	J	0.041	J		U	0.04	J	*NA*

Parameter List EPA Method 8270C	Sample ID	633019-SB10-10-12'		633019-SB11-0-2'		633019-DUP03				6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0710178-016A		0710178-017A		0710178-024A				
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil				
	Sample Date	10/25/2007		10/25/2007		10/25/2007				
bis(2 - Ethylhexyl)phthalate	(mg/kg)	0.072	J	0.061	J	0.19	J			*NA*
Diethyl Phthalate	(mg/kg)	0.045	J	0.042	J		U			*NA*

NOTE: Analytical data results provided by Life Science Laboratories, Inc.. Data validation completed by Environmental Data Services, Inc.
Concentration values highlighted in gray indicate the concentration was above the 6 NYRCC Part 375 Soil Cleanup Objective.
EPA = Environmental Protection Agency
NYCRR = New York Code of Rules and Regulation
J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
mg/kg = Milligrams per kilograms = Parts Per Million (ppm)
633019-DUP03 was collected at 633019-SB10-10-12'

TABLE 4 DETECTED TOTAL PETROLEUM HYDROCARBON SUBSURFACE SOIL ANALYTICAL DATA

Parameter List Method NY310.13/SW846 8015B	Sample ID	633019-SB01-4-6'		633019-SB02-4-6'		633019-SB03-8-9.5'		633019-SB04-8-10'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0710178-001A		0710178-002A		0710178-005A		0710178-007A		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	10/25/2007		10/25/2007		10/25/2007		10/25/2007		
Total Petroleum Hydrocarbons	(mg/kg)		U	750			U		U	*NA*

Parameter List Method NY310.13/SW846 8015B	Sample ID	633019-SB05-0-2'		633019-SB06-0-2'		633019-SB07-0-2'		633019-SB08-8-10'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0710178-008A		0710178-009A		0710178-010A		0710178-012A		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	10/25/2007		10/25/2007		10/25/2007		10/25/2007		
Total Petroleum Hydrocarbons	(mg/kg)	7,000		2,000			U		U	*NA*

Parameter List Method NY310.13/SW846 8015B	Sample ID	633019-SB10-10-12'		633019-SB11-0-2'		633019-SB13-1-2'		633019-SB13-4.5-5'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0710178-016A		0710178-017A		G2349-03		G2349-01		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	10/25/2007		10/25/2007		12/11/2008		12/11/2008		
Total Petroleum Hydrocarbons	(mg/kg)		U		U	130			U	*NA*

Parameter List Method NY310.13/SW846 8015B	Sample ID	633019-SB14-2-2.5'		633019-SB14-7-8'		633019-SB15-2-3'		633019-SB15-5-6'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	G2349-05		G2349-06		G2349-07		G2349-08		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	12/11/2008		12/11/2008		12/11/2008		12/11/2008		
Total Petroleum Hydrocarbons	(mg/kg)	1,700			U	2,600		280		*NA*

Parameter List Method NY310.13/SW846 8015B	Sample ID	633019-SB16-2-4'		633019-SB16-6.5-7.5'		633019-SB17-2-4'		633019-SB17-5-6'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	G2349-01		G2349-04		G2349-09		G2349-10		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	12/11/2008		12/11/2008		12/11/2008		12/11/2008		
Total Petroleum Hydrocarbons	(mg/kg)	4,000		590		460			U	*NA*

Parameter List Method NY310.13/SW846 8015B	Sample ID	633019-SB18-2.5-3.5'		633019-SB18-5-6'		633019-SB19-2.5-3.5'		633019-SB19-7-8'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	G2349-11		G2349-12		G2349-13		G2349-14		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	12/11/2008		12/11/2008		12/11/2008		12/11/2008		
Total Petroleum Hydrocarbons	(mg/kg)		U		U	1,600			U	*NA*

Parameter List Method NY310.13/SW846 8015B	Sample ID	633019-SB20-3-4'		633019-SB20-5-6'		633019-SB21-1-2'		633019-SB21-5-6'		6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	G2349-15		G2349-16		G2349-17		G2349-18		
	Sample Type	Subsurface Soil		Subsurface Soil		Subsurface Soil		Subsurface Soil		
	Sample Date	12/11/2008		12/11/2008		12/11/2008		12/11/2008		
Total Petroleum Hydrocarbons	(mg/kg)		U		U		U		U	*NA*

Parameter List Method NY310.13/SW846 8015B	Sample ID	633019-DUP03		633019-SBDUP-01						6 NYCRR Part 375 Unrestricted Use (mg/kg)
	Lab ID	0710178-024A		G2349-19						
	Sample Type	Subsurface Soil		Subsurface Soil						
	Sample Date	10/25/2007		12/11/2008						
Total Petroleum Hydrocarbons	(mg/kg)		U	180						*NA*

NOTE: Analytical data results provided by Life Science Laboratories, Inc. and Mitkem Laboratories. Data validation completed by Environmental Data Services, Inc.
EPA = Environmental Protection Agency
NYCRR = New York Code of Rules and Regulation
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
mg/kg = Milligrams per kilograms = Parts Per Million (ppm)
633019-DUP03 collected at 633019-SB10-10-12'
633019-SBDUP01 collected at 633019-SB13-1-2'

TABLE 5 DETECTED TARGET ANALYTE METALS GROUNDWATER ANALYTICAL DATA

Parameter List EPA Method 6010B/7470A	Sample ID	633019-MW-01		633019-DUP01		NYSDEC Ambient Water Quality Standard (µg/L)
	Lab ID	0711114-001B		0711114-004B		
	Sample Type	Groundwater		Duplicate/QAQC		
	Sample Date	11/15/2007		11/15/2007		
Aluminum	(µg/L)	0.5		**470,000**		*100 (s)*
Antimony	(µg/L)	**16**	**J**	**9.2**	**J**	*3 (s)*
Arsenic	(µg/L)	**330**		**310**		*25 (s)*
Barium	(µg/L)	**3,900**		**3,600**		*1,000 (s)*
Beryllium	(µg/L)	**21**	**J**	**20**	**J**	*3 (g)*
Calcium	(µg/L)	4,600,000		4,000,000		*NA*
Chromium	(µg/L)	**770**		**730**		*50 (s)*
Cobalt	(µg/L)	570		520		*NA*
Copper	(µg/L)	**1,400**		**1,200**		*200 (s)*
Iron	(µg/L)	**1,100,000**		**1,000,000**		*300 (s)*
Lead	(µg/L)	**530**		**480**		*25 (s)*
Magnesium	(µg/L)	**2,100,000**		**1,800,000**		*35,000 (g)*
Manganese	(µg/L)	**36,000**		**32,000**		*300 (s)*
Mercury	(µg/L)	**1.4**		**1.3**		*0.7 (s)*
Nickel	(µg/L)	**1,200**		**1,100**		*100 (s)*
Potassium	(µg/L)	73,000		73,000		*NA*
Selenium	(µg/L)	**20**	**J**	**25**	**J**	*10 (s)*
Sodium	(µg/L)	**9,500**		**8,800**		*20,000 (s)*
Vandium	(µg/L)	670		620		*NA*
Zinc	(µg/L)	**2,700**		**2,500**		*2,000 (s)*

NOTE: Analytical data results provided by Life Science Laboratories, Inc. Data validation completed by Environmental Data Services, Inc.
Concentration values highlighted in **bold** indicate the concentration was above the NYSDEC AWQS.
EPA = Environmental Protection Agency
NYSDEC = New York State Department of Environmental Conservation
J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
(g) = Value is listed as a guidance value.
(s) = Value is listed as a standard value.
µg/L = Micrograms per liter = Parts Per Billion (ppb)
633019-DUP01 collected at 633019-MW-01

TABLE 5 DETECTED VOLATILE ORGANIC COMPOUNDS GROUNDWATER ANALYTICAL DATA

Parameter List EPA Method 8260B	Sample ID	633019-MW-01		Trip Blank		633019-DUP01		NYSDEC Ambient Water Quality Standard (µg/L)
	Lab ID	0711114-001B		0711114-007A		0711114-004B		
	Sample Type	Groundwater		Trip Blank/QA/QC		Duplicate/QAQC		
	Sample Date	11/15/2007		11/15/2007		11/15/2007		
Acetone	(µg/L)	7.07	J		U	6.54	J	*50 (g)*
Carbon Disulfide	(µg/L)	0.66			U	0.67		*NA*
Methylene Chloride	(µg/L)		U	0.14	J		U	*5 (g)*

NOTE: Analytical data results provided by Life Science Laboratories, Inc. Data validation completed by Environmental Data Services, Inc.
Concentration values highlighted in **bold** indicate the concentration was above the NYSDEC AWQS.
EPA = Environmental Protection Agency
NYSDEC = New York State Department of Environmental Conservation
J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
(g) = Value is listed as a guidance value.
(s) = Value is listed as a standard value.
µg/L = Micrograms per liter = Parts Per Billion (ppb)
633019-DUP01 collected at 633019-MW-01

TABLE 5 DETECTED SEMIVOLATILE ORGANIC COMPOUNDS GROUNDWATER ANALYTICAL DATA

Parameter List EPA Method 8270C		Sample ID	633019-MW-01		633019-DUP01		NYSDEC Ambient Water Quality Standard (µg/L)
		Lab ID	0711114-001B		0711114-004B		
		Sample Type	Groundwater		Duplicate/QAQC		
		Sample Date	11/15/2007		11/15/2007		
Acetone	(µg/L)		7.07	J	6.54	J	*50 (g)*
Carbon Disulfide	(µg/L)		0.66		0.67		*NA*

NOTE: Analytical data results provided by Life Science Laboratories, Inc. Data validation completed by Environmental Data Services, Inc.
Concentration values highlighted in **bold** indicate the concentration was above the NYSDEC AWQS.
EPA = Environmental Protection Agency
NYSDEC = New York State Department of Environmental Conservation
J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
(g) = Value is listed as a guidance value.
(s) = Value is listed as a standard value.
µg/L = Micrograms per liter = Parts Per Billion (ppb)
633019-DUP01 collected at 633019-MW-01

TABLE 5 DETECTED PESTICIDES GROUNDWATER ANALYTICAL DATA

Parameter List EPA Method 8081A	Sample ID	633019-MW-01		633019-DUP01		NYSDEC Ambient Water Quality Standard (µg/L)
	Lab ID	0711114-001B		0711114-004B		
	Sample Type	Groundwater		Duplicate/QAQC		
	Sample Date	11/15/2007		11/15/2007		
gamma- Chlordane	(µg/L)	0.012	J		U	*0.05 (s)*

NOTE: Analytical data results provided by Life Science Laboratories, Inc. Data validation completed by Environmental Data Services, Inc.
Concentration values highlighted in **bold** indicate the concentration was above the NYSDEC AWQS.
EPA = Environmental Protection Agency
NYSDEC = New York State Department of Environmental Conservation
J = Analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
U = The analyte was analyzed for, but was not detected above the sample reporting limit.
(g) = Value is listed as a guidance value.
(s) = Value is listed as a standard value.
µg/L = Micrograms per liter = Parts Per Billion (ppb)
633019-DUP01 collected at 633019-MW-01

TABLE 6 SUMMARY OF DEGREE OF IMPACT FROM CONTAMINANTS OF CONCERN

Surface Soil	Contaminants of Concern	Concentration Range Detected (ppm)[a]	SCG[b] (ppm)[a]	Frequency of Exceeding SCG
PCBs	Aroclor (Total)	0.260 - 6.80	0.1	10/29
Metals	Mercury	0.54	0.18	1/4

Subsurface Soil	Contaminants of Concern	Concentration Range Detected (ppm)[a]	SCG[b] (ppm)[a]	Frequency of Exceeding SCG
PCBs	Aroclor (Total)	0.124 - 3.40	0.1	14/85
VOCs	Acetone	0.051 - 0.053	0.05	2/12
Metals	Copper	50	50	1/6
	Zinc	120	109	1/6
Pesticides	4,4'-DDT	0.0033 - 0.01	0.0033	2/6
	Dieldrin	0.019	0.005	1/6

Notes:
[a] ppm = parts per million, which is equivalent to milligrams per kilogram, mg/kg, in soil
[b] SCG = standards, criteria, and guidance values; 6 NYCRR Part 375, NYSDEC Technical Guidance for Unrestricted Soil Cleanup Objectives
PCB = polychlorinated biphenyls
VOC = volatile organic compounds

TABLE 7 COMPARISON OF ANALYTICAL AND OBSERVATIONAL DATA FOR TEST PITS

Test Pit Identifcation	PID > 1 ppm (PID range/depth)	Odor	Odor Strength	PCBs (No)	PCBs (Yes)	TPH (No)	TPH (Yes)	Test Pit Total Depth (ft bgs)	Test Pit Depth to Till (ft bgs)
633019-TP01	No	No	---	0-8'	---	X	X	22'	12'
633019-TP02	No	No	---	0-10'	---	X	X	10'	2'
633019-TP02A	No	No	---	0-2'	---	X	X	2'	---
633019-TP03	Yes (0-6.8/2-16')	Yes	Strong	2-16'	---	X	X	16'	2'
633019-TP04	Yes (1.7-4.1/0-12')	Yes	Moderate	9-12'	2'	X	X	12'	0.5'
633019-TP05	Yes (1.7-4.1/0-12.5')	to 12.5'	Strong	12.5'	2-9'	X	X	12.5'	5'
633019-TP06	No	No	---	2-10'	---	X	X	10'	0.5'
633019-TP07	No	to 9'	Strong	2-9'	---	X	X	9.5'	4'
633019-TP08	No	No	---	2-9'	---	X	X	9.5'	0'
633019-TP09	No	to 11'	Strong	2-11'	---	X	X	11'	---
633019-TP10	No	to 9.5'	Moderate	3.5', 9'	6'	X	X	9.5'	4.5'
633019-TP11A	No	No	---	2-10'	---	X	X	10'	0.5'
633019-TP11B	No	to 10'	Moderate	5-10'	---	X	X	10'	0.5'
633019-TP12	No	No	---	2-10'	---	X	X	10'	0.5'
633019-TP13	No	No	---	2-8.5'	---	X	X	10'	0.5'
633019-TP14	No	No	---	2-9'	---	X	X	9'	2.5'
633019-TP15	No	No	---	1-2.5'	---	X	X	10.5'	4'
633019-TP16	No	No	---	---	2-10'	X	X	10'	2.5'
633019-TP17	No	to 4'	Moderate	---	1.5-4.5'	X	X	8'	3'
633019-TP18	No	No	to 6'	Light	2-8'	---	X	X	8'	3'

NOTE: Observational data collected during test pit excavation activities and recorded on test pit log forms (Appendix C).
ft bgs = feet below ground surface
PID = photoionization detector
ppm = parts per million
X = indicates no data
--- = not applicable

TABLE 8 COMPARISON OF ANALYTICAL AND OBSERVATIONAL DATA FOR SOIL BORINGS

Soil Boring Identifcation	PID > 1 ppm (PID depth)	Odor	Odor Strength	PCBs (No)	PCBs (Yes)	TPH (No)	TPH (Yes)	Soil Boring Total Depth (ft bgs)	Soil Boring Depth to Till (ft bgs)
633019-SB01	X	X	X	4-6'	---	4-6'	---	6'	1'
633019-SB02	X	X	X	4-10'	---	---	4-6'	10'	0.5'
633019-SB03	X	X	X	4-9.5'	---	8-9.5'	---	9.5'	1'
633019-SB04	X	X	X	8-10'	4-6'	8-10'	---	10'	0.5'
633019-SB05	X	X	X	0-2'	---	---	0-2'	2'	0.5'
633019-SB06	X	X	X	0-2'	---	---	0-2'	2'	1'
633019-SB07	X	X	X	0-2'	---	0-2'	---	2'	X
633019-SB08	X	X	X	8-10'	0-2'	8-10'	---	10'	4.5'
633019-SB09	X	X	X	2-9.5'	---	X	X	10'	0'
633019-SB10	X	X	X	2-12'	---	10-12'	---	12'	0.5'
633019-SB11	X	X	X	0-2'	---	0-2'	---	6'	2.5'
633019-SB12	X	X	X	6-8'	---	X	X	8'	1'
633019-SB13	Yes (2-5')	1-5'	Light	1-5'	---	4.5-5'	1-2'	7'	0'
633019-SB14	No	2-5'	Light	2-8'	---	2-2.5'	7-8'	8'	X
633019-SB15	No	2.5-6'	Strong	2-6'	---	---	2-6'	8'	X
633019-SB16	Yes (5-6')	2-7.5'	Strong	---	2-7.5'	---	2-7.5'	7.5'	X
633019-SB17	No	1-5'	Moderate	5-6'	2-4'	5-6'	2-4'	9'	X
633019-SB18	No	2-7.5'	Moderate	2.5-6'	---	2.5-6'	---	7.5'	X
633019-SB19	No	1-3.5'	Strong	7-8'	2.5-2.5'	7-8'	2.5-3.5'	11'	X
633019-SB20	No	1-5'	Moderate	3-6'	---	3-6'	---	7.5'	X
633019-SB21	No	No	---	1-6'	---	1-6'	---	7'	X

NOTE: Observational data collected during advancement and screening of soil borings and recorded on soil boring log forms (Appendix D).
ft bgs = feet below ground surface
PID = photoionization detector (ppbRae instrument utilized during the second phase of field investigation activities)
ppb = parts per billion
X = indicates no data
--- = not applicable

Appendix A

Daily Field Reports

DAILY FIELD REPORT **Day: 2** **Date: August 18, 2007**

NYSDEC

Temperature: (F) 55 (am) 75 (pm)

Wind Direction: 2 W (am) 2 W (pm)

Weather: (am) Sunny
(pm) Sunny

Project Name
Marshall Transformer Site
NYSDEC Site # 6-33-019

Contract #

Location: Marshall, New York

Arrive at site 0630 (am)

Leave site: 1700 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (x)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?

Soil	Yes (x)	n/a ( )	* No ( )
Waters	Yes (x)	n/a ( )	* No ( )
Air	Yes (x)	n/a ( )	* No ( )

- *If No, provide comments*

OTHER ITEMS:

Site Sketch Attached: Yes ( ) No (X)
Photos Taken: Yes (X) No ( )

DESCRIPTION OF DAILY WORK PERFORMED:

Excavator from Parratt-Wolf arrived onsite at 750 (Belt-Link 210). Continued to clear more room on the access road. Walked the excavator down with Mr. Silliman (land-owner). Mr. Silliman approved all removal, and asked for some additional removal for his own benefit. Used the excavator to remove all the down trees from the work area, pilled the trees up in an area that was out of the way. Set up decon pad for the excavator. Collected all 22 surface soil samples prior to allowing excavator to track across the site. Dug two test pits (TP01-TP02). Excavated TP01 to a depth of 22 feet in order to view geology, and determine if ground water or bedrock would be encountered with a geoprobe during piezometer installation. Bedrock, or groundwater was not encountered.

SAMPLING (Soil/Water/Air) Collected

Contractor Sample ID:	ANALYSIS	Description:
633019-TP01-0-2’	PCB	SOIL SAMPLE FROM TEST PIT-1 SHALLOW
633019-TP01-6-8’	PCB	SOIL SAMPLE FROM TEST PIT-1 DEEP
633019-TP02-0-2’	PCB	SOIL SAMPLE FROM TEST PIT-2 SHALLOW
633019-TP02-8-10’	PCB	SOIL SAMPLE FROM TEST PIT-2-DEEP
633019-TP02A-2’	PCB	SOIL SAMPLE FROM TEST PIT-2A SHALLOW
633019-SS01	PCB	SOIL SAMPLE FROM Surface Soil Number-01
633019-SS02	PCB	SOIL SAMPLE FROM Surface Soil Number-02
633019-SS03	PCB	SOIL SAMPLE FROM Surface Soil Number-03
633019-SS04	PCB	SOIL SAMPLE FROM Surface Soil Number-04
633019-SS05	PCB	SOIL SAMPLE FROM Surface Soil Number-05
633019-SS06	PCB	SOIL SAMPLE FROM Surface Soil Number-06
633019-SS07	PCB	SOIL SAMPLE FROM Surface Soil Number-07
633019-SS08	PCB	SOIL SAMPLE FROM Surface Soil Number-08

633019-SS09	PCB	SOIL SAMPLE FROM Surface Soil Number-09
633019-SS10	PCB	SOIL SAMPLE FROM Surface Soil Number-10
633019-SS11	PCB	SOIL SAMPLE FROM Surface Soil Number-11
633019-SS12	PCB	SOIL SAMPLE FROM Surface Soil Number-12
633019-SS13	PCB	SOIL SAMPLE FROM Surface Soil Number-13
633019-SS14	FULL TCL SUITE	SOIL SAMPLE FROM Surface Soil Number-14
633019-SS15	PCB	SOIL SAMPLE FROM Surface Soil Number-15 (DUP 1)
633019-SS16	PCB	SOIL SAMPLE FROM Surface Soil Number-16
633019-SS17	PCB	SOIL SAMPLE FROM Surface Soil Number-17
633019-SS18	PCB	SOIL SAMPLE FROM Surface Soil Number-18
633019-SS19	PCB	SOIL SAMPLE FROM Surface Soil Number-19
633019-SS20	PCB	SOIL SAMPLE FROM Surface Soil Number-20 (MS/MSD)
633019-SS21	PCB	SOIL SAMPLE FROM Surface Soil Number-21
633019-SS22	FULL TCL SUITE	SOIL SAMPLE FROM Surface Soil Number-22
633019-RINSATE 1	PCB	RINSATE BLANK FOR DAY 1

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Parratt-Wolf, Inc.

(Name of Subcontractor) personnel: Brad Palmer

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors: None

VISITORS TO SITE:

1. NYSDEC Personnel: Dave Crosby

PROJECT SCHEDULE ISSUES:

None.

PROJECT BUDGET ISSUES:

None.

ITEMS OF CONCERN:

With no groundwater or bedrock encountered, large amounts of till it is unlikely that a geoprobe would be adequate to collect soil samples and install piezometers. Discussed with Dave Crosby about getting a drill rig onsite to install 4 2-inch wells to collect water samples.

COMMENTS:

_____
None

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE: **Joseph Von Uderitz-Geologist EA Engineering, Science, Tech.**
Megan Scott-

Name: (*signature*)
cc:

DAILY PHOTOLOG

DAILY FIELD REPORT **Day: 3** **Date: August 19, 2007**

NYSDEC

Temperature: (F) 55 (am) 75 (pm)

Wind Direction: 2 W (am) 2 W (pm)

Weather: (am) Sunny
(pm) Sunny

Project Name
Marshall Transformer Site
NYSDEC Site # 6-33-019

Contract #

Location: Marshall, New York

Arrive at site 0700 (am)

Leave site: 1730 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (x)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?

Soil	Yes (x)	n/a ( )	* No ( )
Waters	Yes (x)	n/a ( )	* No ( )
Air	Yes (x)	n/a ( )	* No ( )

- *If No, provide comments*

OTHER ITEMS:

Site Sketch Attached: Yes ( ) No (X)
Photos Taken: Yes (X) No ( )

DESCRIPTION OF DAILY WORK PERFORMED:
Dug excavations TP03 through TP11. Deconned in between each location. Did not find a large amount of debris, did encounter potent odors. No volatile readings recorded on the PID.

SAMPLING (Soil/Water/Air) Collected

Contractor Sample ID:	ANALYSIS	Description:
633019-TP03-2'	PCB	SOIL SAMPLE FROM TEST PIT-3 SHALLOW (MS/MSD SAMPLE COLLECTED)
633019-TP03-6'	PCB	SOIL SAMPLE FROM TEST PIT-3 INTERMIDENT(DUPLICATE SAMPLE 1)
633019-TP03-8'	FULL TCL SUITE	SOIL SAMPLE FROM TEST PIT-3 INTERMIDENT
633019-TP03-16'	PCB	SOIL SAMPLE FROM TEST PIT-3-DEEP-16'
633019-TP04-2	PCB	SOIL SAMPLE FROM TEST PIT-4 SHALLOW
633019-TP04-9'	PCB	SOIL SAMPLE FROM TEST PIT-4 INTERMIDENT
633019-TP04-12'	PCB	SOIL SAMPLE FROM TEST PIT-4 DEEP
633019-TP05-2'	PCB	SOIL SAMPLE FROM TEST PIT-5 SHALLOW
633019-TP05-9'	PCB	SOIL SAMPLE FROM TEST PIT-5 INTERMIDENT
633019-TP05-12.5'	PCB	SOIL SAMPLE FROM TEST PIT-5 DEEP
633019-TP06-2'	PCB	SOIL SAMPLE FROM TEST PIT-6 SHALLOW
633019-TP06-10'	PCB	SOIL SAMPLE FROM TEST PIT-6 DEEP
633019-TP07-2'	FULL TCL SUITE	SOIL SAMPLE FROM TEST PIT-7 SHALLOW (DUPLICATE SAMPLE 2)
633019-TP07-6'	PCB	SOIL SAMPLE FROM TEST PIT-7 INTERMIDENT
633019-TP07-9'	PCB	SOIL SAMPLE FROM TEST PIT-7 DEEP

633019-TP08-2’	PCB	SOIL SAMPLE FROM TEST PIT-8 SHALLOW
633019-TP08-9’	PCB	SOIL SAMPLE FROM TEST PIT-8 DEEP
633019-TP09-2’	PCB	SOIL SAMPLE FROM TEST PIT-9 SHALLOW
633019-TP09-4’	PCB	SOIL SAMPLE FROM TEST PIT-9 INTERMIDENT
633019-TP09-7’	PCB	SOIL SAMPLE FROM TEST PIT-9 INTERMIDENT
633019-TP09-11’	PCB	SOIL SAMPLE FROM TEST PIT-9 DEEP
633019-TP10-3.5’	PCB	SOIL SAMPLE FROM TEST PIT-10 SHALLOW
633019-TP10-6’	PCB	SOIL SAMPLE FROM TEST PIT-10 INTERMIDENT (DUPLICATE SAMPLE NUMBER 3)
633019-TP10-9’	PCB	SOIL SAMPLE FROM TEST PIT-10 DEEP
633019-TP11A-2’	PCB	SOIL SAMPLE FROM TEST PIT-11A SHALLOW
633019-TP11A-10’	PCB	SOIL SAMPLE FROM TEST PIT-11A DEEP
633019-TP11B-5’	PCB	SOIL SAMPLE FROM TEST PIT-11B SHALLOW
633019-TP11B-10’	PCB	SOIL SAMPLE FROM TEST PIT-11B DEEP
633019-TB-RINSTATE 2	FULL TCL SUITE	RINSATE SAMPLE FOR TCL SUITE-DAY 2

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Parratt-Wolf, Inc.

(Name of Subcontractor) personnel: Brad Palmer

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors: None

VISITORS TO SITE:

1. NYSDEC Personnel: Bill Bennet

PROJECT SCHEDULE ISSUES:

None.

PROJECT BUDGET ISSUES:

None.

ITEMS OF CONCERN:

None

COMMENTS:

None

DAILY FIELD REPORT **Day: 3** **Date: August 19, 2007**

_____

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE: **Joseph Von Uderitz-Geologist EA Engineering, Science, Tech.**
Megan Scott- Engineer-EA Engineering, Science, Tech.

Name: (*signature*)
cc:

DAILY PHOTOLOG

DAILY FIELD REPORT **Day: 4** **Date: August 20, 2007**

NYSDEC

Temperature: (F) 55 (am) 80 (pm)

Wind Direction: 2 W (am) 2 W (pm)

Weather: (am) Sunny
(pm) Sunny

Project Name
Marshall Transformer Site
NYSDEC Site # 6-33-019

Contract #

Location: Marshall, New York

Arrive at site 0700 (am)

Leave site: 1630 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (x)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?

Soil	Yes (x)	n/a ( )	* No ( )
Waters	Yes (x)	n/a ( )	* No ( )
Air	Yes (x)	n/a ( )	* No ( )

- *If No, provide comments*

OTHER ITEMS:

Site Sketch Attached: Yes ( ) No (X)
Photos Taken: Yes (X) No ( )

DESCRIPTION OF DAILY WORK PERFORMED:

Dug test pits TP12 to TP18. Backfilled all test pits and graded the site to minimize visual disturbances. Deconned all equipment used onsite. Deconn water had visible sheen, therefore we discharged the water to the surface. Regraded access road on the way to for future use.

SAMPLING (Soil/Water/Air) Collected

Contractor Sample ID:	ANALYSIS	Description:
633019-TP12-2’	PCB	SOIL SAMPLE FROM TEST PIT-12 SHALLOW (MS/MSD SAMPLE COLLECTED)
633019-TP12-10’	PCB	SOIL SAMPLE FROM TEST PIT-12 DEEP (MS/MSD SAMPLE COLLECTED)
633019-TP13-2’	FULL TCL SUITE	SOIL SAMPLE FROM TEST PIT-13 SHALLOW (MS/MSD SAMPLE COLLECTED)
633019-TP13-8.5’	PCB	SOIL SAMPLE FROM TEST PIT-13-DEEP
633019-TP14-2’	PCB	SOIL SAMPLE FROM TEST PIT-14 SHALLOW
633019-TP14-9’	PCB	SOIL SAMPLE FROM TEST PIT-14 DEEP
633019-TP15-1’	PCB	SOIL SAMPLE FROM TEST PIT-15 SHALLOW
633019-TP15-2.5’	PCB	SOIL SAMPLE FROM TEST PIT-15 DEEP
633019-TP16-2’	PCB	SOIL SAMPLE FROM TEST PIT-16 SHALLOW
633019-TP16-10’	PCB	SOIL SAMPLE FROM TEST PIT-16 DEEP
633019-TP17-1.5’	PCB	SOIL SAMPLE FROM TEST PIT-17 SHALLOW
633019-TP17-4’’	PCB	SOIL SAMPLE FROM TEST PIT-17 INTERMIDENT
633019-TP17-4.5’	PCB	SOIL SAMPLE FROM TEST PIT-17 DEEP
633019-TP18-2’	PCB	SOIL SAMPLE FROM TEST PIT-18 SHALLOW

633019-TP18-6'	PCB	SOIL SAMPLE FROM TEST PIT-7 INTERMIDENT
633019-TP18-8'	PCB	SOIL SAMPLE FROM TEST PIT-8 DEEP
633019-TP RINSATE 3	PCB	RINSATE SAMPLE FOR DAY 3

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: Parratt-Wolf, Inc.

(Name of Subcontractor) personnel: Brad Palmer

(Name of contractor) equipment:

(*Indicates active equipment)

Other Subcontractors: None

VISITORS TO SITE:

1. NYSDEC Personnel: Bill Bennet

PROJECT SCHEDULE ISSUES:

None.

PROJECT BUDGET ISSUES:

None.

ITEMS OF CONCERN:

None

COMMENTS:

None

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE: **Joseph Von Uderitz-Geologist EA Engineering, Science, Tech.**
Megan Scott- Engineer-EA Engineering, Science, Tech.

Name: (*signature*)
cc:

DAILY PHOTOLOG

DAILY FIELD REPORT **Day:___Tuesday___ Date:__10/23/07___**

NYSDEC

Temperature: (F) 45 (am) 65 (pm)

Wind Direction: none (am) (pm)

Weather: (am) rain
(pm) rain(total > 2")

Project Name
Marshall Transformer Site
NYSDEC Site # 6-33-019

Contract # 1436817

Marshall, New York

Arrive at site 800 (am)

Leave site: 1545 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (x)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?

Soil	Yes ( )	n/a (x)	* No ( )
Waters	Yes ( )	n/a (x)	* No ( )
Air	Yes ( )	n/a (x)	* No ( )

- *If No, provide comments*

OTHER ITEMS:

Site Sketch Attached: Yes ( ) No (x)
Photos Taken: Yes ( ) No (x)

DESCRIPTION OF DAILY WORK PERFORMED:

Arrived on site at 8am. Parratt Wolff drillers Brad and Steve arrived at 900.

Rain slowed down work. Drill rig was brought onto site through Mr. Mike Silliman's yard. Many ruts were made and will need to be fixed. We drove EA's Ford F150 onto the site but had to be pulled in by the drill rig both on the way in and on the way out. The vehicle will not be able to be brought onto site for the remainder of the week due to the rough, muddy access road. A Bobcat is to be delivered tomorrow morning around 8:30am so that tools and water can be brought onto and off of the site.

Monitoring Well One (MW01) was drilled at the southeast corner of the site. Left augers in at 40' bgs overnight to make sure the groundwater table had been reached. The well could not be completed because all the necessary parts (sand, water, etc.) could not be brought onto the site. Augers were covered to not let any rain into the boring.

The NYSDEC Project Manager William Bennett arrived onsite around 1530, after the drilling had been completed. The locations of the other two MW's were confirmed: MW02 at the southwest corner of the site, and MW03 near the north-central portion of the site. Exact location (ie, to the east or west of the access road entrance) of MW03 is still to be determined. All MW's are to be installed as permanent wells.

All left the site around 1545.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:	DEC Sample ID:	Description:

DAILY FIELD REPORT **Day:___Tuesday___ Date:__10/23/07___**

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: (Parratt Wolff) Brad and Steve

(Name of Subcontractor) personnel: (EA Engineering) Megan Scott, Joe VonUderitz

(Name of contractor) equipment:

Track mounted direct push drill rig

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. William Bennett (NYSDEC PM)

PROJECT SCHEDULE ISSUES:

Rain slowed down work and prevented necessary equipment from being brought onsite

PROJECT BUDGET ISSUES:

Bobcat had to be rented for remainder of week.

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: Megan Scott
cc:

Photolog

DAILY FIELD REPORT **Day:___Wednesday___ Date:__10/24/07___**

NYSDEC

Temperature: (F) 45 (am) 65 (pm)

Wind Direction: none (am) (pm)

Weather: (am) rain
(pm) rain(total > 2")

Project Name
Marshall Transformer Site
NYSDEC Site # 6-33-019

Contract # 1436817

Marshall, New York

Arrive at site 800 (am)

Leave site: 1545 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (x)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?

Soil	Yes ( )	n/a (x)	* No ( )
Waters	Yes ( )	n/a (x)	* No ( )
Air	Yes ( )	n/a (x)	* No ( )

- *If No, provide comments*

OTHER ITEMS:

Site Sketch Attached: Yes ( ) No (x)
Photos Taken: Yes ( ) No (x)

DESCRIPTION OF DAILY WORK PERFORMED:

Arrived on site at 800. Parratt Wolff was already there. Completed MW01 at 1130. MW01 is 38' bgs. There was 18' of water, so 20' of 10 slot screen was used. More will have to be brought out to finish the third well. The well was installed as a permanent well, with sand, bentonite, and grout.

Began drilling MW02 at 1130 and completed it at 1645. MW02 is 35 feet bgs with 10' of 10 slot screen.

Bill (NYSDEC) arrived onsite at 1300. Took GPS points and discussed locations of soil borings and further surface soil sampling. He mentioned that he'd prefer the Bobcat go onsite as little as possible, so as not to contaminate the access road.

Cleaned up site and all left at 1730.

PROJECT TOTALS:

SAMPLING (Soil/Water/Air)

Contractor Sample ID:	DEC Sample ID:	Description:

DAILY FIELD REPORT **Day:___Wednesday___ Date:__10/24/07___**

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: (Parratt Wolff) Brad and Steve

(Name of Subcontractor) personnel: (EA Engineering) Megan Scott, Joe VonUderitz

(Name of contractor) equipment:

Track mounted direct push drill rig

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. William Bennett (NYSDEC PM)

PROJECT SCHEDULE ISSUES:

PROJECT BUDGET ISSUES:

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: Megan Scott
cc:

Photolog

Photo 1: Installation of MW01

Photo 1

DAILY FIELD REPORT **Day:___Thursday___ Date:__10/25/07___**

NYSDEC

Temperature: (F) 50 (am) 58 (pm)

Wind Direction: none (am) (pm)

Weather: (am) light clouds
(pm) clouds

Project Name
Marshall Transformer Site
NYSDEC Site # 6-33-019

Contract #

Marshall, New York

Arrive at site 700 (am)

Leave site: 1730 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (x)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?

Soil	Yes ( )	n/a (x)	* No ( )
Waters	Yes ( )	n/a (x)	* No ( )
Air	Yes ( )	n/a (x)	* No ( )

- *If No, provide comments*

OTHER ITEMS:

Site Sketch Attached: Yes ( ) No (x)
Photos Taken: Yes (x) No ( )

DESCRIPTION OF DAILY WORK PERFORMED:
Arrived onsite at 700. Brad and Steve from Parratt Wolff were there already. Started on MW03 at 800. MW03 was installed at 30 feet below ground surface at 930. Started on soil borings at 1040 and stopped work at 1630. Collected soil samples from all soil borings

All left the site around 1730.

PROJECT TOTALS:

SAMPLING (Soil, grab sample)

Contractor Sample ID:	DEC Sample ID:	Description:
633019-SB01-4-6’		PCB, TPH
633019-SB02-4-6’		PCB, TPH
633019-SB02-8-10’		PCB
633019-SB03-4-6’		PCB, VOC
633019-SB03-8-9.5’		PCB, TPH/SVOC
633019-SB04-4-6’		PCB,VOC
633019-SB04-8-10’		PCB,TPH
633019-SB05-0-2’		PCB, TPH/SVOC, VOC
633019-SB06-0-2’		PCB, TPH
633019-SB07-0-2’		PCB, TPH
633019-SB08-0-2’		PCB, VOC
633019-SB08-8-10’		PCB, TPH

DAILY FIELD REPORT		Day:___Thursday___ Date:__10/25/07___
633019-SB09-2’		PCB
633019-SB09-8-10’		PCB
633019-SB10-2-4’		PCB, SVOC
633019-SB10-10-12’		PCB,TPH/SVOC, VOC
633019-DUP01		PCB (SB03)
633019-DUP02		VOC (SB05)
633019-DUP03		TPH/SVOC (SB10)
633019-SB04-8-10’ (MS/MSD)		TPH/SVOC
633019-SB06-0-2’ (MS/MSD)		PCB

DAILY FIELD REPORT **Day:___Thursday___ Date:__10/25/07___**

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: (Parratt Wolff) Steve and Brad

(Name of Subcontractor) personnel: (EA Engineering) Megan Scott and Joe VonUderitz

(Name of contractor) equipment: Bobcat, CME 850 drill rig on tracks

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

none

PROJECT BUDGET ISSUES:

none

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: Megan Scott
cc:

Photolog

DAILY OBSERVATION REPORT **Day:___Friday___ Date:__10/26/07___**

NYSDEC

Temperature: (F) 50 (am) 58 (pm)

Wind Direction: none (am) (pm)

Weather: (am) light clouds
(pm) clouds

Project Name
Marshall Transformer Site
NYSDEC Site # 6-33-019

Contract #

Marshall, New York

Arrive at site 700 (am)

Leave site: 1730 (pm)

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (x)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?

Soil	Yes ( )	n/a (x)	* No ( )
Waters	Yes ( )	n/a (x)	* No ( )
Air	Yes ( )	n/a (x)	* No ( )

- *If No, provide comments*

OTHER ITEMS:

Site Sketch Attached: Yes ( ) No (x)
Photos Taken: Yes (x) No ( )

DESCRIPTION OF DAILY WORK PERFORMED:
Arrived onsite at 800. Brad and Steve from Parratt Wolff were there already. Finished soil borings SB11 and 12 and collected three surface soil samples.

Bill (NYSDEC) arrived onsite at 1200. He took the rest of the GPS points (Soil borings and surface soil locations). I finished up paperwork and left the site at 1400.

Brad, Steve, and Joe VonUderitz remained onsite to decon equipment, regrade access road, and pack up.

PROJECT TOTALS:

SAMPLING (Soil, grab sample)

Contractor Sample ID:	DEC Sample ID:	Description:
633019-SB11-0-2’		PCB, TPH/SVOC
633019-SB12-6-8’		PCB, VOC
633019-SS23-0-2”		PCB, TPH/SVOC, VOC
633019-SS24-0-2”		PCB, TPH/SVOC,VOC
633019-SS25-0-2”		PCB, TPH/SVOC,VOC
DUP04		PCB (SS23)
633019-SB12-6-8’ (MS/MSD)		VOC
633019-SS24-0-2” (MS/MSD)		PCB

DAILY OBSERVATION REPORT Day:___Friday___ Date:__10/26/07___

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: (Parratt Wolff) Steve and Brad

(Name of Subcontractor) personnel: (EA Engineering) Megan Scott and Joe VonUderitz

(Name of contractor) equipment: Bobcat, CME 850 drill rig on tracks

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1. William Bennett (NYSDEC)

PROJECT SCHEDULE ISSUES:

none

PROJECT BUDGET ISSUES:

none

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: Megan Scott
cc:

Photolog

Photo 1: Access road
Photo 2: Site looking from entrance to SW corner
Photo 3: MW02
Photo 4: Foreground: MW03 Background: MW01
Photo 5: MW01
Photo 6: Soil stockpile from well drilling
Photo 7: Cleared space for SB01, located just north of site.
Photo 8: Access road
Photo 9: Access road at creek crossing
Photo 10: Access road at creek crossing
Photo 11: Access road through Silliman property
Photo 12: Access road through Silliman property
Photo 13: Access road through Silliman property

Photo 1

Photo 2

Photo 3

Photo 4

Photo 5

Photo 6

Photo 7

Photo 8

Photo 9

Photo10

Photo 11

Photo 12

Photo 13

DAILY FIELD REPORT **Day:___Friday___ Date:__11/02/07___**

NYSDEC

Temperature: (F) 35 (am) 50 (pm)

Wind Direction: none (am) (pm)

Weather: (am) clear
(pm) clear

Project Name
Marshall Transformer Site
NYSDEC Site # 6-33-019

Contract #

Marshall, New York

Arrive at site 830 (am)

Leave site: 1130

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (x)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?

Soil	Yes ( )	n/a (x)	* No ( )
Waters	Yes ( )	n/a (x)	* No ( )
Air	Yes ( )	n/a (x)	* No ( )

- *If No, provide comments*

OTHER ITEMS:

Site Sketch Attached: Yes ( ) No (x)
Photos Taken: Yes (x) No ( )

DESCRIPTION OF DAILY WORK PERFORMED:

Arrived onsite at 830. Brad and Dick from Parratt Wolff were there already. Parratt Wolff brought 1 cy of topsoil, a bag of seed and two bales of hay. All the topsoil was used and half the bag of seed. Both bales of hay were used but not all the seed was covered. All the seed on the slope was covered, so we decided, along with Mr. Silliman, that it would be ok. We seeded from the road to the edge of the bushes. Past the bushes is a road used by Mr. Silliman with his tractor and 4-wheeler, so there was no need to plant seed there. Mr. Silliman was there the whole time, though he didn't state any preferences as to how the work was done. He did help carry soil with his tractor.

All left the site at 1130.

PROJECT TOTALS:

SAMPLING (Soil, grab sample)

Contractor Sample ID:	**DEC Sample ID:**	**Description:**

DAILY FIELD REPORT **Day:___Friday___ Date:__11/02/07___**

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: (Parratt Wolff) Steve and Dick

(Name of Subcontractor) personnel: (EA Engineering) Megan Scott

(Name of contractor) equipment: Rakes and shovels

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

none

PROJECT BUDGET ISSUES:

none

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: Megan Scott
cc:

Photolog

Photo 1: Tracks in Mr. Silliman's yard
Photo 2: Tracks

Photo 3: Tracks
Photo 4: End of tracks to be filled in (to bushes)

Photo 5: Closeup of track filled in and seeded
Photo 6: Tracks filled in and seeded

Photo 7: Tracks filled in and seeded
Photo 8: Tracks filled in, seeded, and covered with hay

Photo 1

Photo 2

Photo3

Photo 4

Photo 5

Photo 6

Photo 7

Photo 8

DAILY FIELD REPORT **Day: Thursday Date: 11/15/07**

NYSDEC

Temperature: (F) 40 (am) 25 (pm)

Wind Direction: none (am) none (pm)

Weather: (am) light to heavy rain
(pm) light to heavy rain

Project Name
Marshall Transformer Site
NYSDEC Site # 6-33-019

Contract # D004438.17

Marshall, New York

Arrive at site 820 (am)

Leave site: 1300

HEALTH & SAFETY:

Are there any changes to the Health & Safety Plan? Yes ( ) No (x)
(If yes, list the deviation under items for concern)

Are monitoring results at acceptable levels?

Soil	Yes ( )	n/a (x)	* No ( )
Waters	Yes (x)	n/a ( )	* No ( )
Air	Yes ( )	n/a (x)	* No ( )

- *If No, provide comments*

OTHER ITEMS:

Site Sketch Attached: Yes ( ) No (x)
Photos Taken: Yes ( ) No (x)

DESCRIPTION OF DAILY WORK PERFORMED:
Arrive onsite 820. Purged and sampled 3 monitoring wells onsite. In general utilized low flow techniques to purge until water quality stabilized, and collected samples with dedicated bailers. MW02 would not pump and was purged with bailer till dry, allowed to recharge and then collected sample. Decontaminated water level indicator between wells (Rinsate Blank collected at end of sampling).

All Left site 1300

PROJECT TOTALS:

SAMPLING (Soil, grab sample)

Contractor Sample ID:	DEC Sample ID:	Description:
6-33-019-MW-01		Full TCL Suite and TPH
6-33-019-MW-02		TPH/PCB
6-33-019-MW-03		TPH/PCB (MS/MSD)

DAILY FIELD REPORT

Day: Thursday Date: 11/15/07

CONTRACTOR/SUBCONTRACTOR EQUIPMENT AND PERSONNEL ON SITE:

(Name of contractor) personnel: (EA Engineering) David Crandall/John Clark

(Name of Subcontractor) personnel:

(Name of contractor) equipment: Geopump, YSI Water Quality Meter, Bailers

(*Indicates active equipment)

Other Subcontractors:

VISITORS TO SITE:

1.

PROJECT SCHEDULE ISSUES:

none

PROJECT BUDGET ISSUES:

none

ITEMS OF CONCERN:

COMMENTS:

ATTACHMENT(S) TO THIS REPORT:

SITE REPRESENTATIVE:

Name: David Crandall
cc:

Appendix B

Surface Soil Sampling Logs

Surface Soil Sampling Log Forms

EA Engineering, P.C.
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates:	75°24'5.849"W 42°57'45.29"N
Surface Elevation:	
Reference Elevation:	
Reference Description:	

Job. No.	**Client:** NYSDEC	**Location**
14368.17		Marshall Transformer
Sampling Method:		Sample Location:: **SS0-1**
GRAB SAMPLE		Sheet 1 of 1
		Sampling
Weather Conditions:		**Start** 1015 / **Finish** 1017
Clear, mild 65 deg		

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log
0-2"	NA						X	

Surface Conditions: Topsoil
Weather: clear
Temperature: 65 deg

B-MS-T-S L/NC rock fragments

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

EA Engineering, P.C.
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: 75°24'6.537"W 42°57'45.303"N
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method: GRAB SAMPLE

Sample Location:: **SS02**

Sheet 1 of 1

Sampling

Weather Conditions: Clear, mild 65 deg

Start	Finish
1101	1104

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log
0-2"	NA						X	

Surface Conditions: Topsoil
Weather: clear
Temperature: 65 deg

B-MS-T-S L/NC

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

EA Engineering, P.C.
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: 75°24'7.199"W 42°57'45.321"N
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method: GRAB SAMPLE

Sample Location:: **SS03**

Sheet 1 of 1

Sampling

Weather Conditions: Clear, mild 65 deg

Start	Finish
1219	1227

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log
0-2"	NA						X	

Surface Conditions: Topsoil
Weather: clear
Temperature: 65 deg

B-MS-T-S L/NC many fine roots

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

EA Engineering, P.C.
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: 75°24'7.861"W 42°57'45.346"N
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method: GRAB SAMPLE

Sample Location:: **SS04**

Sheet 1 of 1

Weather Conditions: Clear, warm 75 deg

Sampling: **Start** 1411 **Finish** 1417

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log
0-2"	NA						X	

Surface Conditions: Topsoil
Weather: clear
Temperature: 75 deg

B-MS-T-S L/NC

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

EA Engineering, P.C.
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: 75°24'7.853"W 42°57'45.756"N
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method:	Sample Location::
GRAB SAMPLE	SS05
	Sheet 1 of 1

Weather Conditions:	Sampling Start	Sampling Finish
Clear, mild 65 deg	1430	1435

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log	Surface Conditions: Topsoil Weather: clear Temperature: 65 deg
0-2"	NA		X	X	X	X	X		B-MS-T-S L/NC many fine roots

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

EA Engineering, P.C.
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: 75°24'7.169"W 42°57'45.745"N
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method: GRAB SAMPLE

Sample Location:: **SS06**

Sheet 1 of 1

Weather Conditions: Clear, mild 65 deg

Sampling: **Start** 1237 **Finish** 1241

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log
0-2"	NA	0					X	

Surface Conditions: Topsoil
Weather: clear
Temperature: 65 deg

B-MS-T-S L/NC

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

EA Engineering, P.C.
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: 75°24'6.509"W 42°57'45.718"N
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method:	Sample Location::
GRAB SAMPLE	SS07
	Sheet 1 of 1

Weather Conditions:	Sampling Start	Sampling Finish
Clear, mild 65 deg	1142	1151

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log	Surface Conditions: Topsoil Weather: clear Temperature: 65 deg
0-2"	NA	0	X	X		X	X	SP	B-MS-T-S L/NC

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

EA Engineering, P.C.
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: 75°24'5.782"W 42°57'45.677"N
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method: GRAB SAMPLE

Sample Location:: **SS08**

Sheet 1 of 1

Weather Conditions: Clear, mild 65 deg

Sampling: **Start** 1600 **Finish** 1603

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log
0-2"	NA						X	

Surface Conditions: Topsoil
Weather: clear
Temperature: 65 deg

B-MS-T-S L/NC

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

EA Engineering, P.C.
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: 75°24'5.723"W 42°57'46.182"N
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method: GRAB SAMPLE

Sample Location:: **SS09**

Sheet 1 of 1

Sampling

Weather Conditions: Clear, mild 65 deg

Start	Finish
1539	1541

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log
0-2"	NA	0					X	

Surface Conditions: Topsoil
Weather: clear
Temperature: 65 deg

B-MS-T-S L/NC

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

EA Engineering, P.C.
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: 75°24'6.478"W 42°57'46.109"N
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method: GRAB SAMPLE

Sample Location:: **SS10**

Sheet 1 of 1

Sampling

Weather Conditions: Clear, mild 65 deg

Start	Finish
1530	1532

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log
0-2"	NA						X	

Surface Conditions: Topsoil
Weather: clear
Temperature: 70 deg

B-MS-T-S L/NC

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

EA Engineering, P.C.
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: 75°24'7.115"W 42°57'46.147"N
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method: GRAB SAMPLE

Sample Location:: **SS11**

Sheet 1 of 1

Sampling

Weather Conditions: Clear, mild 65 deg

Start	Finish
1532	1535

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log
0-2"	NA						X	

Surface Conditions: Topsoil
Weather: clear
Temperature: 65 deg

B-MS-T-S L/NC

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

EA Engineering, P.C.
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: 75°24'7.793"W 42°57'46.149"N
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method: GRAB SAMPLE

Sample Location:: **SS12**

Sheet 1 of 1

Sampling

Weather Conditions: Clear, mild 65 deg

Start	Finish
1458	1503

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log
0-2"	NA						X	

Surface Conditions: Topsoil
Weather: clear
Temperature: 70 deg

B-MS-T-S L/NC with many fine roots

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

EA Engineering, P.C.
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: 75°24'6.042"W 42°57'45.973"N
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method: GRAB SAMPLE

Sample Location:: **SS13**

Sheet 1 of 1

Sampling

Weather Conditions: Clear, mild 65 deg

Start	Finish
1536	1538

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log
0-2"	NA	0					X	

Surface Conditions: Topsoil
Weather: clear
Temperature: 65 deg

B-MS-T-S L/NC

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

EA Engineering, P.C.
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: 75°24'7.522"W 42°57'45.759"N
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method:	Sample Location::
GRAB SAMPLE	SS14
	Sheet 1 of 1

Weather Conditions:	Sampling Start	Sampling Finish
Clear, mild 65 deg	1252	1257

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log	
0-2"	NA	0	X	X	X		X	SP	B-MS-T-S L/NC rock fragments
									TOOK RINSATE BLANK AFTER SAMPLE

Surface Conditions: Topsoil
Weather: clear
Temperature: 65 deg

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

EA Engineering, P.C.
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: 75°24'6.809"W 42°57'45.558"N
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method:	Sample Location:: SS15
GRAB SAMPLE	Sheet 1 of 1

Weather Conditions:	Sampling Start	Sampling Finish
Clear, mild 65 deg	1207	1211

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log	Surface Conditions: Topsoil / Weather: clear / Temperature: 65 deg
0-2"	NA						X		B-MS-T-S L/NC
0-2"	NA						X	SP	B-MS-T-S L/NC **DUP 01**

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

EA Engineering, P.C.
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: 75°24'6.453"W 42°57'45.44"N
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method: GRAB SAMPLE

Sample Location:: **SS16**

Sheet 1 of 1

Sampling

Weather Conditions:	Start	Finish
Clear, mild 65 deg	1118	1123

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log	
0-2"	NA						X		B-MS-T-S L/NC

Surface Conditions: Topsoil
Weather: clear
Temperature: 65 deg

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

EA Engineering, P.C.
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: 75°24'6.03"W 42°57'45.459"N
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method: GRAB SAMPLE

Sample Location:: **SS17**

Sheet 1 of 1

Weather Conditions:	Sampling Start	Sampling Finish
Clear, mild 65 deg	1030	1032

Surface Conditions: Topsoil
Weather: clear
Temperature: 65 deg

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log	
0-2"	NA						X		B-MS-T-S L/NC rock fragments

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

EA Engineering, P.C.
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: 75°24'6.192"W 42°57'44.99"N
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method: GRAB SAMPLE

Sample Location:: **SS18**

Sheet 1 of 1

Sampling

Weather Conditions: Clear, mild 65 deg

Start	Finish
1042	1046

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log
0-2"	NA						X	

Surface Conditions: Topsoil
Weather: clear
Temperature: 65 deg

B-MS-T-S L/NC rock fragments

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

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LOG OF SURFACE SOIL

Coordinates: 75°24'7.449"W 42°57'46.185"N
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method: GRAB SAMPLE

Sample Location:: **SS19**

Sheet 1 of 1

Weather Conditions: Clear, mild 65 deg

Sampling: **Start** 1504 **Finish** 1506

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log
0-2"	NA						X	

Surface Conditions: Topsoil
Weather: clear
Temperature: 65 deg

B-MS-T-S L/NC

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

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LOG OF SURFACE SOIL

Coordinates: 75°24'7.258"W 42°57'46.41"N
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method: GRAB SAMPLE

Sample Location:: **SS20**

Sheet 1 of 1

Sampling

Weather Conditions:	Start	Finish
Clear, mild 65 deg	1507	1510

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log	
0-2"	NA						X		B-MS-T-S L/NC rock fragments
MS/MSD							x	SP	B-MS-T-S L/NC rock fragments
MS/MSD							x	SP	B-MS-T-S L/NC rock fragments

Surface Conditions: Topsoil
Weather: clear
Temperature: 65 deg

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

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EA Science and Technology

LOG OF SURFACE SOIL

Coordinates: 75°24'5.973"W 42°57'46.873"N
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method: GRAB SAMPLE

Sample Location:: **SS21**

Sheet 1 of 1

Weather Conditions:	Sampling Start	Sampling Finish
Clear, mild 65 deg	1520	1525

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log	
0-2"	NA						X		B-MS-T-S L/NC many roots

Surface Conditions: Topsoil
Weather: clear
Temperature: 65 deg

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

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LOG OF SURFACE SOIL

Coordinates: 75°24'5.975"W 42°57'46.868"N
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method:	Sample Location::
GRAB SAMPLE	SS22
	Sheet 1 of 1

Weather Conditions:	Sampling Start	Sampling Finish
Clear, mild 65 deg	1515	1517

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	Metals	Pesticides	PCBs	USCS Log
0-2"	NA	o	X	X	X	X	X	sp

Surface Conditions: Topsoil
Weather: clear
Temperature: 65 deg

B-MS-T-S L/NC

Logged by: Megan Scott **Date:** 12-Oct-07

Sample Interval: 0-2" **Time:** 1330

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LOG OF SURFACE SOIL

Coordinates:
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method:	Sample Location:: SS23
GRAB SAMPLE	Sheet 1 of 1

Weather Conditions:	Sampling Start	Sampling Finish
Cool, 60 deg	957	958

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	TPH	Pesticides	PCBs	USCS Log	Surface Conditions: Topsoil / Weather: clear / Temperature: 65 deg
0-2"	NA	o					2		Sand with trace silt, dry, loose **PCB DUP
0-2"	NA	0			1				Sand with trace silt, dry, loose
0-2"	NA	0	1						Sand with trace silt, dry, loose
0-2"	NA	0		1					Sand with trace silt, dry, loose

Logged by: Megan Scott **Date:** 26-Oct-07

Sample Interval: 0-2" **Time:** 957

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EA Science and Technology

LOG OF SURFACE SOIL

Coordinates:
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method: GRAB SAMPLE

Sample Location:: **SS24**

Sheet 1 of 1

Sampling

Weather Conditions: Cool, 60 deg

Start	Finish
1002	1003

Surface Conditions: Topsoil
Weather: clear
Temperature: 65 deg

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	TPH	Pesticides	PCBs	USCS Log	
0-2"	NA	o					3		topsoil **PCB (MS/MSD)
0-2"	NA	0			1				topsoil
0-2"	NA	0	1						topsoil
0-2"	NA	0		1					topsoil

Logged by: Megan Scott **Date:** 26-Oct-07

Sample Interval: 0-2" **Time:** 1002

EA Engineering, P.C.
EA Science and Technology

LOG OF SURFACE SOIL

Coordinates:
Surface Elevation:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location
14368.17	NYSDEC	Marshall Transformer

Sampling Method:	Sample Location::
GRAB SAMPLE	SS25
	Sheet 1 of 1

Weather Conditions:	Sampling Start	Sampling Finish
Cool, 60 deg	1008	1009

Sample Interval	Feet Drvn/Ft. Recvrd	PID (ppm) HNu	VOCs	SVOCs	TPH	Pesticides	PCBs	USCS Log	
0-2"	NA	o					1		Topsoil
0-2"	NA	0			1				topsoil
0-2"	NA	0	1						topsoil
0-2"	NA	0		1					topsoil

Surface Conditions: Topsoil
Weather: clear
Temperature: 65 deg

Logged by: Megan Scott
Date: 26-Oct-07
Sample Interval: 0-2"
Time: 1008

Appendix C

Test Pit Logs

Exploratory Test Pit Log Form

EA Engineering P.C. and Its Affiliate, EA Science and Technology

Test Pit Log

Project: Marshall Transformer Site (6-33-019)	***Site Location: Town of Marshall, Oneida County, NY***	***Date: 18 August 2007***
Drilling Company: Parratt-Wolf Inc.	***Driller: Brad Palmer***	***Geologist/Scientist: Joe Von Uderitz/Megan Scott***
Size and Types of Drilling and Sampling Equipment: 210 Link-Belt Excavator	***Hole ID: Test Pit 01***	
Date Started: 18 August 2007	***Date Completed: 18 August 2007***	
Groundwater Encountered (ft bgs): Not Encountered	***Depth to Bedrock (ft bgs): Not Encountered***	
Total Depth of Hole (ft bgs): 22	***Disposition of Hole: Backfilled to grade***	

Depth (ft)	*PID Reading (ppm)*	*Description of Material*	*Samples Collected*	*Sample Depth (ft)*
0-1	16.2	Top Soil	PCB-8082	0-2
1-5	0	Light brown medium SAND with trace SILT. Many Small Cobbles	NONE	
5-12	0	Brown fine to medium SAND with trace SILT, loose, non-cohesive	NONE	
12-22	0	TILL-SANDY SILT with many Cobbles and Rock Fragements	PCB-8082	22

Comments and Notes: Lots of Cobbles and Rocks, Clean, No Staining or parts encountered

Exploratory Test Pit Log Form

EA Engineering P.C. and Its Affiliate, EA Science and Technology

Test Pit Log

Project: Marshall Transformer Site (6-33-019)	***Site Location: Town of Marshall, Oneida County, NY***	***Date: 18 August 2007***
Drilling Company: Parratt-Wolf Inc.	***Driller: Brad Palmer***	***Geologist/Scientist: Joe Von Uderitz/Megan Scott***
Size and Types of Drilling and Sampling Equipment: 210 Link-Belt Excavator	***Hole ID: Test Pit 02***	
Date Started: 18 August 2007	***Date Completed: 18 August 2007***	
Groundwater Encountered (ft bgs): Not Encountered	***Depth to Bedrock (ft bgs): Not Encountered***	
Total Depth of Hole (ft bgs): 10	***Disposition of Hole: Backfilled to grade***	

Depth	*PID Reading (ppm)*	*Description of Material*	*Samples Collected*	*Sample Depth*
0-0.5	0	Top Soil	PCB-8082	0-2
0.5-2	0	Light gray medium SAND with trace SILT. Some debris encountered (barb wire, bottles, grill, washer parts)		
2-10	0	TILL-SANDY SILT with many Cobbles and Rock Fragements	PCB-8082	8-10

Comments and Notes: Some debris encountred during drill (old garbage dump for farmer ?)

Exploratory Test Pit Log Form

EA Engineering P.C. and Its Affiliate, EA Science and Technology

Test Pit Log

Project: Marshall Transformer Site (6-33-019)	***Site Location: Town of Marshall, Oneida County, NY***	***Date: 18 August 2007***
Drilling Company: Parratt-Wolf Inc.	***Driller: Brad Palmer***	***Geologist/Scientist: Joe Von Uderitz/Megan Scott***
Size and Types of Drilling and Sampling Equipment: 210 Link-Belt Excavator	***Hole ID: Test Pit 02A***	
Date Started: 18 August 2007	***Date Completed: 18 August 2007***	
Groundwater Encountered (ft bgs): Not Encountered	***Depth to Bedrock (ft bgs): Not Encountered***	
Total Depth of Hole (ft bgs): 2	***Disposition of Hole: Backfilled to grade***	

Depth	*PID Reading (ppm)*	*Description of Material*	*Samples Collected*	*Sample Depth*
0-0.5	0	Top Soil	PCB-8082	2
0.5-2	0	Brown medium SAND with trace SILT. Large amount of debris. 1-55 gallon drum (rusted through, sheet metal, barb wire, fence post, glass bottles, light bulbs, part of a stove, grill, bedspring		

Comments and Notes: Some debris encountred during drill (old garbage dump for farmer ?)

Exploratory Test Pit Log Form

EA Engineering P.C. and Its Affiliate, EA Science and Technology

Test Pit Log

Project: Marshall Transformer Site (6-33-019)	***Site Location: Town of Marshall, Oneida County, NY***	***Date: 19 August 2007***
Drilling Company: Parratt-Wolf Inc.	***Driller: Brad Palmer***	***Geologist/Scientist: Joe Von Uderitz/Megan Scott***
Size and Types of Drilling and Sampling Equipment: 210 Link-Belt Excavator	***Hole ID: Test Pit 03***	
Date Started: 19 August 2007	***Date Completed: 19 August 2007***	
Groundwater Encountered (ft bgs): Not Encountered	***Depth to Bedrock (ft bgs): Not Encountered***	
Total Depth of Hole (ft bgs): 16	***Disposition of Hole: Backfilled to grade***	

Depth	*PID Reading (ppm)*	*Description of Material*	*Samples Collected*	*Sample Depth*
0-0.5	5.3	Top Soil		
0.5-2	2.6	Light gray fine SAND and SILT	PCB-8082 (MS/MSD)	2
2-16	6.8	TILL-SANDY SILT with many Cobbles and Rock Fragements	PCB-8082(duplicate) TCL-FULL SUITE	6 and 8
16	0	Red SILTY CLAY, tight, cohesive, moist	PCB-8082	16

Comments and Notes: Collected a total of 4 samples, strong non pungent odor. Silty Clay labyer apperas to of acted as a confining layer for the dowwnward migration of the contamination

Exploratory Test Pit Log Form

EA Engineering P.C. and Its Affiliate, EA Science and Technology

Test Pit Log

Project: Marshall Transformer Site (6-33-019)	***Site Location: Town of Marshall, Oneida County, NY***	***Date: 19 August 2007***
Drilling Company: Parratt-Wolf Inc.	***Driller: Brad Palmer***	***Geologist/Scientist: Joe Von Uderitz/Megan Scott***
Size and Types of Drilling and Sampling Equipment: 210 Link-Belt Excavator	***Hole ID: Test Pit 04***	
Date Started: 19 August 2007	***Date Completed: 19 August 2007***	
Groundwater Encountered (ft bgs): Not Encountered	***Depth to Bedrock (ft bgs): Not Encountered***	
Total Depth of Hole (ft bgs): 16	***Disposition of Hole: Backfilled to grade***	

Depth	*PID Reading (ppm)*	*Description of Material*	*Samples Collected*	*Sample Depth*
0-0.5	3.6	Top Soil		
0.5-2	1.7	TILL-SANDY SILT with many Cobbles and Rock Fragements	PCB-8082	2
2-6	2.1	Brown very fine SAND and SILT. Tight, non-cohesive		
6-9	4.1	TILL-SANDY SILT with many Cobbles and Rock Fragements	PCB-8082	9
9-12	3.9	Gray brown fine to medium SAND, light ,non-cohesive.	PCB-8082	12

Comments and Notes: Odor not as strong as TP03

Exploratory Test Pit Log Form

EA Engineering P.C. and Its Affiliate, EA Science and Technology

Test Pit Log

Project: Marshall Transformer Site (6-33-019)	***Site Location: Town of Marshall, Oneida County, NY***	***Date: 19 August 2007***
Drilling Company: Parratt-Wolf Inc.	***Driller: Brad Palmer***	***Geologist/Scientist: Joe Von Uderitz/Megan Scott***
Size and Types of Drilling and Sampling Equipment: 210 Link-Belt Excavator	***Hole ID: Test Pit 05***	
Date Started: 19 August 2007	***Date Completed: 19 August 2007***	
Groundwater Encountered (ft bgs): Not Encountered	***Depth to Bedrock (ft bgs): Not Encountered***	
Total Depth of Hole (ft bgs): 12.5	***Disposition of Hole: Backfilled to grade***	

Depth	*PID Reading (ppm)*	*Description of Material*	*Samples Collected*	*Sample Depth*
0-0.5	3.6	Top Soil		
0.5-2	1.7	Light gray medium SAND to coarse SAND. Trace Gravel	PCB-8082	2
2-5	2.1	Light brown very fine SAND with some SILT, tight, non-cohesive.		
5-12.5	4.1	TILL-SANDY SILT with many Cobbles and Rock Fragements	PCB-8082	9
12.5	3.9	Light brown very fine SANDY SILT, tight, non-cohesive.	PCB-8082	12.5

Comments and Notes:

Exploratory Test Pit Log Form

EA Engineering P.C. and Its Affiliate, EA Science and Technology

Test Pit Log

Project: Marshall Transformer Site (6-33-019)	***Site Location: Town of Marshall, Oneida County, NY***	***Date: 19 August 2007***
Drilling Company: Parratt-Wolf Inc.	***Driller: Brad Palmer***	***Geologist/Scientist: Joe Von Uderitz/Megan Scott***
Size and Types of Drilling and Sampling Equipment: 210 Link-Belt Excavator	***Hole ID: Test Pit 06***	
Date Started: 19 August 2007	***Date Completed: 19 August 2007***	
Groundwater Encountered (ft bgs): Not Encountered	***Depth to Bedrock (ft bgs): Not Encountered***	
Total Depth of Hole (ft bgs): 10	***Disposition of Hole: Backfilled to grade***	

Depth	*PID Reading (ppm)*	*Description of Material*	*Samples Collected*	*Sample Depth*
0-0.5	0	Top Soil		
0.5-1.5	0	TILL-SANDY SILT with many Cobbles and Rock Fragements	PCB-8082	2
1.5-3	0	Light brown fine SAND with some SILT. Loose, non-cohesive		
3-10	0	Light brown fine SANDY SILT, tight, non-cohesive.	PCB-8082	10

Comments and Notes: No Odors, located just south of the fence line.

Exploratory Test Pit Log Form

EA Engineering P.C. and Its Affiliate, EA Science and Technology

Test Pit Log

Project: Marshall Transformer Site (6-33-019)	***Site Location: Town of Marshall, Oneida County, NY***	***Date: 19 August 2007***
Drilling Company: Parratt-Wolf Inc.	***Driller: Brad Palmer***	***Geologist/Scientist: Joe Von Uderitz/Megan Scott***
Size and Types of Drilling and Sampling Equipment: 210 Link-Belt Excavator	***Hole ID: Test Pit 07***	
Date Started: 19 August 2007	***Date Completed: 19 August 2007***	
Groundwater Encountered (ft bgs): Not Encountered	***Depth to Bedrock (ft bgs): Not Encountered***	
Total Depth of Hole (ft bgs): 9.5	***Disposition of Hole: Backfilled to grade***	

Depth	*PID Reading (ppm)*	*Description of Material*	*Samples Collected*	*Sample Depth*
0-0.5	0	Top Soil		
0.5-4	0	Gray medium SAND	TCL FULL SUITE-8082 (DUPLICATE TCL)	2
4-9	0	TILL-SANDY SILT with many Cobbles and Rock Fragements	PCB-8082	6
9-9.5	0	Brown SILT. Tight, semi-cohesive	PCB-8082	9

Comments and Notes: Very punget odors from 0.5-9'

Exploratory Test Pit Log Form

EA Engineering P.C. and Its Affiliate, EA Science and Technology

Test Pit Log

Project: Marshall Transformer Site (6-33-019)	***Site Location: Town of Marshall, Oneida County, NY***	***Date: 19 August 2007***
Drilling Company: Parratt-Wolf Inc.	***Driller: Brad Palmer***	***Geologist/Scientist: Joe Von Uderitz/Megan Scott***
Size and Types of Drilling and Sampling Equipment: 210 Link-Belt Excavator	***Hole ID: Test Pit 08***	
Date Started: 19 August 2007	***Date Completed: 19 August 2007***	
Groundwater Encountered (ft bgs): Not Encountered	***Depth to Bedrock (ft bgs): Not Encountered***	
Total Depth of Hole (ft bgs): 9.5	***Disposition of Hole: Backfilled to grade***	

Depth	*PID Reading (ppm)*	*Description of Material*	*Samples Collected*	*Sample Depth*
0-3	0	TILL-SANDY SILT with many Cobbles and Rock Fragements	PCB-8082	2
3-8.5	0	Light brown very fine SANDY SILT. Tight, non-cohesive		
8.5-9.5	0	Brown SILTY CLAY, tight, cohesive, damp.	PCB-8082	9

Comments and Notes:

Exploratory Test Pit Log Form

EA Engineering P.C. and Its Affiliate, EA Science and Technology

Test Pit Log

Project: Marshall Transformer Site (6-33-019)	***Site Location: Town of Marshall, Oneida County, NY***	***Date: 19 August 2007***
Drilling Company: Parratt-Wolf Inc.	***Driller: Brad Palmer***	***Geologist/Scientist: Joe Von Uderitz/Megan Scott***
Size and Types of Drilling and Sampling Equipment: 210 Link-Belt Excavator	***Hole ID: Test Pit 09***	
Date Started: 19 August 2007	***Date Completed: 19 August 2007***	
Groundwater Encountered (ft bgs): Not Encountered	***Depth to Bedrock (ft bgs): Not Encountered***	
Total Depth of Hole (ft bgs): 9.5	***Disposition of Hole: Backfilled to grade***	

Depth	*PID Reading (ppm)*	*Description of Material*	*Samples Collected*	*Sample Depth*
0-0.5	0	Topsoil		
0.5-2.5	0	Brown very fine SANDY SILT. Tight, non-cohesive.	PCB-8082	2
2.5-4.5	0	Gray medium SAND	PCB-8082	4
4.5-10	0	Brown very fine SANDY SILT. Tight, non-cohesive.	PCB-8082 TCL FULL SUITE	7
10-11	0	Brown SILTY CLAY, tight, cohesive, damp.	PCB-8082	11

Comments and Notes: Collected four samples from the four distinct litology layers

Exploratory Test Pit Log Form

EA Engineering P.C. and Its Affiliate, EA Science and Technology

Test Pit Log

Project: Marshall Transformer Site (6-33-019)	***Site Location: Town of Marshall, Oneida County, NY***	***Date: 19 August 2007***
Drilling Company: Parratt-Wolf Inc.	***Driller: Brad Palmer***	***Geologist/Scientist: Joe Von Uderitz/Megan Scott***
Size and Types of Drilling and Sampling Equipment: 210 Link-Belt Excavator	***Hole ID: Test Pit 10***	
Date Started: 19 August 2007	***Date Completed: 19 August 2007***	
Groundwater Encountered (ft bgs): Not Encountered	***Depth to Bedrock (ft bgs): Not Encountered***	
Total Depth of Hole (ft bgs): 9.5	***Disposition of Hole: Backfilled to grade***	

Depth	*PID Reading (ppm)*	*Description of Material*	*Samples Collected*	*Sample Depth*
0-0.5	0	Topsoil		
0.5-4.5	0	Brown very fine SANDY SILT. Tight, non-cohesive.	PCB-8082	3.5
4.5-9	0	TILL-SANDY SILT with many Cobbles and Rock Fragements	PCB-8082 (Duplicate #3)	6
9-9.5	0	Red brown SILTY CLAY, tight, cohesive, dry.	PCB-8082	9

Comments and Notes: No odors until 3-ft deep.

Exploratory Test Pit Log Form

EA Engineering P.C. and Its Affiliate, EA Science and Technology

Test Pit Log

Project: Marshall Transformer Site (6-33-019)	***Site Location: Town of Marshall, Oneida County, NY***	***Date: 19 August 2007***
Drilling Company: Parratt-Wolf Inc.	***Driller: Brad Palmer***	***Geologist/Scientist: Joe Von Uderitz/Megan Scott***
Size and Types of Drilling and Sampling Equipment: 210 Link-Belt Excavator	***Hole ID: Test Pit 11***	
Date Started: 19 August 2007	***Date Completed: 19 August 2007***	
Groundwater Encountered (ft bgs): Not Encountered	***Depth to Bedrock (ft bgs): Not Encountered***	
Total Depth of Hole (ft bgs): 10	***Disposition of Hole: Backfilled to grade***	

Depth	*PID Reading (ppm)*	*Description of Material*	*Samples Collected*	*Sample Depth*
0-0.5	0	Topsoil		
0.5-4	0	TILL-SANDY SILT with many Cobbles and Rock Fragements	PCB-8082	2-north side
4-7	0	Light brown fine SANDY SILT, tight, non-cohesive(north side of trench) South side of trench-Till	PCB-8082	5-south side
7-9.5	0	TILL-SANDY SILT with many Cobbles and Rock Fragements		
9.5-10	0	Red brown SILTY CLAY with some SAND, tight, cohesive, dry.	PCB-8082	10-north side 10-south side

Comments and Notes:

Exploratory Test Pit Log Form

EA Engineering P.C. and Its Affiliate, EA Science and Technology

Test Pit Log

Project: Marshall Transformer Site (6-33-019)	***Site Location: Town of Marshall, Oneida County, NY***	***Date: 20 August 2007***
Drilling Company: Parratt-Wolf Inc.	***Driller: Brad Palmer***	***Geologist/Scientist: Joe Von Uderitz/Megan Scott***
Size and Types of Drilling and Sampling Equipment: 210 Link-Belt Excavator	***Hole ID: Test Pit 12***	
Date Started: 20 August 2007	***Date Completed: 20 August 2007***	
Groundwater Encountered (ft bgs): Not Encountered	***Depth to Bedrock (ft bgs): Not Encountered***	
Total Depth of Hole (ft bgs): 10	***Disposition of Hole: Backfilled to grade***	

Depth	*PID Reading (ppm)*	*Description of Material*	*Samples Collected*	*Sample Depth*
0-0.5	0	Topsoil		
0.5-10	0	TILL-SANDY SILT with many Cobbles and Rock Fragements	PCB-8082 PCB-8082 (MS/MSD)	2 10

Comments and Notes:

Exploratory Test Pit Log Form

EA Engineering P.C. and Its Affiliate, EA Science and Technology

Test Pit Log

Project: Marshall Transformer Site (6-33-019)	***Site Location: Town of Marshall, Oneida County, NY***	***Date: 20 August 2007***
Drilling Company: Parratt-Wolf Inc.	***Driller: Brad Palmer***	***Geologist/Scientist: Joe Von Uderitz/Megan Scott***
Size and Types of Drilling and Sampling Equipment: 210 Link-Belt Excavator	***Hole ID: Test Pit 13***	
Date Started: 20 August 2007	***Date Completed: 20 August 2007***	
Groundwater Encountered (ft bgs): Not Encountered	***Depth to Bedrock (ft bgs): Not Encountered***	
Total Depth of Hole (ft bgs): 10	***Disposition of Hole: Backfilled to grade***	

Depth	*PID Reading (ppm)*	*Description of Material*	*Samples Collected*	*Sample Depth*
0-0.5	0	Topsoil		
0.5-5	0	TILL-SANDY SILT with many Cobbles and Rock Fragements	PCB-8082 (MS/MSD) FULL TCL SUITE (MS/SMD)	2
5-6	0	Light brown very fine SANDY SILT. Tight, non-cohesive		
6-8.5	0	TILL-SANDY SILT with many Cobbles and Rock Fragements	PCB - 8082	8.5

Comments and Notes:

Exploratory Test Pit Log Form

EA Engineering P.C. and Its Affiliate, EA Science and Technology

Test Pit Log

Project: Marshall Transformer Site (6-33-019)	***Site Location: Town of Marshall, Oneida County, NY***	***Date: 20 August 2007***
Drilling Company: Parratt-Wolf Inc.	***Driller: Brad Palmer***	***Geologist/Scientist: Joe Von Uderitz/Megan Scott***
Size and Types of Drilling and Sampling Equipment: 210 Link-Belt Excavator	***Hole ID: Test Pit 14***	
Date Started: 20 August 2007	***Date Completed: 20 August 2007***	
Groundwater Encountered (ft bgs): Not Encountered	***Depth to Bedrock (ft bgs): Not Encountered***	
Total Depth of Hole (ft bgs): 9	***Disposition of Hole: Backfilled to grade***	

Depth	*PID Reading (ppm)*	*Description of Material*	*Samples Collected*	*Sample Depth*
0-1	0	Topsoil		
1-2.5	0	Light brown very fine SANDY SILT. Tight, non-cohesive	PCB-8082	2
2.5-3.5	0	TILL-SANDY SILT with many Cobbles and Rock Fragements		
3.5-8.5	0	TILL-SANDY SILT with More Cobbles and Rock Fragements		
8.5-9	0	Light brown SILTY CLAY, tight, cohesive	PCB-8082	9

Comments and Notes:

Exploratory Test Pit Log Form

EA Engineering P.C. and Its Affiliate, EA Science and Technology

Test Pit Log

Project: Marshall Transformer Site (6-33-019)	***Site Location: Town of Marshall, Oneida County, NY***	***Date: 20 August 2007***
Drilling Company: Parratt-Wolf Inc.	***Driller: Brad Palmer***	***Geologist/Scientist: Joe Von Uderitz/Megan Scott***
Size and Types of Drilling and Sampling Equipment: 210 Link-Belt Excavator	***Hole ID: Test Pit 15***	
Date Started: 20 August 2007	***Date Completed: 20 August 2007***	
Groundwater Encountered (ft bgs): Not Encountered	***Depth to Bedrock (ft bgs): Not Encountered***	
Total Depth of Hole (ft bgs): 10.5	***Disposition of Hole: Backfilled to grade***	

Depth	*PID Reading (ppm)*	*Description of Material*	*Samples Collected*	*Sample Depth*
0-0.5	0	Topsoil		
0.5-2	0	Light brown SANDY SILT, loose, non-cohesive	PCB-8082	1
2-4	0	Light brown SILTY CLAY, tight, cohesive.	PCB-8082	2.5
4-10.5	0	TILL-SANDY SILT with More Cobbles and Rock Fragements		

Comments and Notes:

Exploratory Test Pit Log Form

EA Engineering P.C. and Its Affiliate, EA Science and Technology

Test Pit Log

Project: Marshall Transformer Site (6-33-019)	***Site Location: Town of Marshall, Oneida County, NY***	***Date: 20 August 2007***
Drilling Company: Parratt-Wolf Inc.	***Driller: Brad Palmer***	***Geologist/Scientist: Joe Von Uderitz/Megan Scott***
Size and Types of Drilling and Sampling Equipment: 210 Link-Belt Excavator	***Hole ID: Test Pit 16***	
Date Started: 20 August 2007	***Date Completed: 20 August 2007***	
Groundwater Encountered (ft bgs): Not Encountered	***Depth to Bedrock (ft bgs): Not Encountered***	
Total Depth of Hole (ft bgs): 10	***Disposition of Hole: Backfilled to grade***	

Depth	*PID Reading (ppm)*	*Description of Material*	*Samples Collected*	*Sample Depth*
0-1	0	Topsoil		
1-2.5	0	Light brown very fine SANDY SILT, loose, non-cohesive.	PCB-8082	2
2.5-8.5	0	TILL-SANDY SILT with many Cobbles and Rock Fragements		
8.5-10	0	Light brown SANDY SILT, very fine SAND. Loose, non-cohesive	PCB-8082	10

Comments and Notes:

Exploratory Test Pit Log Form

EA Engineering P.C. and Its Affiliate, EA Science and Technology

Test Pit Log

Project: Marshall Transformer Site (6-33-019)	***Site Location: Town of Marshall, Oneida County, NY***	***Date: 20 August 2007***
Drilling Company: Parratt-Wolf Inc.	***Driller: Brad Palmer***	***Geologist/Scientist: Joe Von Uderitz/Megan Scott***
Size and Types of Drilling and Sampling Equipment: 210 Link-Belt Excavator	***Hole ID: Test Pit 17***	
Date Started: 20 August 2007	***Date Completed: 20 August 2007***	
Groundwater Encountered (ft bgs): Not Encountered	***Depth to Bedrock (ft bgs): Not Encountered***	
Total Depth of Hole (ft bgs): 4.5	***Disposition of Hole: Backfilled to grade***	

Depth	*PID Reading (ppm)*	*Description of Material*	*Samples Collected*	*Sample Depth*
0-0.5	0	Topsoil		
0.5-3	0	Light brown SANDY SILT. Loose, non-cohesive	PCB-8082 TCL FULL SUITE	1.5
3-6	0	TILL-SANDY SILT with More Cobbles and Rock Fragements	PCB-8082	4
6-7	0	Light brown SANDY SILT. Loose, non-cohesive		
7-8	0	Light brown Very fine SANDY SILT, tight, semi-cohesive.	PCB-8082	8

Comments and Notes:

Exploratory Test Pit Log Form

EA Engineering P.C. and Its Affiliate, EA Science and Technology

Test Pit Log

Project: *Marshall Transformer Site (6-33-019)*	***Site Location:*** *Town of Marshall, Oneida County, NY*	***Date:*** *20 August 2007*
Drilling Company: *Parratt-Wolf Inc.*	***Driller:*** *Brad Palmer*	***Geologist/Scientist:*** *Joe Von Uderitz/Megan Scott*
Size and Types of Drilling and Sampling Equipment: *210 Link-Belt Excavator*	***Hole ID:*** *Test Pit 18*	
Date Started: *20 August 2007*	***Date Completed:*** *20 August 2007*	
Groundwater Encountered (ft bgs): *Not Encountered*	***Depth to Bedrock (ft bgs):*** *Not Encountered*	
Total Depth of Hole (ft bgs): *8*	***Disposition of Hole:*** *Backfilled to grade*	

Depth	*PID Reading (ppm)*	*Description of Material*	*Samples Collected*	*Sample Depth*
0-0.5	0	Topsoil		
0.5-3	0	Light brown SANDY SILT. Loose, non-cohesive	PCB-8082	2
3-6	0	TILL-SANDY SILT with More Cobbles and Rock Fragements	PCB-8082	6
6-7	0	Light brown SANDY SILT. Loose, non-cohesive		
7-8	0	Light brown Very fine SANDY SILT, tight, semi-cohesive.	PCB-8082	8

Comments and Notes:

Appendix D

Soil Boring/Well Logs

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location:
14368.17	New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer
Drilling Method:	Hollow Stem Augers	Soil Boring Number: SB01
Sampling Method:	Split spoons - 5 ft. rods	Sheet 1 of 1

Water Lev.					Drilling Start	Drilling Finish
Time					1040	1050

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet		USCS Log	Surface Conditions: Weather: Temperature:
				0			Topsoil- brown, moist
				1		ML	Sandy silt, med-tight, semi cohesive, moist (1-4'
				2			
				3			
				4			
				5		SM	Sandy silt, tight, semi cohesive, moist (4-5.5')
							Rock- shale, gray, (5.5-6')
				6			
				7			
				8			
				9			
				10			
				11			
				12			
				13			
				14			
				15			
				16			
				17			
				18			
				19			
				20			

Logged by: MS/JV Date: 10/25/07

Drilling Contractor: Parratt-Wolff Inc. Driller: Brad/Steve

SOIL SAMPLE COLLECTED **YES** / NO

Samples Collected for **V** **PCB** **TPH** SVOC VOC DUPLICATE MS/MSD

Sample Depth: 4-6' Sample Time: 1050 Sample Date: 25 October 2007

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location:
14368.17	New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer
Drilling Method: Hollow Stem Augers		Soil Boring Number: SB02
Sampling Method: Split spoons - 5 ft. rods		Sheet 1 of 1

					Drilling	
Water Lev.					Start	Finish
Time					1100	1130

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet		USCS Log	Surface Conditions: Weather: Temperature:
7				0			Topsoil
45						GM	Rocky till- shale, angular, dry, some sand, loose, NC (0.5-4')
50/.4				1			
				2			
				3			
				4			Rock-shale (4-4.5')
						SM	Brown sandy silt, dry, loose, NC (4.5-6')
				5			
				6		GM	Rocky till- angular with silt and sand, dry, NC (6-6.5')
						SM	Silty sand, fine, loose, dry, NC (6.5-7')
				7		ML	Brown tight silt with trace fine sand, dry, semi-cohesive (7-9')
				8			
				9			Angular till (9-9.5')
							Rock- shale (9.5-10')
				10			
				11			
				12			
				13			
				14			
				15			
				16			
				17			
				18			
				19			
				20			

Logged by: MS/JV Date: 10/25/07 Note: Same odor as test pits

Drilling Contractor: Parratt-Wolff Inc. Driller: Brad/Steve

SOIL SAMPLE COLLECTED **YES** / NO

Samples Collected for **V** **PCB** **TPH** SVOC VOC DUPLICATE MS/MSD

Sample Depth: 4-6' Sample Time: 1115 Sample Date: 25 October 2007

SOIL SAMPLE COLLECTED **YES** / NO

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location:
14368.17	New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer
Drilling Method: Hollow Stem Augers		Soil Boring Number: SB03
Sampling Method: Split spoons - 5 ft. rods		Sheet 1 of 1

Water Lev. / Time					Drilling Start	Drilling Finish
					1245	1315

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet		USCS Log	Surface Conditions: / Weather: / Temperature:
14				0			Topsoil (0-1')
11							
10				1		GM	Till- angular rock fragments (1-2')
7							
6				2		ML	Brown silt with fine sand- dry, tight, semi cohesive (2-3')
5							
7				3		ML	Brown silt with fine sand- moist, tight, semi cohesive (3-4')
5							
6				4		SM	Brown sand with silt, fine sand, loose, dry, NC (4-5')
7							
7				5		ML	Brown silt with trace vf sand, tight, dry, semi cohesive (5-6')
12							
19				6		GM	Brown silt with some gravel and sand- loose, dry, NC (6-7')
22							
31				7		GM	Till w/ brown fine sand, loose, dry, NC (7-8')
26							
14				8		SM	Brown silt with sand, some small gravel, loose, dry, semi-cohesive (8-9.5')
48							
50/.4				9			
				10			
				11			
				12			
				13			
				14			
				15			
				16			
				17			
				18			
				19			
				20			

Logged by: MS/JV Date: 10/25/07

Drilling Contractor: Parratt-Wolff Inc. Driller: Brad/Steve

SOIL SAMPLE COLLECTED **YES** / NO

Samples Collected for **V PCB** TPH SVOC **VOC** **DUPLICATE-PCB** MS/MSD

Sample Depth: 4-6' Sample Time: 1050 Sample Date: 25 October 2007

SOIL SAMPLE COLLECTED **YES** / NO

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location:
14368.17	New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer
Drilling Method: Hollow Stem Augers		Soil Boring Number: SB04
Sampling Method: Split spoons - 5 ft. rods		Sheet 1 of 1

					Drilling	
Water Lev.					Start	Finish
Time					1320	1350

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet	USCS Log	Surface Conditions: Weather: Temperature:
2				0		Topsoil
8					GM	Angular till with some fine sand, moist, loose, NC (0.5-6')
14				1		
14						
26				2		
14						
25				3		
20						
12				4		
16						
17				5		
17						
19				6	GM	Sandy till, brown, angular, loose, dry, NC (6-7.5')
12						
18				7		
18					ML	Silt with trace fine sand, very tight, semi cohesive, dry (7.5-10')
14				8		
15						
17				9		
19						
				10		
				11		
				12		
				13		
				14		
				15		
				16		
				17		
				18		
				19		
				20		

Logged by: MS/JV Date: 10/25/07

Drilling Contractor: Parratt-Wolff Inc. Driller: Brad/Steve

SOIL SAMPLE COLLECTED **YES** / NO

Samples Collected for **V** **PCB** TPH SVOC **VOC** DUPLICATE MS/MSD

Sample Depth: 4-6' Sample Time: 1330 Sample Date: 25 October 2007

SOIL SAMPLE COLLECTED **YES** / NO

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location:
14368.17	New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer
Drilling Method: Hollow Stem Augers		Soil Boring Number: SB05
Sampling Method: Split spoons - 5 ft. rods		Sheet 1 of 1

					Drilling	
Water Lev.					Start	Finish
Time					1405	1415

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet		USCS Log	Surface Conditions: Weather: Temperature:
3				0			Topsoil
4						GM	Sandy till, dry, small gravel, NC (0.5-2')
4				1			
4							
				2			
				3			
				4			
				5			
				6			
				7			
				8			
				9			
				10			
				11			
				12			
				13			
				14			
				15			
				16			
				17			
				18			
				19			
				20			

Logged by: MS/JV Date: 10/25/07

Drilling Contractor: Parratt-Wolff Inc. Driller: Brad/Steve

SOIL SAMPLE COLLECTED **YES** / NO

Samples Collected for **V PCB TPH SVOC VOC DUPLICATE-VOC** MS/MSD

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location:
14368.17	New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer
Drilling Method: Hollow Stem Augers		Soil Boring Number: SB06
Sampling Method: Split spoons - 5 ft. rods		Sheet 1 of 1

Water Lev. / Time					Drilling Start	Drilling Finish
					1418	1425

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet		USCS Log	Surface Conditions: / Weather: / Temperature:
2				0			Topsoil
2							
5				1		GM	Brown sandy till- small rock fragments, loose, dry, NC
8							
				2			
				3			
				4			
				5			
				6			
				7			
				8			
				9			
				10			
				11			
				12			
				13			
				14			
				15			
				16			
				17			
				18			
				19			
				20			

Logged by: MS/JV Date: 10/25/07

Drilling Contractor: Parratt-Wolff Inc. Driller: Brad/Steve

SOIL SAMPLE COLLECTED **YES** / NO

Samples Collected for **V PCB** **TPH** SVOC VOC DUPLICATE **MS/MSD-PCB**

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location:
14368.17	New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer
Drilling Method: Hollow Stem Augers		Soil Boring Number: SB07
Sampling Method: Split spoons - 5 ft. rods		Sheet 1 of 1

	Drilling	
Water Lev. / Time	Start	Finish
	1445	1450

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet		USCS Log	Surface Conditions: / Weather: / Temperature:
				0			Brown sandy silt, loose, semi cohesive (0-1')
				1		SW	Brown fine sand, loose, NC (1-2')
				2			
				3			
				4			
				5			
				6			
				7			
				8			
				9			
				10			
				11			
				12			
				13			
				14			
				15			
				16			
				17			
				18			
				19			
				20			

Logged by: MS/JV Date: 10/25/07

Drilling Contractor: Parratt-Wolff Inc. Driller: Brad/Steve

SOIL SAMPLE COLLECTED **YES** / NO

Samples Collected for **V** **PCB** **TPH** SVOC VOC DUPLICATE MS/MSD

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:		Location:
14368.17		New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer
Drilling Method:		Hollow Stem Augers	Soil Boring Number: SB08
Sampling Method:		Split spoons - 5 ft. rods	Sheet 1 of 1

					Drilling	
Water Lev.					Start	Finish
Time					1455	1518

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet		USCS Log	Surface Conditions: Weather: Temperature:
				0			Topsoil
				1		SW	Fine sand, loose, dry, NC (1-3')
				2			
				3		ML	Silt, semi cohesive, tight, wet (3-4.5')
				4			
						GM	Till- angular stone, loose, dry, NC (4.5-8')
				5			
49				6			
49							
49				7			
38							
42				8		GM	Sandy till, angular stone, loose, dry, NC (8-10')
41							
21				9			
20							
				10			
				11			
				12			
				13			
				14			
				15			
				16			
				17			
				18			
				19			
				20			

Logged by: MS/JV Date: 10/25/07 Note: Slight odor

Drilling Contractor: Parratt-Wolff Inc. Driller: Brad/Steve

SOIL SAMPLE COLLECTED **YES** / NO

Samples Collected for **V** **PCB** TPH SVOC **VOC** DUPLICATE MS/MSD

Sample Depth: 0-2' Sample Time: 1500 Sample Date: 25 October 2007

SOIL SAMPLE COLLECTED **YES** / NO

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:		Location:
14368.17		New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer
Drilling Method:		Hollow Stem Augers	Soil Boring Number: SB09
Sampling Method:		Split spoons - 5 ft. rods	Sheet 1 of 1

					Drilling	
Water Lev.					Start	Finish
Time					1530	1549

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet		USCS Log	Surface Conditions: Weather: Temperature:
				0		GM	Till with silt- semi cohesive, angular rocks, tight, moist (0-5')
				1			
				2			
				3			
				4			
				5		GM	Sandy till- NC, loose, dry (5-10')
				6			
				7			
				8			
				9			
				10			
				11			
				12			
				13			
				14			
				15			
				16			
				17			
				18			
				19			
				20			

Logged by: MS/JV Date: 10/25/07

Drilling Contractor: Parratt-Wolff Inc. Driller: Brad/Steve

SOIL SAMPLE COLLECTED **YES** / NO
Samples Collected for **√PCB** TPH SVOC VOC DUPLICATE MS/MSD

Sample Depth: 2' Sample Time: 1534 Sample Date: 25 October 2007

SOIL SAMPLE COLLECTED **YES** / NO
Samples Collected for **√PCB** TPH SVOC VOC DUPLICATE MS/MSD

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location:
14368.17	New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer

Drilling Method:	Soil Boring Number:
Hollow Stem Augers	SB10

Sampling Method:	Sheet 1 of 1
Split spoons - 5 ft. rods	

					Drilling	
Water Lev.					Start	Finish
Time					1608	1630

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet	USCS Log	Surface Conditions: Weather: Temperature:
				0		
					GM	Sandy till- few rocks, loos, dry, NC (0.5-10')
				1		
				2		
				3		
				4		
				5		
				6		
				7		
				8		
				9		
				10	GM	Silt- tight, dry, semi cohesive (10-12')
				11		
				12		
				13		
				14		
				15		
				16		
				17		
				18		
				19		
				20		

Logged by: MS/JV Date: 10/25/07

Drilling Contractor: Parratt-Wolff Inc. Driller: Brad/Steve

SOIL SAMPLE COLLECTED **YES** / NO

Samples Collected for **V** **PCB** TPH **SVOC** VOC DUPLICATE MS/MSD

Sample Depth: 2-4' Sample Time: 1610 Sample Date: 25 October 2007

SOIL SAMPLE COLLECTED **YES** / NO

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location:
14368.17	New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer
Drilling Method:	Hollow Stem Augers	Soil Boring Number: SB11
Sampling Method:	Split spoons - 5 ft. rods	Sheet 1 of 1

	Drilling	
Water Lev. / Time	Start	Finish
	850	907

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet	USCS Log	Surface Conditions: Weather: Temperature:
				0		Topsoil
				1	GM	Silt with angular stone and loose sand, semi cohesive (1-1.5')
					SW	Sand with trace silt, loose, NC (1.5-2.5')
				2		
					ML	Silt with trace sand, loose, semi cohesive (2.5-3.5')
				3		
					GM	Sandy till (3.5-5')
				4		
				5	GM	Till (5-5.5')
						2" silt, 2" till, 2" silt (to 6')
				6		
				7		
				8		
				9		
				10		
				11		
				12		
				13		
				14		
				15		
				16		
				17		
				18		
				19		
				20		

Logged by: MS/JV Date: 10/26/07

Drilling Contractor: Parratt-Wolff Inc. Driller: Brad/Steve

SOIL SAMPLE COLLECTED **YES** / NO

Samples Collected for **V PCB** **TPH** **SVOC** VOC DUPLICATE MS/MSD

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location:
14368.17	New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer
Drilling Method:	Hollow Stem Augers	Soil Boring Number: SB12
Sampling Method:	Split spoons - 5 ft. rods	Sheet 1 of 1

					Drilling	
Water Lev.					Start	Finish
Time					921	938

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet		USCS Log	Surface Conditions: Weather: Temperature:
				0			Topsoil- moist
						ML	Silt- moist, tight, semi cohesive (0.5-1')
				1		GM	Till- angular, rocky (1-2')
				2		ML	Silt with trace VF sand, semi cohesive, tight, dry (2-3.5')
				3			
						SM	Sand with silt, loose, dry, NC (faint odor) (3.5-5')
				4			
				5		ML	Silt with trace VF sand, tight, SC (faint odor) (5-5.5')
							Same silt with stone (faint odor) (5.5-6')
				6		ML	Silt with some till (faint odor) (6-7')
				7		SM	Sandy silt- loose, semi cohesive (faint odor) (7-8')
				8			
				9			
				10			
				11			
				12			
				13			
				14			
				15			
				16			
				17			
				18			
				19			
				20			

Logged by: MS/JV Date: 10/26/07

Drilling Contractor: Parratt-Wolff Inc. Driller: Brad/Steve

SOIL SAMPLE COLLECTED **YES** / NO

Samples Collected for **V PCB** **TPH** **SVOC** **VOC** DUPLICATE **MS/MSD-VOC**

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:		Location:
14368.17		New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer
Drilling Method:		Tractor mounted Geoprobe	Soil Boring Number: SB-13
Sampling Method:		Direct-push - 4 ft. rods dedicated acetate sleeves	Sheet 1 of 1
Water Lev.			Drilling: Start 12/11/2008 — Finish 12/11/2008
Time			

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppb) HNu	Depth in Feet	USCS Log	Surface Conditions: / Weather: / Temperature:
				0		0-3 TILL (Brown SANDY SILT with sandstone rock fragments. Loose, non-cohesive.
						Moist at 2-ft.
				1		1-2 Slight Odors
	3/4					
			2539	2		
			3739	3		
			2565	4		4-4.5 Brown very fine SANDY SILT. Tight, non-cohesive. Moist
						4.5-5 Brown medium SAND with trace SILT. Loose, non-cohesive. Moist
			25	5		5-7 Brown SILT. Tight, semi-cohesive, trace sandstone rock fragements. Dry
	3/3		203	6		
			58	7		
				8		
				9		
				10		
				11		
				12		
				13		
				14		
				15		
				16		
				17		
				18		
				19		
				20		

Logged by: JAV Date: 12/11/08

Drilling Contractor: Parratt-Wolff Inc. Driller: Brad/Steve

SOIL SAMPLE COLLECTED **YES** / NO

Samples Collected for **PCB** **TPH** SVOC VOC DUPLICATE MS/MSD-VOC

Sample Depth: 1-2' Sample Time: 940 Sample Date: 11 December 2008

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:		Location:
14368.17		New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer
Drilling Method:		Tractor mounted Geoprobe	Soil Boring Number: SB-14
Sampling Method:		Direct-push - 4 ft. rods dedicated acetate sleeves	Sheet 1 of 1
Water Lev.			Drilling
Time			Start: 12/11/2008 — Finish: 12/11/2008

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppb) HNu	Depth in Feet	USCS Log	Surface Conditions: / Weather: / Temperature:
				0		0-1 Brown SANDY SILT with sandstone rock fragments. Tight, non-cohesive. Dry.
			137	1		1-1.5 Coarse black SAND with sandstone rocks
	4/4					1.5-2 Medium brown SAND AND SILT. Loose, non-cohesive. Dry
			92	2		2.-4 Very fine brown SANDY SILT with medium sand lenses interbedded throughout.
						Tight, non-cohesive, Dry.
			102	3		
			250	4		4.-5 Coarse medium orange-brown SAND. Loose, non-cohesive. Moist.
						5.-8 Brown SILT with trace fine/very fine SAND. Tight, semi-cohesive. Dry.
			110	5		
	4/4					
			98	6		
			270	7		
			0	8		
				9		
				10		
				11		
				12		
				13		
				14		
				15		
				16		
				17		
				18		
				19		
				20		

Logged by: JAV Date: 12/11/08

Drilling Contractor: Parratt-Wolff Inc. Driller: Brad/Steve

SOIL SAMPLE COLLECTED **YES** / NO

Samples Collected for **PCB** **TPH** SVOC VOC DUPLICATE MS/MSD-VOC

Sample Depth: 2-2.5' Sample Time: 957 Sample Date: 11 December 2008

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:		Location:
14368.17		New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer
Drilling Method:		Tractor mounted Geoprobe	Soil Boring Number: SB-15
Sampling Method:		Direct-push - 4 ft. rods dedicated acetate sleeves	Sheet 1 of 1
Water Lev.			Drilling: Start 12/11/2008 — Finish 12/11/2008
Time			

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppb) HNu	Depth in Feet		USCS Log	Surface Conditions: / Weather: / Temperature:
				0			0-.25 Topsoil
							.25-.5 Medium brown SAND. Loose, non-cohesive. Dry.
			515	1			.5-.75 Very fine brown SANDY SILT. Tight, non-cohesive. Dry
	4/4						.75-3.5 Small to medium SAND. Loose, non-cohesive. Dry.
			0	2			
			0	3			
							3.5-4 Very fine brown SANDY SILT. Tight, non-cohesive. Dry.
			0	4			4.-5 Very fine brown SANDY SILT. Tight, non-cohesive. Dry.
							4.5-6 Medium brown SAND. Loose, non-cohesive. Wet.
			600	5			
	3/4						
			55	6			6-7.5 Very find brown SANDY SILT. Tight, semi-cohesive.
			44	7			
							7.5-8 Same as above with sandstone rock fragments.
			214	8			
				9			
				10			
				11			
				12			
				13			
				14			
				15			
				16			
				17			
				18			
				19			
				20			

Logged by: JAV Date: 12/11/08

Drilling Contractor: Parratt-Wolff Inc. Driller: Brad/Steve

SOIL SAMPLE COLLECTED **YES** / NO

Samples Collected for **PCB** **TPH** SVOC VOC DUPLICATE MS/MSD-VOC

Sample Depth: 2-3' Sample Time: 1015 Sample Date: 11 December 2008

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:		Location:
14368.17		New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer
Drilling Method:		Tractor mounted Geoprobe	Soil Boring Number: SB-16
Sampling Method:		Direct-push - 4 ft. rods dedicated acetate sleeves	Sheet 1 of 1
Water Lev.			Drilling
Time			Start: 12/11/2008 — Finish: 12/11/2008

Surface Conditions:
Weather:
Temperature:

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppb) HNu	Depth in Feet	USCS Log	
				0		0-1 Brown SANDY SILT. Tight, non-cohesive. Dry.
			112	1		1-2.5 Medium gray/brown SAND. Loose, non-cohesive. Dry.
	3.5/4		98	2		2.5-4 Large SAND with some cobbles. Loose, non-cohesive. Dry
			144	3		
			172	4		
			1537	5		5-5.5 Gravel. Odors
	3.5/3.5					5.5-6 Coarse to medium grey brown SAND. Loose, non-cohesive.
			0	6		6.-7 Fine brown SANDY SILT. Tight, semi-cohesive. Wet.
						7-7.5 Gravel with coarse SAND
			0	7		Slight odors through whole interval.
				8		Refusal at 7.5'
				9		
				10		
				11		
				12		
				13		
				14		
				15		
				16		
				17		
				18		
				19		
				20		

Logged by: JAV Date: 12/11/08

Drilling Contractor: Parratt-Wolff Inc. Driller: Brad/Steve

SOIL SAMPLE COLLECTED **YES** / NO

Samples Collected for **PCB** **TPH** SVOC VOC DUPLICATE **MS/MSD-VOC**

Sample Depth: 2-4' Sample Time: 1030 Sample Date: 11 December 2008

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:		Location:
14368.17		New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer
Drilling Method:		Tractor mounted Geoprobe	Soil Boring Number: SB-17
Sampling Method:		Direct-push - 4 ft. rods dedicated acetate sleeves	Sheet 1 of 1
Water Lev.			Drilling Start: 12/11/2008 Finish: 12/11/2008
Time			

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppb) HNu	Depth in Feet		USCS Log	Surface Conditions: / Weather: / Temperature:
				0			0-1 Brown SANDY SILT. Tight, semi-cohesive.
			25	1			1.-3 Till. Tight, non-cohesive. Odors.
	4/4						
			0	2			
			0	3			3.-4 Coarse grey/brown SAND and GRAVEL. Odors
			0	4			4.-7 Medium to large SAND with some SILT. Loose, non-cohesive. Odors
			87	5			
	4/4						
			0	6			
			0	7			7.-8 Very fine light brown very fine SAND with SILT. Tight, semi-cohesive. Moist.
			0	8			8-8.5 SAND and GRAVEL
							8.5-9 Fine light brown SANDY SILT. Tight, semi-cohesive. Wet.
			0	9			Odors present throughout interval.
	1/1			10			Refusal at 9'
				11			
				12			
				13			
				14			
				15			
				16			
				17			
				18			
				19			
				20			

Logged by: JAV Date: 12/11/08

Drilling Contractor: Parratt-Wolff Inc. Driller: Brad/Steve

SOIL SAMPLE COLLECTED **YES** / NO

Samples Collected for **PCB** **TPH** SVOC VOC DUPLICATE MS/MSD-VOC

Sample Depth: 2-4' Sample Time: 1115 Sample Date: 11 December 2008

FIELD BROING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:		Location:
14368.17		New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer
Drilling Method:		Tractor mounted Geoprobe	Soil Boring Number: SB-18
Sampling Method:		Direct-push - 4 ft. rods dedicated acetate sleeves	Sheet 1 of 1
Water Lev.			Drilling
Time			Start: 12/11/2008 — Finish: 12/11/2008

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppb) HNu	Depth in Feet	USCS Log	Surface Conditions: / Weather: / Temperature:
				0		0-1 Fine brown SAND AND SILT.
			885	1		1.-2 GRAVEL with some SAND
	4/4		43	2		2.-3 Same as above with fine SANDY SILT. Loose, non-cohesive.
			48	3		3.-4 Large SAND and small GRAVEL. Odors
			13	4		4-4.5 GRAVEL
						4.5-5.5 Very fine light brown SANDY SILT. Tight, semi-cohesive. Moist.
			1	5		
	3.5/3.5					5.5-6.5 Grey coarse SAND. Loose, non-cohesive. Dry
			265	6		
						6.5-7 Very fine light brown SANDY SILT. Tight, semi-cohesive. Moist.
			161	7		7-7.5 GRAVEL
			196	8		
				9		
				10		
				11		
				12		
				13		
				14		
				15		
				16		
				17		
				18		
				19		
				20		

Logged by: JAV Date: 12/11/08

Drilling Contractor: Parratt-Wolff Inc. Driller: Brad/Steve

SOIL SAMPLE COLLECTED **YES** / NO

Samples Collected for **PCB** **TPH** SVOC VOC DUPLICATE MS/MSD-VOC

Sample Depth: 2.5-3.5' Sample Time: 1135 Sample Date: 11 December 2008

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:		Location:
14368.17		New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer
Drilling Method:		Tractor mounted Geoprobe	Soil Boring Number: SB-19
Sampling Method:		Direct-push - 4 ft. rods dedicated acetate sleeves	Sheet 1 of 1
Water Lev.			Drilling
Time			Start: 12/11/2008 — Finish: 12/11/2008

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppb) HNu	Depth in Feet	USCS Log	Surface Conditions: / Weather: / Temperature:
				0		0-1 Brown SANDY SILT. Tight, non-cohesive.
			68	1		1-2.75 Large SAND and GRAVEL, with some SILT. Loose, non-cohesive. Dry. Odors
	4/4		115	2		2.75-3.5 Very fine brown SANDY SILT. Tight, semi-cohesive. Odors
			147	3		3.5-5 Medium brown SAND. Loose, non-cohesive. Dry. Odors
			0	4		4-4.1 Very fine brown SANDY SILT. Tight, semi-cohesive. Odors
						4.1-4.5 Medium grey SAND. Loose, non-cohesive. Dry. Odors
			35	5		4.5-5 Very fine brown SANDY SILT. Tight, semi-cohesive. Dry. Odors
	4/4					5-5.5 Sandstone rock fragements, some brown SILT.
			58	6		5.5-8 Light brown SILT with trace very fine SAND. Tight, semi-cohesive. No odor
			78	7		
			119	8		8-8.5 Same as above
						8.5-9 Red brown SILTY CLAY. Tight, cohesive. Dry
			251	9		9.-11 Brown SILT with very fine SAND. Tight, non-cohesive. Wet.
	3/3		0	10		
			0	11		
				12		
				13		
				14		
				15		
				16		
				17		
				18		
				19		
				20		

Logged by: JAV Date: 12/11/08

Drilling Contractor: Parratt-Wolff Inc. Driller: Brad/Steve

SOIL SAMPLE COLLECTED **YES** / NO

Samples Collected for **PCB** **TPH** SVOC VOC DUPLICATE MS/MSD-VOC

Sample Depth: 2.5-3.5' Sample Time: 1045 Sample Date: 11 December 2008

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:		Location:
14368.17		New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer
Drilling Method:		Tractor mounted Geoprobe	Soil Boring Number: SB-20
Sampling Method:		Direct-push - 4 ft. rods dedicated acetate sleeves	Sheet 1 of 1
Water Lev.			Drilling: Start 12/11/2008 — Finish 12/11/2008
Time			

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppb) HNu	Depth in Feet		USCS Log	Surface Conditions: / Weather: / Temperature:
				0			0-1 Brown SANDY SILT with COBBLES.
			151	1			1.-2 GRAVEL and COBBLES.
	3/4		0	2			2.-3 Medium to large grey/brown SAND.
			0	3			
			0	4			4-4.5 Same as above
							4.5-7 Medium to large grey SAND. Loose, non-cohesive. Dry.
			0	5			
	3.5/4		0	6			
			0	7			7-7.5 Very fine brown SANDY SILT. Tight, semi-cohesive. Dry.
				8			
				9			
				10			
				11			
				12			
				13			
				14			
				15			
				16			
				17			
				18			
				19			
				20			

Logged by: JAV Date: 12/11/08

Drilling Contractor: Parratt-Wolff Inc. Driller: Brad/Steve

SOIL SAMPLE COLLECTED **YES** / NO

Samples Collected for **PCB** **TPH** SVOC VOC DUPLICATE MS/MSD-VOC

Sample Depth: 3-4' Sample Time: 1202 Sample Date: 11 December 2008

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:		Location:
14368.17		New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer
Drilling Method:		Tractor mounted Geoprobe	Soil Boring Number: SB-21
Sampling Method:		Direct-push - 4 ft. rods dedicated acetate sleeves	Sheet 1 of 1
Water Lev.			Drilling: Start 12/11/2008 / Finish 12/11/2008
Time			

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppb) HNu	Depth in Feet	USCS Log	Surface Conditions: Weather: Temperature:
				0		0-1.5 Till. Brown SAND and SILT with shale rock fragments.
			0	1		
	3/4					1.5-2 Coarse brown SAND. Loose, non-cohesive. Dry.
			0	2		2.-3 Light brown SILT with some very fine SAND. Tight, semi-cohesive. Moist
			0	3		
			0	4		4.-4.5 Till.
						4.5-4.75 Fine light brown SAND and SILT. Tight, semi-cohesive. Moist
			0	5		4.75-7 Till.
	3/3		0	6		Refusal at 7'
			0	7		
				8		
				9		
				10		
				11		
				12		
				13		
				14		
				15		
				16		
				17		
				18		
				19		
				20		

Logged by: JAV Date: 12/11/08

Drilling Contractor: Parratt-Wolff Inc. Driller: Brad/Steve

SOIL SAMPLE COLLECTED **YES** / NO

Samples Collected for **PCB** **TPH** SVOC VOC **DUPLICATE** MS/MSD-VOC

Sample Depth: 1-2' Sample Time: 1150 Sample Date: 11 December 2008

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:		Location:
14368.17		New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer
Drilling Method:		Hollow stem auger	Soil Boring Number: MW01
Sampling Method:		split spoon	Sheet 1 of 2
			Drilling
Water Lev.	23.70' bgs	23.57' bgs	Start: 10/23/2007 1009 / Finish: 10/23/07 1130
Time	10/26/07 1000	11/2/2007 1010	

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet	USCS Log	Surface Conditions: Weather: Temperature:
				0		Same as TP05- disturbed material, a lot of moisture due to heavy rains (0-14')
				1		
				2		
				3		
				4		
				5		
				6		
				7		
				8		
				9		
14				10	GM	Till- sandstone, dolostone, dry/loose (10-12')
50/0.4						
				11		
				12		
				13		
10				14	SM	Brown fine sand with silt, tight, NC, moist (14-16')
8						
8				15		
18						
				16		
				17		
				18		
				19	SW	Brown sand- coarse, NC, moist, with trace silt
3				20	ML	Brown clayey silt- tight, fine, cohesive, moist
4						

Logged by: Megan Scott Date: 10/23/07 - 10/24/07

Drilling Contractor: Parratt Wolff Driller: Brad Palmer

WELL SPECIFICATIONS:

Diam. of casing: 2" Screen Interval: 18-38 ft 0.01" Slot Sand Pack 16-20 ft #0 Sand Grout: 0-14 ft

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:		Location:
14368.17	New York State Department of Environmental Conservation		Marshall, NY - Marshall Transformer
Drilling Method:	Hollow stem auger		Soil Boring Number:
Sampling Method:	Split spoon		Sheet 2 of 2
			Drilling
Water Lev.	23.70' bgs	23.57' bgs	Start: 10/23/2007 1009 / Finish: 10/23/07 1130
Time	10/26/07 1000	11/2/2007 1010	

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet	USCS Log	Surface Conditions: Weather: Temperature:
8				21		
11						
				22		
				23	GM	Till- 23' drilling became harder
9				24		No Recovery (24-26')
8						
11				25		
14						
				26		
				27		
				28		
6				29	SM	Brown silt with trace of fine sand, tight, semi cohesive, moist (29-31')
9						
14				30		
5						
				31		
				32		
				33		
9				34	SM	Brown silt with trace of very fine sand, tight, semi cohesive, near wet (34-36')
8						
7				35		
11						
				36		
				37		
				38		(Bottom of well-38 ft bgs)
2				39		
2						
4				40		
6						
				41		

Logged by: Megan Scott
Date: 10/23/07-10/24/07
Note: 11 bags sand

Drilling Contractor: Parratt Wolff
Driller: Brad Palmer

WELL SPECIFICATIONS:

Diam. of casing: 2" Screen Interval: 18-38 ft 0.01" Slot Sand Pack 16-39 ft #0 Sand Grout: 0-14 ft

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location:
14368.17	New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer

Drilling Method:	Soil Boring Number:
Hollow stem auger	MW02
Sampling Method:	Sheet 1 of 2
Split Spoon	

					Drilling	
Water Lev.	31' bgs	33.29' bgs	33.31' bgs		Start	Finish
Time	10/25/07	10/26/2007	11/2/2007		10/24/2007 1136	10/24/07 1645
	800	1115	1005			

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet		USCS Log	Surface Conditions: Weather: Temperature:
				0			
				1			
				2			
				3			
				4			
				5			
				6			
				7			
				8			
				9			
8				10		GM	Till- loose, dry, angular rock, NC (10-12')
17							
16				11			
13							
				12			
				13			
				14			
5				15		GM	Till- tight with silt, damp, semi cohesive, oval pebbles (15-15.5')
6							Sand- brown, fine, loose, dry, NC (15.5-17')
9				16			
14							
				17			
				18			
				19			
2				20		SW	Very fine sand, brown, loose, dry, NC (20-22')
6							

Logged by: Megan Scott Date: 10/24/07

Drilling Contractor: Parratt Wolff Driller: Brad Palmer

WELL SPECIFICATIONS:

Diam. of casing: 2" Screen Interval: 26-36 ft 0.01" Slot Sand Pack 24-37 ft Grout: 0-22 ft

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location:
14368.17	New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer

Drilling Method:	Soil Boring Number:
Hollow stem auger	MW02
Sampling Method:	Sheet 2 of 2
Split spoon	

Water Lev.	31' bgs	33.29' bgs	33.31' bgs	Drilling Start	Drilling Finish
Time	10/25/07	10/26/2007	11/2/2007	10/24/07 1136	10/24/07 1645
	800	1115	1005		

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet	USCS Log	Surface Conditions: Weather: Temperature:
12				21		
14						
				22		
				23		
				24		
9				25	ML	Brown silt, tight, damp, SC (25-25.5')
8					ML	Brown silt with sand, tight, damp, SC (25.5-26')
12				26	ML	Brown silt, tight, moist, SC (26'-26.5')
16					SW	Fine brown sand, NC, less tight (26.5-27')
				27		
				28		
				29		
37				30	GM	Sandy till, porous water bearing zone
50/0.2						
				31		
				32		
				33		
				34		
				35		
				36		(Bottom of well 36 -ft below ground surface)
				37		
				38		
				39		
				40		
				41		

Logged by: Megan Scott Date: 10/24/07 Note: 7 bags of sand used

Drilling Contractor: Parratt Wolff Driller: Brad Palmer

WELL SPECIFICATIONS:

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location:
14368.17	New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer

Drilling Method:	Soil Boring Number:
Hollow Stem Auger	MW03
Sampling Method:	Sheet 1 of 2
Split Spoon	

					Drilling	
Water Lev.	26.27' bgs	26.22' bgs			Start	Finish
Time	10/26/07	11/2/2007			10/25/07 800	10/25/2007 930
	1130	1001				

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet		USCS Log	Surface Conditions: Weather: Temperature:
				0			
				1			
				2			
				3			
				4			
				5			
				6			
				7			
				8			
				9			
15				10		GM	Till with silt, brown, med tight, angular rock fragments, dry, NC (10-10.5')
50/0.4							Rock- shale, gray, sheared in layers (10.5-10.75')
				11			/ Coarse till- reddish brown, loose, dry with sand- angular fragments (10.75-10.9')
				12			
				13			
				14			
11				15		GM	Tight silt, brown, SC (15-15.4')
9						SM	Brown sand with silt, loose, dry, NC (15.4-17')
14				16			
12							
				17			
				18			
				19			
5				20		SM	Brown fine sandy silt, loose, dry, SC (20-21')
10							

Logged by: Megan Scott Date: 10/25/07

Drilling Contractor: Parratt Wolff Driller: Brad Palmer

WELL SPECIFICATIONS:

Diam. of casing: 2" Screen Interval: 20-30 ft 0.01" Slot Sand Pack 18-31 ft #0 Sand Grout: 0-16 ft

FIELD BORING LOG FORM

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:	Location:
14368.17	New York State Department of Environmental Conservation	Marshall, NY - Marshall Transformer

Drilling Method:	Soil Boring Number:
Hollow Stem Auger	MW03
Sampling Method:	Sheet 1 of 2
Split Spoon	

					Drilling	
Water Lev.	26.27' bgs	26.22' bgs			Start	Finish
Time	10/26/07	11/2/2007			10/25/07 800	10/25/2007 930
	1130	1001				

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet		USCS Log	Surface Conditions: Weather: Temperature:
				0			
				1			
				2			
				3			
				4			
				5			
				6			
				7			
				8			
				9			
15				10		GM	Till with silt, brown, med tight, angular rock fragments, dry, NC (10-10.5')
50/0.4							Rock- shale, gray, sheared in layers (10.5-10.75')
				11			/ Coarse till- reddish brown, loose, dry with sand- angular fragments (10.75-10.9')
				12			
				13			
				14			
11				15		GM	Tight silt, brown, SC (15-15.4')
9						SM	Brown sand with silt, loose, dry, NC (15.4-17')
14				16			
12							
				17			
				18			
				19			
5				20		SM	Brown fine sandy silt, loose, dry, SC (20-21')
10							

Logged by: Megan Scott Date: 10/25/07

Drilling Contractor: Parratt Wolff Driller: Brad Palmer

WELL SPECIFICATIONS:

Diam. of casing: 2" Screen Interval: 20-30 ft 0.01" Slot Sand Pack 18-31 ft #0 Sand Grout: 0-16 ft

EA Engineering, P.C.
EA Science and Technology

LOG OF SOIL BORING

Coordinates:
Surface Elevation:
Casing Below Surface:
Reference Elevation:
Reference Description:

Job. No.	Client:	New York State Department of Environmental Conservation	Location:
14368.17			Marshall, NY - Marshall Transformer
Drilling Method:			Soil Boring Number:
Hollow Stem Auger			MW03
Sampling Method:			Sheet 2 of 2
Split Spoon			

					Drilling	
Water Lev.	26.27' bgs	26.22' bgs			Start	Finish
Time	10/26/07	11/2/2007			10/25/07 800	10/25/2007 930
	1130	1001				

Blow Counts (140-lb)	Feet Drvn/Ft. Recvrd	Well Diagram	PID (ppm) HNu	Depth in Feet		USCS Log	Surface Conditions: / Weather: / Temperature:
14				21		SM	Brown silt with fine sand, moist, medium tight, SC (21-22')
14							
				22			
				23			
				24			
				25		ML	Brown silt with trace fine sand, wet, tight, SC (25-26.5')
				26			
						GM	Till with trace silt, loose, wet, NC (26.5-27')
				27			
				28			
				29			
				30			(Bottom of well 30-ft below ground surface)
				31			
				32			
				33			
				34			
				35			
				36			
				37			
				38			
				39			
				40			
				41			

Logged by: Megan Scott Date: 10/25/07 Note: 6 bags of sand used

Drilling Contractor: Parratt Wolff Driller: Brad Palmer

WELL SPECIFICATIONS:

Diam. of casing:	2"	Screen Interval:	20-30 ft 0.01" Slot	Sand Pack	18-31 ft #0 Sand	Grout:	0-16 ft
BOH:	31ft	Riser Interval:	0-20 ft	Bentonite:	16-18 ft	Cover:	3-ft Steel Stick-up

Appendix E

Well Development Forms

EA Engineering PC and its Affliate,
EA Science and Technology

MONITORING WELL DEVELOPMENT PURGE FORM

Well I.D.: MW01	**EA Personnel:** JAV/MES	**Client:** NYSDEC
Location: Town of Marshall, New York	**Well Condition:** Good	**Weather:** 50-cloudy
Sounding Method: WLI	**Gauge Date:** 26-Oct-07	**Measurement Ref:** top of casing
Stick Up/Down (ft): Stick up	**Gauge Time:** 1000	**Well Diameter (in):** 2"

Purge Date: 26-Oct-07	**Purge Time:** 1059-1109
Purge Method: 2" submersible	**Field Technician:** Megan Scott/ Joe VonUderitz

Well Volume

A. Well Depth (ft): 39.62	**D. Well Volume (ft):** 0.16532	**Depth/Height of Top of PVC:** 2'
B. Depth to Water (ft): 23.7	**E. Well Volume (gal) C*D):** 2.6318944	**Pump Type:** Grunfos
C. Liquid Depth (ft) (A-B): 15.92	**F. Five Well Volumes (gal) (E3):** 13.159472	**Pump Designation:**

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity (S/m)	DO (mg/L)	Turbidity (ntu)

Total Quantity of Water Removed (gal): _____ **Sampling Time:** _____

Samplers: _____ **Split Sample With:** _____

Sampling Date: _____ **Sample Type:** _____

COMMENTS AND OBSERVATIONS: Well very muddy- doesn't produce much water, recharge < 0.5 GPM

Very turbid, well pumped dry several times

EA Engineering PC and its Affliate,
EA Science and Technology

MONITORING WELL DEVELOPMENT PURGE FORM

Well I.D.: MW02	**EA Personnel:** JAV/MES	**Client:** NYSDEC
Location: Town of Marshall, New York	**Well Condition:**	**Weather:** 50, cloudy
Sounding Method: WLI	**Gauge Date:** 26-Oct-07	**Measurement Ref:** top of casing
Stick Up/Down (ft): Stick up	**Gauge Time:** 1115	**Well Diameter (in):** 2"

Purge Date: 26-Oct-07	**Purge Time:** 1125-1127
Purge Method: 2" submersible	**Field Technician:** Megan Scott/ Joe VonUderitz

Well Volume

A. Well Depth (ft): 36.41	**D. Well Volume (ft):** 0.16532	**Depth/Height of Top of PVC:** 2'
B. Depth to Water (ft): 33.29	**E. Well Volume (gal) C*D):** 0.5157984	**Pump Type:** Grunfos
C. Liquid Depth (ft) (A-B): 3.12	**F. Five Well Volumes (gal) (E3):** 2.578992	**Pump Designation:**

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity (S/m)	DO (mg/L)	Turbidity (ntu)

Total Quantity of Water Removed (gal): _____ **Sampling Time:** _____

Samplers: _____ **Split Sample With:** _____

Sampling Date: _____ **Sample Type:** _____

COMMENTS AND OBSERVATIONS: Well very muddy- doesn't produce much water, recharge < 0.25 GPM

EA Engineering PC and its Affliate,
EA Science and Technology

MONITORING WELL DEVELOPMENT PURGE FORM

Well I.D.:	EA Personnel:	Client:
MW03	JAV/MES	NYSDEC
Location:	**Well Condition:**	**Weather:**
Town of Marshall, New York		50, cloudy
Sounding Method:	**Gauge Date:**	**Measurement Ref:**
WLI	26-Oct-07	top of casing
Stick Up/Down (ft):	**Gauge Time:**	**Well Diameter (in):**
Stick up	1130	2"

Purge Date:	Purge Time:
26-Oct-07	1131-1143
Purge Method:	**Field Technician:**
2" submersible	Megan Scott/ Joe VonUderitz

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
33.36	0.16532	2'
B. Depth to Water (ft):	**E. Well Volume (gal) C*D):**	**Pump Type:**
26.27	4.3429564	Grunfos
C. Liquid Depth (ft) (A-B):	**F. Five Well Volumes (gal) (E3):**	**Pump Designation:**
7.09	21.714782	

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity (S/m)	DO (mg/L)	Turbidity (ntu)

Total Quantity of Water Removed (gal): _____ **Sampling Time:** _____

Samplers: _____ **Split Sample With:** _____

Sampling Date: _____ **Sample Type:** _____

COMMENTS AND OBSERVATIONS: Well very muddy- doesn't produce much water, recharge = 0.25 GPM

Appendix F

Groundwater Purging/ Sampling Forms

EA Engineering PC and its Affliate,
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW01	**EA Personnel:** Dave Crandall/John Clark	**Client:** NYSDEC
Location: Town of Marshall, New York	**Well Condition:** Good	**Weather:** 40 - Rain
Sounding Method: WLI	**Gauge Date:** 15-Nov-07	**Measurement Ref:** top of casing
Stick Up/Down (ft): Stick up	**Gauge Time:** 1040	**Well Diameter (in):** 2"

Purge Date: 15-Nov-07	**Purge Time:** 1045
Purge Method: Peristaltic	**Field Technician:** Dave Crandall/John Clark

Well Volume

A. Well Depth (ft): 39.62	**D. Well Volume (ft):** 0.16532	**Depth/Height of Top of PVC:** 2'
B. Depth to Water (ft): 25.38	**E. Well Volume (gal) C*D):** 2.3541568	**Pump Type:** Geopump
C. Liquid Depth (ft) (A-B): 14.24	**F. Five Well Volumes (gal) (E3):** 11.770784	**Pump Designation:**

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity (S/m)	DO (mg/L)	Turbidity (ntu)
1045	23.58	-	0.5	7.53	115.2	9.34	0.425	6.93	157
1049	25.26	2	0.5	7.47	117.2	9.67	0.432	6.59	95
1053	26.75	4	0.5	7.44	120.3	9.63	0.434	6.58	261
1057	27.70	6	0.5	7.41	123	9.57	0.434	6.54	1072
1101	28.29	8	0.5	7.41	127	9.3	0.433	6.53	1442

Total Quantity of Water Removed (gal):	2	**Sampling Time:**	1105
Samplers:	DC/JC	**Split Sample With:**	
Sampling Date:	15-Nov-07	**Sample Type:**	GW

COMMENTS AND OBSERVATIONS: Very Muddy/silty water, turn pump down to try and get less turbid and it would not pump

DUP01 for FULL TCL, DUP02 for TPH

EA Engineering PC and its Affliate,
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.: MW02	**EA Personnel:** Dave Crandall/John Clark	**Client:** NYSDEC
Location: Town of Marshall, New York	**Well Condition:** Good	**Weather:** 40 - Rain
Sounding Method: WLI	**Gauge Date:** 15-Nov-07	**Measurement Ref:** top of casing
Stick Up/Down (ft): Stick up	**Gauge Time:** 1112	**Well Diameter (in):** 2"

Purge Date: 15-Nov-07	**Purge Time:** 1140
Purge Method: geopump/bailer	**Field Technician:** Dave Crandall/John Clark

Well Volume

A. Well Depth (ft): 36.41	**D. Well Volume (ft):** 0.16532	**Depth/Height of Top of PVC:** 2'
B. Depth to Water (ft): 33.42	**E. Well Volume (gal) C*D):** 0.4943068	**Pump Type:** geopump/bailer
C. Liquid Depth (ft) (A-B): 2.99	**F. Five Well Volumes (gal) (E3):** 2.471534	**Pump Designation:**

Water Quality Parameters

Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity (S/m)	DO (mg/L)	Turbidity (ntu)
1150	33.42	-	-	7.64	57.3	9.67	6.502	5.46	1340

Total Quantity of Water Removed (gal): 0.5
Samplers: DC/JC
Sampling Date: 15-Nov-07
Sampling Time: 1230
Split Sample With:
Sample Type: GW

COMMENTS AND OBSERVATIONS: Well very mudy, would not pump, hand bailed dry, then sampled upon recharge

EA Engineering PC and its Affliate,
EA Science and Technology

GROUNDWATER SAMPLING PURGE FORM

Well I.D.:	EA Personnel:	Client:
MW03	Dave Crandall/John Clark	NYSDEC
Location:	**Well Condition:**	**Weather:**
Town of Marshall, New York	Good	40 - Rain
Sounding Method:	**Gauge Date:**	**Measurement Ref:**
WLI	15-Nov-07	top of casing
Stick Up/Down (ft):	**Gauge Time:**	**Well Diameter (in):**
Stick up	900	2"

Purge Date:	Purge Time:
15-Nov-07	922
Purge Method:	**Field Technician:**
Peristaltic	Dave Crandall/John Clark

Well Volume

A. Well Depth (ft):	D. Well Volume (ft):	Depth/Height of Top of PVC:
33.36	0.16532	2'
B. Depth to Water (ft):	**E. Well Volume (gal) C*D):**	**Pump Type:**
26.16	1.190304	Geopump2
C. Liquid Depth (ft) (A-B):	**F. Five Well Volumes (gal) (E3):**	**Pump Designation:**
7.2	5.95152	

Water Quality Parameters

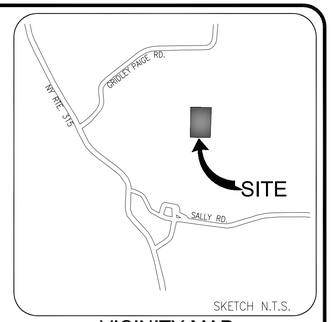
Time (hrs)	DTW (ft btoc)	Volume (liters)	Rate (Lpm)	pH (pH units)	ORP (mV)	Temperature (oC)	Conductivity (S/m)	DO (mg/L)	Turbidity (ntu)
922	26.16	-	-	7.95	52	9.36	0.659	4.90	1443
926	26.51	2	0.5	7.56	64	9.39	0.653	3.90	1439
930	26.49	4	0.5	7.53	74.1	9.42	0.656	2.86	1099
934	26.12	6	0.5	7.54	82	9.41	0.655	2.84	53
938	26.48	8	0.5	7.45	81.7	9.43	0.650	2.76	20.8

Total Quantity of Water Removed (gal):	2	**Sampling Time:**	1030
Samplers:	DC/JC	**Split Sample With:**	
Sampling Date:	15-Nov-07	**Sample Type:**	GW

COMMENTS AND OBSERVATIONS: DUP-03 for Pesticides and MS/MSD collected at MW03

Appendix G

Site Survey Map



VICINITY MAP

MARSHALL TRANSFORMER SITE

WELL AND SAMPLE TABLE

	UTM ZONE 18		NAVD88	
ID	**NORTHING**	**EASTING**	**ELEVATION**	**DESC.**
MW-1	15606074.8	1532953.5	1058.73	*GROUND*
			1060.94	*CASING*
			1060.78	*RISER*
MW-2	15606089.8	1532788.1	1059.46	*GROUND*
			1061.5	*CASING*
			1061.26	*RISER*
MW-3	15606181.6	1532906.3	1057.49	*GROUND*
			1060.26	*CASING*
			1060.11	*RISER*
SB 01	15606208.4	1532764.0	1066.7	*GROUND*
SB 02	15606173.1	1532836.2	1057.5	*GROUND*
SB 03	15606150.3	1532839.2	1057.6	*GROUND*
SB 04	15606157.5	1532800.0	1058.5	*GROUND*
SB 05	15606070.6	1532808.4	1058.7	*GROUND*
SB 06	15606068.2	1532867.9	1058.0	*GROUND*
SB 07	15606062.5	1532917.0	1058.6	*GROUND*
SB 08	15606093.0	1532977.2	1057.7	*GROUND*
SB 09	15606096.8	1532951.0	1058.0	*GROUND*
SB 10	15606093.4	1532905.5	1057.0	*GROUND*
SB 11	15606112.0	1532865.3	1057.7	*GROUND*
SB 12	15606121.9	1532898.4	1056.9	*GROUND*
SS 02	15606062.6	1532902.0	1058.0	*GROUND*
SS 03	15606065.6	1532854.5	1058.2	*GROUND*
SS 04	15606067.3	1532801.1	1058.7	*GROUND*
SS 06	15606105.7	1532853.6	1058.6	*GROUND*
SS 08	15606100.7	1532956.2	1058.3	*GROUND*
SS 10	15606142.3	1532903.4	1056.9	*GROUND*
SS 11	15606147.3	1532856.8	1057.0	*GROUND*
SS 12	15606147.9	1532807.1	1058.8	*GROUND*
SS 13	15606125.6	1532937.9	1057.2	*GROUND*
SS 14	15606108.5	1532828.0	1058.8	*GROUND*
SS 17	15606075.3	1532938.8	1058.4	*GROUND*
SS 18	15606028.1	1532925.9	1060.4	*GROUND*
SS 19	15606148.0	1532834.2	1057.7	*GROUND*
SS 22	15606224.4	1532947.6	1060.4	*GROUND*
SS 23	15606150.4	1532927.1	1056.9	*GROUND*
SS 24	15606032.7	1532870.6	1058.1	*GROUND*
SS 25	15606035.4	1532833.3	1058.2	*GROUND*
TP-1	15606215.4	1532925.4	1060.0	*A*
	15606207.6	1532914.8	1059.3	*B*
TP-2 / 2A	15606228.6	1532969.7	1063.4	*A*
	15606215.4	1532964.2	1060.6	*B*
	15606196.1	1532958.9	1059.9	*C*
TP-3	15606166.9	1532954.5	1057.2	*A*
	15606146.8	1532942.9	1057.1	*B*
TP-4	15606126.4	1532947.7	1057.6	*A*
	15606107.4	1532933.5	1057.3	*B*
TP-6	15606033.6	1532896.7	1059.0	*A*
	15606014.3	1532897.0	1060.0	*B*
TP-7	15606078.8	1532901.8	1057.4	*A*
	15606065.5	1532901.4	1058.1	*B*
TP-8	15606080.9	1532764.3	1059.8	*A*
	15606063.1	1532761.5	1059.7	*B*
TP-9	15606090.0	1532840.9	1058.7	*A*
	15606073.2	1532848.3	1058.4	*B*
TP-10	15606136.1	1532882.6	1056.2	*A*
	15606123.2	1532872.7	1056.7	*B*
TP-11	15606131.0	1532793.1	1064.3	*A*
	15606104.7	1532802.5	1059.6	*B*
TP-12	15606325.3	1532891.5	1057.0	*A*
	15606312.2	1532894.6	1055.7	*B*
TP-13	15606299.2	1532913.0	1056.4	*A*
	15606302.3	1532927.4	1058.2	*B*
TP-14	15606276.9	1532873.9	1056.5	*A*
	15606274.3	1532889.7	1056.9	*B*
TP-16	15606177.0	1532803.3	1058.1	*A*
	15606171.2	1532809.4	1057.9	*B*
TP-17	15606163.3	1532818.8	1057.9	*A*
	15606154.8	1532831.5	1057.7	*B*

MARSHALL TRANSFORMER SITE

SAMPLE LOCATIONS PROVIDED BY D.E.C.

	UTM ZONE 18	
LOCATION ID	**NORTHING**	**EASTING**
SB 13	15606141.032	1532810.812
SB 14	15606130.310	1532833.713
SB 15	15606060.979	1532840.865
SB 16	15606095.133	1532876.987
SB 17	15606161.570	1532889.355
SB 18	15606163.243	1532912.059
SB 19	15606113.899	1532903.660
SB 20	15606086.603	1532934.959
SB 21	15606136.603	1532968.489
TP 05A	15606087.653	1532972.754
TP 05B	15606078.663	1532948.804
SS 26	15606132.994	1532841.521
SS 27	15606085.881	1532831.875
SS 28	15606074.956	1532881.744
SS 29	15606137.981	1532921.344
SS 05	15606110.651	1532802.348
SS 07	15606106.124	1532902.118
SS 09	15606153.302	1532960.582
SS 16	15606078.040	1532905.858
SS 20	15606177.876	1532847.000
SS 01	15606062.587	1532950.937
SS 15	15606090.802	1532880.497
SS 21	15606308.814	1532899.034
TP 15A	15606057.371	1532941.455
TP 15B	15606043.788	1532943.424
TP 18A	15606186.078	1532861.304
TP 18B	15606174.037	1532866.554

*THE COORDINATES ABOVE WERE PROVIDED BY THE N.Y.S. D.E.C.; POPLI DESIGN GROUP SURVEY PERSONNEL DID NOT FIELD VERIFY THE LOCATION OF THESE SAMPLES.

SURVEY NOTES

1.) MAPPING HEREON IS REFERENCED TO NAD 83/ 96 - UTM ZONE 18.

2.) ELEVATIONS HEREON ARE REFERENCED TO NAVD 88.

3.) PROJECT UNITS ARE U.S. SURVEY FEET.

4.) THE CONTOUR INTERVAL IS ONE (1) FOOT.

CERTIFICATION

WE, POPLI, ARCHITECTURE + ENGINEERING & L.S., P.C., HEREBY CERTIFY THAT THIS SURVEY AND MAP WAS PREPARED UNDER THE DIRECTION OF A LICENSED LAND SURVEYOR, FROM THE NOTES OF AN INSTRUMENT SURVEY COMPLETED NOVEMBER 12, 2007.

MICHAEL ANTHONY VENTURO — STATE OF NEW YORK — 50079 — LICENSED LAND SURVEYOR

1/20/2010

LEGEND

- TREE LINE
- SOIL SAMPLE
- MONITORING WELL
- TEST PIT (A — TP XX — B)

D.E.C. LOCATED SAMPLES

- D.E.C. SB SAMPLE
- D.E.C. SS SAMPLE
- D.E.C. TEST PIT LOCATION (TP A — TP B)

SURVEY BY:
POPLI DESIGN GROUP
ARCHITECTURE + ENGINEERING
555 Penbrooke Drive
Penfield NY 14526

PREPARED FOR:
EA Engineering, P.C. and Its Affiliate
EA Science and Technology

SURVEYOR JOB NUMBER:	3278.04
SURVEY CREW:	K. RYAN, W. STRATTON
DRAWN BY:	J. PHILLIPS
CHECKED BY:	M. VENTURO

REVISIONS

3/12/10	D.E.C. SAMPLE LOCATIONS ADDED

TOPOGRAPHIC MAP

FOR THE
NEW YORK STATE D.E.C.

MARSHALL TRANSFORMER SITE

SITE NO. 6-33-019

Town of Marshall, County of Oneida, State of New York

DATE: JANUARY 20, 2010
SCALE: 1" = 20'

SHEET: 1 OF 1

MARSHALL TRANSFORMER SITE

WELL AND SAMPLE TABLE

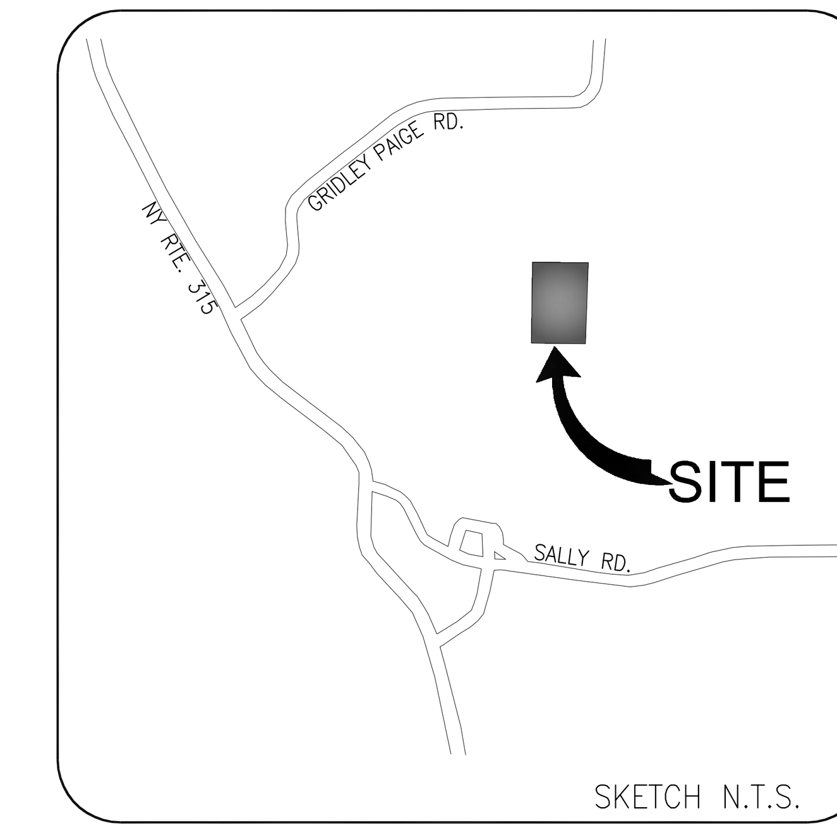
ID	NYSPCS-CENTRAL ZONE NORTHING	NYSPCS-CENTRAL ZONE EASTING	NAVD88 ELEVATION	DESC.
MW-1	1081672.2	1136517.8	1058.73	GROUND
			1060.94	CASING
			1060.78	RISER
MW-2	1081684.1	1136352.1	1059.46	GROUND
			1061.5	CASING
			1061.26	RISER
MW-3	1081778.1	1136468.7	1057.49	GROUND
			1060.26	CASING
			1060.11	RISER
SB 01	1081802.2	1136325.8	1066.7	GROUND
SB 02	1081768.3	1136398.7	1057.5	GROUND
SB 03	1081745.6	1136402.1	1057.6	GROUND
SB 04	1081752.0	1136362.7	1058.5	GROUND
SB 05	1081665.3	1136372.8	1058.7	GROUND
SB 06	1081664.0	1136432.4	1058.0	GROUND
SB 07	1081659.3	1136481.6	1058.6	GROUND
SB 08	1081690.8	1136541.3	1057.7	GROUND
SB 09	1081694.2	1136514.9	1058.0	GROUND
SB 10	1081689.9	1136469.5	1057.0	GROUND
SB 11	1081707.7	1136428.9	1057.7	GROUND
SB 12	1081718.3	1136461.9	1056.9	GROUND
SS 02	1081659.0	1136466.6	1058.0	GROUND
SS 03	1081661.1	1136419.0	1058.2	GROUND
SS 04	1081661.9	1136365.6	1058.7	GROUND
SS 06	1081701.3	1136417.3	1058.6	GROUND
SS 08	1081698.2	1136520.0	1058.3	GROUND
SS 10	1081738.8	1136466.4	1056.9	GROUND
SS 11	1081742.9	1136419.8	1057.0	GROUND
SS 12	1081742.6	1136370.0	1058.8	GROUND
SS 13	1081722.8	1136501.3	1057.2	GROUND
SS 14	1081703.5	1136391.7	1058.8	GROUND
SS 17	1081672.5	1136503.1	1058.4	GROUND
SS 18	1081625.0	1136491.1	1060.4	GROUND
SS 19	1081743.2	1136397.1	1057.7	GROUND
SS 22	1081821.8	1136509.1	1060.4	GROUND
SS 23	1081747.3	1136490.1	1056.9	GROUND
SS 24	1081628.6	1136435.7	1058.1	GROUND
SS 25	1081630.6	1136398.3	1058.2	GROUND
TP-1	1081812.3	1136487.1	1060.0	A
	1081804.3	1136476.6	1059.3	B
TP-2 / 2A	1081826.3	1136531.1	1063.4	A
	1081813.1	1136525.9	1060.6	B
	1081793.7	1136521.0	1059.9	C
TP-3	1081764.4	1136517.1	1057.2	A
	1081744.0	1136505.9	1057.1	B
TP-4	1081723.8	1136511.1	1057.6	A
	1081704.5	1136497.2	1057.3	B
TP-6	1081630.0	1136461.8	1059.0	A
	1081610.6	1136462.4	1060.0	B
TP-7	1081675.2	1136466.0	1057.4	A
	1081662.0	1136465.9	1058.1	B
TP-8	1081674.7	1136328.4	1059.8	A
	1081656.9	1136326.1	1059.7	B
TP-9	1081685.3	1136404.9	1058.7	A
	1081668.6	1136412.7	1058.4	B
TP-10	1081732.2	1136445.8	1056.2	A
	1081719.1	1136436.1	1056.7	B
TP-11	1081725.4	1136356.3	1064.3	A
	1081699.3	1136366.2	1059.6	B
TP-12	1081921.6	1136451.1	1057.0	A
	1081908.6	1136454.5	1055.7	B
TP-13	1081895.9	1136473.1	1056.4	A
	1081899.3	1136487.4	1058.2	B
TP-14	1081872.9	1136434.4	1056.5	A
	1081870.5	1136450.2	1056.9	B
TP-16	1081771.6	1136365.6	1058.1	A
	1081765.9	1136371.9	1057.9	B
TP-17	1081758.2	1136381.4	1057.9	A
	1081750.0	1136394.3	1057.7	B

MARSHALL TRANSFORMER SITE

SAMPLE LOCATIONS PROVIDED BY D.E.C.

LOCATION ID	NYSPCS-CENTRAL ZONE NORTHING	NYSPCS-CENTRAL ZONE EASTING
SB 13	1081735.8	1136373.9
SB 14	1081725.5	1136397.0
SB 15	1081656.3	1136405.4
SB 16	1081691.1	1136440.9
SB 17	1081757.8	1136452.0
SB 18	1081759.9	1136474.7
SB 19	1081710.4	1136467.3
SB 20	1081683.7	1136499.1
SB 21	1081734.3	1136531.7
TP 05A	1081685.4	1136536.9
TP 05B	1081676.0	1136513.1
SS 26	1081728.3	1136404.7
SS 27	1081681.0	1136396.0
SS 28	1081671.0	1136446.1
SS 29	1081734.8	1136484.5
SS 05	1081705.2	1136366.0
SS 07	1081702.6	1136465.9
SS 09	1081750.9	1136523.5
SS 16	1081674.6	1136470.1
SS 20	1081773.3	1136409.4
SS 01	1081659.9	1136515.5
SS 15	1081686.8	1136444.5
SS 21	1081905.3	1136459.0
TP 15A	1081654.6	1136506.1
TP 15B	1081641.0	1136508.4
TP 18A	1081781.8	1136423.5
TP 18B	1081769.8	1136429.0

*THE COORDINATES ABOVE WERE PROVIDED BY THE N.Y.S. D.E.C.; POPLI DESIGN GROUP SURVEY PERSONNEL DID NOT FIELD VERIFY THE LOCATION OF THESE SAMPLES.



VICINITY MAP

SURVEY NOTES

1.) MAPPING HEREON IS REFERENCED TO NAD 83/ 96 - NEW YORK STATE PLANE COORDINATE SYSTEM, CENTRAL ZONE.

2.) ELEVATIONS HEREON ARE REFERENCED TO NAVD 88.

3.) PROJECT UNITS ARE U.S. SURVEY FEET.

4.) THE CONTOUR INTERVAL IS ONE (1) FOOT.

CERTIFICATION

WE, POPLI, ARCHITECTURE + ENGINEERING & L.S., P.C., HEREBY CERTIFY THAT THIS SURVEY AND MAP WAS PREPARED UNDER THE DIRECTION OF A LICENSED LAND SURVEYOR, FROM THE NOTES OF AN INSTRUMENT SURVEY COMPLETED NOVEMBER 12, 2007.

STATE OF NEW YORK · MICHAEL ANTHONY VENTURO · 50079 · LICENSED LAND SURVEYOR

1/20 2010

LEGEND

TREE LINE

SOIL SAMPLE

MONITORING WELL

A TP XX B — TEST PIT

D.E.C. LOCATED SAMPLES

D.E.C. SB SAMPLE

D.E.C. SS SAMPLE

TP A — TP B — D.E.C. TEST PIT LOCATION

SURVEY BY: POPLI DESIGN GROUP, ARCHITECTURE + ENGINEERING, 555 Penbrooke Drive, Penfield NY 14526

PREPARED FOR: EA Engineering, P.C. and Its Affiliate EA Science and Technology

SURVEYOR JOB NUMBER:	3278.04
SURVEY CREW:	K. RYAN, W. STRATTON
DRAWN BY:	J. PHILLIPS
CHECKED BY:	M. VENTURO

REVISIONS

3/12/10	D.E.C. SAMPLE LOCATIONS ADDED
3/30/10	TRANSLATED TO STATE PLANE COORDINATES

TOPOGRAPHIC MAP

FOR THE NEW YORK STATE D.E.C.

MARSHALL TRANSFORMER SITE

SITE NO. 6-33-019

Town of Marshall, County of Oneida, State of New York

DATE: JANUARY 20, 2010

SCALE: 1" = 20'

SHEET: 1 OF 1

Appendix H

Data Usability Summary Report – Provided on CD

Appendix I

Laboratory Analytical Data – Provided on CD

Appendix J

GIS Data – Provided on CD