Jameco Industries Site

WYANDANCH, SUFFOLK COUNTY, NEW YORK

Final Engineering Report

NYSDEC Site Number: #1-52-006

Prepared for:

Watts Regulator Company
815 Chestnut Street
North Andover, MA 01845

Prepared by:

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AUGUST 2011

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CERTIFICATIONS

I, Matthew Hackman, am currently a registered professional engineer licensed by the State of New York (P.E. No. 083778), and, as a duly authorized representative of Watts Regulator Company, the former owner of 248 Wyandanch Avenue, Wyandanch, New York, had primary direct responsibility for implementation of the remedial program activities, and I certify that the Remedial Work Plan was implemented and that all construction activities were completed in substantial conformance with the DER-approved Remedial Work Plan, with any changes authorized by Department staff.

I certify that the data submitted to the Department with this Final Engineering Report demonstrates that the remediation requirements set forth in the Remedial Work Plan and in all applicable statutes and regulations, or alternative requirements authorized by Department staff, have been or will be achieved in accordance with the time frames, if any, established in for the remedy.

I certify that all use restrictions, Institutional Controls, Engineering Controls, and/or any operation and maintenance requirements applicable to the Site are contained in an environmental easement created and recorded pursuant ECL 71-3605 and that all affected local governments, as defined in ECL 71-3603, have been notified that such easement has been recorded.

I certify that a Site Management Plan has been submitted for the continual and proper operation, maintenance, and monitoring of all Engineering Controls employed at the Site, including the proper maintenance of all remaining monitoring wells, and that such plan has been approved by Department.

I certify that any financial assurance mechanisms required by the Department pursuant to Environmental Conservation Law have been executed.

I certify that all information and statements in this certification form are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law. I, Matthew E. Hackman, P.E., of 97 Asylum Road, Warwick, Rhode Island, am certifying as Owner's Designated Site Representative for the site.

Matthew E. Hackman	24 AUG 2011	
NYS Professional Engineer #083778	Date	Signature

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LIST OF ACRONYMS

Acronym	Definition
NYSDEC	New York State Department of Environmental Conservation
GEC	Goldman Environmental Consultants, Inc.
FER	Final Engineering Report
ROD	Record of Decision
SVOCs	Semi-Volatile Organic Compounds
CVOCs	Chlorinated Volatile Organic Compounds
AOC	Area of Concern
MTBE	methyl-tert-butyl-ether
ISCO	In-Situ Chemical Oxidation
IRM	Interim Remedial Measure
SVE	Soil Vapor Extraction system
HASP	Health and Safety Plan
SOPs	Standard Operating Procedures
QA/QCP	Quality Assurance/Quality Control Plan
SCOs	Soil Cleanup Objectives
SCGs	Standards Criteria and Guidance

FINAL ENGINEERING REPORT

1.0 BACKGROUND AND SITE DESCRIPTION

Watts Industries, Inc. (now know as Watt Water Technologies, Inc (herein referred to as Watts)) entered into a Consent Order with the New York State Department of Environmental Conservation (NYSDEC) in October 2003, to investigate and remediate a (then) 7.4-acre property located in Wyandanch, Suffolk County, New York. The property was remediated to industrial use and will be used for the manufacture of paint brushes.

The site is located in the County of Suffolk, New York and is identified as Block 02 and Lots 73.1 and 37.6 on the Suffolk County Tax Map, Parcel Numbers District 0100, Section 82.00. The (now) 9.35 ± acre (Parcels 1 and 3) site is located with in a mixed industrial/commercial/residential area bounded by Wyandanch Ave to the north, Rockland Ave to the east, Mount Ave to the west-southwest, and residential properties to the south-southeast. Refer to Figure 2A for a site plan and the boundaries of the site, or Figure 5 for the ALTA/ASCM Land Survey Map.

An electronic copy of this FER with all supporting documentation is included as Appendix M.

2.0 SUMMARY OF SITE REMEDY

2.1 REMEDIAL ACTION OBJECTIVES

As stated in the Amended Record of Decision (ROD), the Remedial Action Objectives (RAOs) were to eliminate or mitigate all significant threats to public health and/or the environment.

The remediation goals for the site were to eliminate or reduce to the extent practicable:

- Exposures of persons at or around the site to metals and semi-volatile organic compounds (SVOCs) in soil and groundwater; and
- The release of contaminants from soil into groundwater that may create exceedances of ambient groundwater quality standards.

The remediation goals for the site also included attaining, to the extent practicable, and with changes authorized by NYSDEC staff:

- Ambient Class GA groundwater quality standards; and
- The soil cleanup objectives specified in Technical and Administrative Guidance Memorandum (TAGM) #4046.

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2.2 DESCRIPTION OF SELECTED REMEDY

The site was remediated in accordance with the remedy selected by the NYSDEC in the Record of Decision (ROD) dated March 28, 2003 and the ROD Amendment dated March 2006.

The environmental conditions at the Site are broken down into Areas of Concern (AOC). The following is a summary of the five identified AOCs along with the AOC-specific remedial approach. The factors considered during the selection of the remedy are those listed in 6NYCRR 375-1.8. The following are the components of the selected remedy:

AOC#1 – Former Seepage Lagoon Area

Metals contaminated soil remained within the former seepage lagoon area, which is located in the loading/shipping area of the Linzer operation. Refer to Figure 2A, Site Plan of Remediation Areas and Sampling Locations. The amended ROD, selected in-situ solidification/stabilization as the preferred alternative, with the chemical treatment to be determined upon completion of a bench scale test, along with the following institutional controls:

- groundwater will not be used as a source of potable or process water without appropriate water quality treatment,
- an environmental easement was imposed, and a soil management plan was developed to ensure safety when and if contaminated soils are disturbed during any future subsurface construction activities,
- NYSDEC was notified prior to construction activities in AOC#1, and
- Watts shall be required to provide periodic inspections and annual certification that the institutional controls and engineering controls are in place and effective.

AOC#2 – Former Degreasing Area

No remedial actions were required for this area under the amended ROD as the AOC was the subject of an IRM, consisting of the installation and operation of a soil vapor extraction (SVE) system, initiated in 1997 and completed in 1999. Concentrations of CVOCs in groundwater have diminished to levels at, or near, relevant standards, criteria, and guidance (SCGs).

AOC#3 – Former Leaching Pool Area

Moderate to elevated concentrations of metals were detected in soils in this area, shown in Figure 2A. Low to moderate concentrations of metals were detected in groundwater monitoring wells located in the former leaching pool area. Based on concentrations of metals in groundwater samples from monitoring wells located in AOC#3, the amended ROD selected soil

excavation and off-site disposal at a permitted disposal facility. Contaminated soil was to be excavated from AOC#3 and from two exterior storm drains (B-27 and B-28), stockpiled, analyzed for disposal characteristics and transported off-site to a permitted disposal facility. Post excavation confirmatory endpoint soil samples were to be collected to ensure compliance with the recommended soil cleanup objectives (SCOs) specified in TAGM #4046. Excavated areas were then to be backfilled to original grade with certified clean fill. Institutional controls, similar to those outlined for AOC#1, were proposed for AOC#3.

The amended ROD did not change the remedial alternative. NYSDEC, however, did allow the following:

1) a limited amount of in-situ treatment along the southern property line of AOC#3 to save a line of pine trees;
2) excavated soil was tested and if concentrations were below acceptable levels the material was left in place or used as backfill; and,
3) the site cleanup objectives for soil were based upon TAGM #4046, with latitude authorized by NYSDEC staff.

Additionally, two storm drains which exist just outside the former leaching pool area were remediated via bottom sediment removal, and in-situ treatment was conducted surrounding the two structures via solidification/stabilization. Clean sand was placed in the bottom of the drains to prevent them from settling. A soil management plan is part of the site management plan which will ensure safe conditions during any future excavation work. Groundwater monitoring will evaluate the effectiveness of the remedy.

Because overflow of effluent wastewater from the leaching pool area affected soil at an adjacent property, 50 Oswego Place, soil was excavated and disposed of off-site at a permitted disposal facility. The soil clean-up objectives were met at the adjacent property, 50 Oswego Place, with a "No Further Action Required" letter issued to Watts and the homeowner by the NYSDEC. Refer to Appendix I for a copy of this letter.

AOC#4 – Cutting Oil Release Area

Soil samples collected from AOC#4 after the 2003 ROD was issued indicated that residual concentrations of semi-volatile organic compounds (SVOCs) remain in soil located near the water table and within the smear zone. SVOCs were not detected in site monitoring wells during the subsequent sampling event, and no measurable Light, Non-Aqueous Phase Liquid (LNAPL) was detected in the site monitoring wells (although a petroleum-sheen was periodically observed on groundwater samples in nearby wells). Approximately 500 cubic yards of petroleum contaminated soil was previously removed from that portion of AOC#4 between the

building and Wyandanch Avenue. This remedial work was terminated due to physical constraints; including proximity to the building, the roadway, and major utilities. Confirmatory sidewall samples indicated that contaminated soil remained beyond the limit of the remedial excavation.

Historically, CVOCs and methyl-tert-butyl-ether (MTBE) were detected in monitoring wells downgradient of this area in addition to SVOCs. Because concentrations of CVOCs and MTBE decreased rapidly toward the southeast (downgradient) and concentrations had decreased steadily over a period of several years, it was determined that the plume was decreasing in size due to natural attenuation and biodegradation. The presence of natural degradation products and reduced contaminant concentrations supported the presence of a shrinking and naturally degrading plume.

The original ROD selected excavation of contaminated soil and treatment of contaminated groundwater for this area. However, based on additional sampling results, the amended ROD selected in-situ treatment of residual soil and groundwater contamination via the injection of oxygen releasing compounds (ORC) to stimulate aerobic biological degradation of petroleum hydrocarbons and hydrogen releasing compounds (HRC) to stimulate anaerobic reductive dechlorination of chlorinated hydrocarbon compounds, with the resulting dechlorinated hydrocarbons further degraded by indigenous anaerobic and aerobic microorganisms. Both remedial additives were proposed to enhance naturally occurring biological degradation by indigenous microorganisms.

Subsequent to the amended ROD, soil samples were collected and a bench scale test was conducted to evaluate treatment alternatives as required. As a result of the bench scale test, GEC and Redox Tech proposed, an alternative in-situ chemical treatment method, namely In-Situ Chemical Oxidation (ISCO) using a strong oxidant, sodium persulfate (more specifically magnesium persulfate and sodium hydroxide), via injection into subsurface soil and groundwater. ISCO using sodium persulfate has been shown to be effective at oxidizing a wide range of petroleum hydrocarbon and halogenated hydrocarbon compounds, and was selected because it would be effective at remediating all the identified contaminants of concern at AOC#4: SVOC, MtBE and CVOCs. Please refer to Appendix I for a copy of the Pilot Test Results, presented by Redox Tech.

Since the amended ROD included either oxygen releasing compounds or hydrogen releasing compounds and required that “Prior to field implementation, laboratory bench scale tests will aid in the determination of the appropriate amount of compounds and total oxidant demand”, NYSDEC staff agreed that the use of ISCO instead of ORC & HRC did not require additional NYSDEC approval. However, the NYSDEC staff were informed in writing of the change to ISCO as the selected remedial alternative.

This change to the amended ROD also included a soil management plan to insure safe conditions during any future excavation work, and groundwater monitoring to evaluate the effectiveness of the remedy. Institutional controls, similar to those outlined for AOC#1, were proposed for AOC#4.

AOC#5 – Former Metals Plating Area

Low to moderate concentrations of metals were detected in soils in AOC#5. Low concentrations of metals were also detected in groundwater in this area, indicating no significant impact to groundwater. Metals concentrations in groundwater from monitoring wells in and downgradient of AOC#5 also decreased over time and were approaching SCGs.

The ROD selected soil excavation and off-site disposal of contaminated soil as the preferred remedy for this area (similar to AOC#1); however, based on groundwater sampling subsequent to the issuance of the 2003 ROD, residual soil contamination did not appear to significantly impact groundwater. As a result, the amended ROD selected in-situ solidification/stabilization as the preferred alternative. The specific chemical treatment was modified based on the results of the required bench scale test, as discussed below.

In addition institutional controls similar to those outlined above for AOC#1 and AOC#4 were also proposed for AOC#5.

3.0 INTERIM REMEDIAL MEASURES, OPERABLE UNITS AND REMEDIAL CONTRACTS

During the completion of response actions at the site, elevated concentrations of chlorinated compounds were detected beneath a portion of the building. An Interim Remedial Measure (IRM) was implemented to address this condition. The IRM selected and performed was the installation of a Soil Vapor Extraction (SVE) system, continued monitoring of the system and the collection and analysis of confirmatory vapor and soil samples, as discussed below.

3.1 INTERIM REMEDIAL MEASURES

In October 1997, following the submittal of a Proposed Design Plan for an SVE system and a pilot test, construction of a NYSDEC-approved SVE system began. Six extraction wells were installed and two 1,000-pound granular activated carbons vessels were used to treat vapors. The system was started up on December 3, 1997. After continued monitoring for five months and confirmatory air sampling, contaminant concentrations significantly declined and the SVE system was shut down on April 20, 1998. Additional soil borings were advanced to evaluate soil

conditions. Contaminant concentrations in one soil sample exceeded the applicable standards and the SVE system was restarted on May 10, 1999 and extraction wells were tuned and vapor flow rates adjusted to focus remediation efforts in the one area where contamination remained above standards. On June 22, 1999 another soil boring was advanced in this area and a soil sample was collected and analyzed; no compounds were detected above SCGs. Based on these results, GEC recommended shutting down the SVE system. An IRM Completion Report was submitted to NYSDEC on July 7, 1999.

Specific details regarding the construction, operation, and sampling of the SVE system can be found in the *Interim Remedial Measure Completion Statement* prepared by GEC and submitted to the NYSDEC on July 7, 1999. The information and certifications made in the Interim Remedial Measure Completion Statement were relied upon to prepare this report and certify that the remediation requirements for the site have been meet.

4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED

Remedial activities completed at the Site were conducted in accordance with the NYSDEC-approved Remedial Design (RD) Plan prepared for the Former Jameco site dated August 11, 2005. All deviations from the RD are noted, **in bold**, below.

The remedial actions outlined above have been completed with the following modifications:

AOC#1 – Former Seepage Lagoon Area

The bench scale test showed that ferrous sulfide would be very effective at solidifying/stabilizing the metals of concern in-situ in AOC#1 and AOC#5. However, during several attempts to inject the treatment solution in AOC#1 extreme pressures were needed to inject the required volume. Apparently solidification occurred very quickly around the borehole limiting the necessary distribution of the treatment solution throughout the surrounding soils. As a result, an alternative solution was needed. Bench scale tests were also run with calcium polysulfide (CaS_x) with similarly successful results. **As a result, calcium polysulfide was used in place of ferrous sulfide.** Since the amended ROD included a bench scale test was needed to determine the optimal mixture of chemical reagents for the treatment of AOC#1 and AOC#5, additional NYSDEC approvals were not required for this change. However the NYSDEC was made aware of the change via email; please refer to Appendix I for copies of relevant correspondence with the NYSDEC.

CaS_x is a proprietary formulation that precipitates most metals as a solid metal sulfide complex, and reduces hexavalent chromium and precipitates it as chromium hydroxide. The

calcium combines with available hydroxyl (OH^-) and carbonate (CO_3^{-2}) ions and precipitates as calcium carbonate ($CaCO_3$) and calcium hydroxide ($Ca(OH)_2$). The metals are thus incorporated into a cementatious hydroxide/sulfide mixture with soil, thus achieving both stabilization and solidification.

Based on bench-scale laboratory testing utilizing soil samples from the site, fifty-seven chemical injection points were installed across the area in a grid pattern, and 375 gallons of calcium polysulfide (CaS_x) were pumped into each injection point. These injections were conducted by New England GeoTech and Redox Technologies, from Jamestown, Rhode Island and Attleboro, Massachusetts, respectively, both under the supervision of GEC.

Six additional points were placed around two catch basins proximate to AOC#1 with each receiving similar quantities of CaS_x solution. The total volume of CaS_x solution injected into and proximate to AOC#1 was approximately 23,600 gallons. Some injection points were relocated due to property lines and immobile trailers located within AOC#1. In addition, oily water and oily sediment were removed from catch basins B-27 and B-28, referenced in the amended ROD above, using a vacuum truck. Please refer to Figure 2B for the injection points and Appendix J for a copy of the injection sheets.

AOC#2 – Former Degreasing Area

No remedial actions were required in AOC#2, but because of its proximity to AOC#5, residual contamination in AOC#2 was likely remediated by the application of CaS_x solution to AOC#5.

AOC#3 – Former Leaching Pool Area

4,063 cubic yards of metals contaminated soil were excavated from AOC#3 by Eastern Environmental Solutions (EES) of Manorville, New York, and transported off-Site for beneficial reuse at Safe Soil at Bellmawr Waterfront Development in Bellmawr, New Jersey. Please refer to Appendix D for copies of the Non-Hazardous Specific Waste Manifests and Weight Slips. Please refer to Table 6 for a summary of the soil disposal shipments. This material was shipped between November 29, 2007 and January 15, 2008. Please refer to Appendix I for a copy of New Jersey State Department of Environmental Protection (NJSDEP) letter of acceptance to receive this material at the Bellmawr facility.

Confirmatory soil samples were collected and analyzed and compared to the soil cleanup objectives specified in TAGM #4046 in order to limit the total volume of soil to be removed. In general, analyses of soil samples located in close proximity to the leaching chambers showed elevated concentrations of metals, and analyses of soil samples located between chambers often met TAGM #4046. Therefore, in some cases these soils were segregated and re-used on-site as

backfill, as discussed in more detail below.

Of the 48 original concrete leaching chambers, 42 chambers and associated piping were excavated from AOC#3 and the concrete debris transported off-Site for recycling at 110 Sand Company in West Babylon, New York. Please refer to Appendix D for copies of the weight slips. The concrete was transported off-site between December 3, 2007 and December 14, 2007. Approximately 279 cubic yards of material were removed.

Six chambers and surrounding soils located along the southern property line were treated in place with the injection of CaS_x into six injection points for in-situ chemical stabilization/solidification treatment similar to the remediation of AOC#1 and AOC#5. This approach was taken with the approval of NYSDEC in order to maintain a line of large white pine trees along the southern property line. Please refer to Appendix I for correspondence between GEC and the NYSDEC, including approvals for this change. During the excavation of soils in AOC#3, two existing monitoring wells, MW-3 and MW-4, were destroyed and these wells were replaced by EES on April 17, 2008. AOC#3 was backfilled with approximately 4,808 tons of certified clean backfill material and a four to six inch layer of processed gravel was placed over the area to provide a suitable load-bearing surface. The certified clean backfill material was provided by 110 Sand Company. The material was certified as being from a virgin source in a letter from James Debis, P.E to Mike Flynn December 18, 2007. Please also refer to the weight slips in Appendix F and Table 7 for a summary of the shipment. Please refer to approval of the material for backfill by the NYSDEC in an email to GEC dated December 21, 2007, provided in Appendix I.

During backfilling activities, two new concrete storm drain structures were installed near the north edge of AOC#3. These are individual leaching drainage structures designed to handle the surrounding storm water runoff as well as roof drains from the facility building.

During the assessment process of AOC#3, suspected asbestos containing material (ACM) piping (asbestos-cement pipe or ACP, also referred to by the trade name “Transite”) and pipe connections were discovered and were excavated for off-Site disposal at a permitted disposal facility at that time. Approximately 40 pipe connections, six feet of 8-inch diameter suspected ACP, and 30 feet of 10-inch diameter suspected ACP were removed from AOC#3 for disposal. The suspected ACP connecting plumbing and connectors were excavated by Eastern Environmental, removed from the excavation and loaded by Branch Services, a licensed asbestos handler, and were transported under TSCA waste manifest Number 56596-C by ATC to Minerva Enterprises, a licensed ACM TSCA disposal facility located in Waynesburg, Ohio. A copy of the waste manifest for the suspected ACP is provided in Appendix A.

As part of the AOC#3 remediation, approximately 15 cubic yards of soil was excavated from an adjacent property, 50 Oswego Place, abutting AOC#3 on the east side. This soil was

included with the material removed from AOC#3 for disposal. Refer to Appendix D for the waste manifests and weight slips. In general, the soil cleanup objectives specified in TAGM #4046 were met and the excavation was concluded at a depth of greater than 5 feet below grade.

AOC#4 – Cutting Oil Release Area

As described above, NYSDEC was notified of the use of ISCO using sodium persulfate as an alternative to oxygen releasing compounds or hydrogen releasing compounds for in-situ remediation of the SVOC, MtBE and CVOCs identified as contaminants of concern in soil and groundwater at AOC#4. Based on bench-scale laboratory testing utilizing soil samples from the site, a total of 24 injection points using 375 gallons of sodium persulfate were estimated to be required.

New England GeoTech and Redox Technologies installed 24 injection points in a grid across the AOC#4 area: twelve inside the building and twelve outside and adjacent to the north side of the building. GEC supervised the injection of 325 gallons of magnesium persulfate, with a sodium hydroxide catalyst, into each injection point for a total of 7,800 gallons. The injections were conducted at only enough pressure to maintain a ten gallon per minute flow rate. Please refer to Figure 2B for the injection point locations and Appendix J for a copy of the injection sheets.

AOC#5 – Former Metals Plating Area

GEC supervised the installation of fourteen injection points in AOC#2 and #5 for the purpose of remediating elevated levels of metals. Upon the completion of each injection points, Redox Technologies injected a total of 350 gallons of calcium polysulfide (CaS_x) solution at three foot vertical intervals in order to stabilize/solidify metals containing soils. Because of the closer spacing of the injection points, the volume of the CaS_x solution was reduced by 25 gallons per injection point compared to the injections in AOC#1. The array of injection points was not a uniform grid due to the presence of manufacturing equipment and occasional drilling obstructions. Please refer to Figure 2B for the injection point locations and Appendix J for a copy of the injection sheets.

The property boundaries subject to the environmental easement and institutional controls are shown on the attached Site Plan, ALTA/ASCM Land Title Survey of Parcels 1 & 3. A description of the meets and bounds is provided on the plan. A detailed description of the environmental easement is provided below. A discussion of the institutional controls and long term monitoring plan is provided within the approved Site Management Plan.

4.1 GOVERNING DOCUMENTS

The following is a general discussion of the governing documents as they were presented in the RD.

4.1.1 Site Specific Health & Safety Plan (HASP)

All remedial work performed under this Remedial Action was in full compliance with governmental requirements, including Site and worker safety requirements mandated by Federal OSHA. The site-specific Health and Safety Plan (HASP) was complied with for all remedial and invasive work performed at the Site.

This site-specific HASP was developed for both Site remedial actions and long-term groundwater monitoring. In the event that excavation work is performed after completion of the remedial activities, for example new earthwork construction or subsurface utility installation or repair work, the HASP can be modified and included in a Soils Management Plan. Please refer to Appendix G for a copy of the HASP.

4.1.2 Quality Assurance Project Plan (QAPP)

The QAPP, which consisted of GEC's Standard Operating Procedures (SOPs) and Quality Assurance/Quality Control Plan was included as Appendix A of the Remedial Design approved by the NYSDEC. Please also refer to a copy of GECs SOPs included here in Appendix H.

4.1.3 Site Management Plan (SMP)

A Site Management Plan was approved by NYSDEC on August 12, 2009. The Site Management Plan contains a Soil Management Plan which will be implemented in the event that subsurface excavation or construction activities are undertaken.

4.1.4 Community Air Monitoring Plan (CAMP)

During the soil excavation work conducted in AOC#3 perimeter dust monitoring was conducted. A dust monitor was placed on the fence located on the property line near the adjacent residential property, and the results were monitored daily. In addition, on particularly dry and windy days the excavation contractor applied tap water via a garden hose to the excavate material to moisten the soil and prevent wind blown dust.

4.1.5 Contractors Site Operations Plans (SOPs)

The Remediation Engineer reviewed all plans and submittals for this remedial project (i.e. those listed above plus contractor and subcontractor submittals) and confirmed that they were in compliance with the RD. All remedial documents were submitted to NYSDEC and NYSDOH in a timely manner and prior to the start of work.

4.1.6 Community Participation Plan

The Citizen Participation provides the interested/affected public with various opportunities to become informed and involved with this Site. The following measures were carried out.

A copy of the Remedial Design Plan report was placed into the Information Repositories. A public meeting was held, as part of the public comment period, to present and receive comment on the Remedial Design Plan, with notification through a fact-sheet and a NYSDEC press notice. The Fact Sheets were prepared to provide brief but clear overview of the investigations that were taking place at the former Jameco Industries Site and the additional work that was to be completed in accordance with the Remedial Design Plan and amended ROD.

4.2 REMEDIAL PROGRAM ELEMENTS

4.2.1 Contractors and Consultants

- The certifying Engineer of Record responsible for inspection of the work is Matthew E. Hackman, with on-site assistance from Goldman Environmental Consultants, Inc. In addition, during certain excavation activities Charter Environmental was responsible for the oversight of activities including the removal of underground structures and contaminated soil, backfilling the excavation with clean fill, conducting air monitoring, and the collection of confirmatory soil samples for laboratory analysis for AOC#3.
- 192 Branch Interior Services, Inc. was responsible for the removal of asbestos containing piping materials. The excavation contractor was Eastern Environmental Solution.
- Redox Technologies, LLC, with help from the drilling company New England GeoTech, Inc. performed the pilot tests, and ISCO treatment.

- Several state certified laboratories performed analytical services including Phoenix Environmental Laboratories, Inc., EcoTest Laboratories, Inc., Groundwater Analytical, Inc., and Long Island Analytical Laboratories, Inc.

4.2.2 Site Preparation

The following generally describes the site preparation work performed:

- The work was conducted in phases and included several AOCs. In some cases work was conducted simultaneously in more than one AOC. As a result, contactors may have mobilized and demobilized more than once throughout the duration of the project. Please refer to Section 4.1 and 4.3 for more details regarding the timeframe and dates for each activity performed.
- Because manufacturing is occurring on-site, access to each AOC was coordinated with the cooperation of the current property owner, Linzer Products. Prior to conducting remedial activities often equipment, materials, and vehicles were relocated.
- AOC#3 had become significantly overgrown and therefore the area was cleared prior to conducting remedial work.
- Erosion and sedimentation controls were not required;
- Utilities were marked by the owner, and DigSafe prior to subsurface activities;
- Pre-construction meeting with NYSDEC occurred throughout the duration of the project as activities occurred at various time in each of the AOCs;
- A pre-construction meeting for was held with NYSDEC and contractors on or about September 20, 2006.
- Documentation of agency approvals required by the RD is included in Appendix I. Other non-agency permits relating to the remediation project are provided in Appendix I.

4.2.3 General Site Controls

The following generally describe the site controls.

- The site is fenced in and secure. Linzer Products maintains property security with a locked gate that requires knowledge of a security code for access;
- GEC, Charter, and Redox Tech, as well as other contractors working on the site, documented daily activities in log books and daily log sheets;
- Erosion and sedimentation controls were not of particular concern, however a small soil berm was constructed on the downgradient end of AOC #3 to prevent soil erosion

and migration in the event of a rain storm, also stockpiled soils awaiting reuse and or off-site disposal were placed on asphalt and securely covered with polyethylene sheeting while awaiting transportation and disposal;

- In general, equipment used to excavate contaminated structures and soil in AOC#3 remained in that area while the work was being performed. Before the equipment was allowed to leave the site it was decontaminated in accordance with the requirements of the HASP and SMP;
- Soil screening results are discussed below in Section 4.3;
- Stockpile methods are discussed below in Section 4.3;
- During the removal of the last row of leaching chambers from AOC#3 petroleum contaminated soil was encountered (a separate release). The NYSDEC and Linzer Products were notified. Linzer Products took on the responsibility of assessing that issue.

4.2.4 Nuisance controls

The following is a brief description of the procedures for truck egress housekeeping, dust control, odor control, truck routing, and responding to complaints.

- Because trucks were not allowed to access contaminated areas (parked just outside the AOC during loading) truck washing was not necessary. However, if excess soil was found outside of the truck bed, it was brushed off, swept up, and placed back in the appropriate stockpile before the truck was allowed to leave the site. At the end of each day the equipment was properly stored and the area swept clean of any contaminated soil or debris.
- During excavation activities in AOC#3, during dry and windy days, dust suppression methods were employed by the contractor by keeping wet with water by spraying it down with a garden hose. In addition, dust monitors were placed around the perimeter of AOC#3 and checked daily to maintain compliance with the CAMP.
- There was no need for odor control.
- Trucks entered the site through the main gate and proceeded passed the loading docks toward AOC#3. Care was taken to not interrupt the daily flow of truck traffic of the Linzer Products delivery and shipping trucks.
- One neighbor requested that the brush be removed from around her existing wooded fence, located along the property line between the site and her property, and the fence be replaced with a matching vinyl fence. Watts paid to remove the brush and replace the fence. There were no other requests or complaints.

4.2.5 CAMP results

Copies of all field data sheets and/or laboratory analytical reports for the confirmatory soil samples are provided in electronic format in Appendix C. Airborne particulate (dust) monitoring results were recorded in the field and therefore no laboratory analytical results are available for the Community Air Monitoring Plan (CAMP).

4.2.6 Reporting

Daily field notes were maintained by GEC and Charter Environmental. Redox Tech maintained daily injection logs for the ISCO treatment, and the waste manifest and weight slips for the soil being shipped off site and clean backfill being brought on site were maintained by Eastern Environmental Solutions, and provided to GEC. The waste manifest for the transite piping is included in Appendix A, the non-hazardous special waste manifests and weight slips are provided in Appendix D, and the clean fill weight slips are provided in Appendix F, and the Redox Tech daily injection sheets/reports are included in electronic format in Appendix J.

The digital photo log required by the RD is included in electronic format in Appendix K.

4.3 CONTAMINATED MATERIALS REMOVAL

This section describes the removal activities for all contaminated media during the remedial action. In this case the contaminated media removed includes soil, concrete structures, and transite piping from AOC#3. The following is a discussion of the remedial activities conducted in AOC#3, including any remedial performance criteria, types and quantities of materials removed, the locations of the material treated or removed including references to figures showing the excavation and treatment areas.

4.3.1 Soil Removal from AOC#3: Former Leaching Pool Area

Initial remedial activities in AOC#3 occurred on September 20 and 21, 2006 at which time GEC supervised test pitting in AOC#3. Test pits were performed by Charter Environmental of Wilmington, MA. Because AOC#3 was heavily over grown, the area had to be cleared of all vegetation. Please refer to photographs provided in Appendix K. Upon completion, Charter performed fifteen test pits throughout the area. See Figure 3 for approximate locations. Ten soil samples were collected on September 19, 2006. Samples were collected for the purpose of pre-characterizing AOC#3 for waste disposal criteria. Pre-characterization was necessary for logistical purposes due to the limited space available for placing stockpiles and other logistical

constraints. The goal of pre-characterization was to allow for a direct-load soil transport, and to maximize reuse of soils meeting SCOs.

Pre-characterization soil samples were submitted to Phoenix Environmental Laboratories, a New York State certified (environmental laboratories accreditation program (ELAP)) laboratory located in Manchester, Connecticut. Samples were submitted for waste characteristic analysis including total mass and TCLP RCRA-8 metals (arsenic, barium, cadmium, chromium, lead, mercury, selenium and silver), polychlorinated biphenyls (PCBs), pesticides, TCLP herbicides, TCLP pesticides, volatile organic compounds (VOCs) and TCLP VOCs, semi-VOCs and TCLP acid/base neutrals. Characterization data for AOC#3 metals are summarized in Table 1A, TCLP data for the same metals is summarized in Table 1B. Laboratory analytical reports were previously submitted to the NYDEC in a report *Proposed Remedial Activities – AOC#3*, dated April 2, 2007, and are submitted again here in Appendix B. The report provided the pre-characterization data for AOC#3 along with a risk assessment update, the January 2007 and historic groundwater analytical data, and completed and proposed remedial actions for AOC#3 including a construction sequence. The following is a summary of that work along with the work conducted to complete the AOC#3 remediation.

At the time of test pitting on September 20 and 21, 2006, Charter encountered distribution pipes which carried discharge water to the 48 individual leaching pits. Charter observed that the connectors (Y's, sleeves and elbows) between lengths of pipe appeared to be made of asbestos containing material (ACM). These pipes are believed to have been Asbestos Cement Pipe (ACP), commonly referred to by the registered trademark name for the Johns Manville ACP product "Transite". Transite pipe consists of 12-50 percent asbestos and a cement binder. For convenience, this piping and fittings will be referred to as "Transite pipe" or "ACP". Charter made arrangements to return to the Site at a later time to remove and dispose of all ACP portions of the distribution system.

On November 1 and 2, 2006 GEC and Charter returned to the Site to locate and remove buried ACP pipe connectors within AOC#3. The second goal for work to be completed was to remove an estimated 30 to 50 foot section of 10-inch diameter ACP pipe which was observed along the east fence line of AOC#3. Charter Environmental subcontracted with Eastern Environmental Solutions on Long Island to provide the equipment and NY licensed personnel needed to locate and excavate ACP piping. Excavation work was done by a CAT 430B backhoe and the identification of ACP material was performed by Branch Services, a licensed asbestos abatement contractor, New York licensed number 28586. Refer to a copy of Branch's then-current license in Appendix A.

The excavation process revealed that piping connecting the 48 leaching structures consisted of linear runs of 4-inch diameter black PVC joined together by ACP sleeves, elbows

and “Y” connectors.

To ensure the buried ACP connections were located and removed, piping was initially located at each leaching structure and followed from structure to structure. Each connection that was encountered was examined and was differentiated from the PVC piping by its light color and greater density. ACP connectors were removed from the excavation by Branch personnel and stockpiled for later wrapping and removal from the Site for proper disposal as TSCA regulated asbestos waste. ACP connectors were not observed to be friable and were not broken into smaller pieces and were kept damp due to the weather. Prior to removal from the Site, ACP connectors were double wrapped by Branch Services and transported off-Site by ATC of Hampton Bays, New York, under appropriate TSCA Waste Manifest documentation for disposal at Minerva Enterprises at 9000 Minerva Road, S.E. Waynesburg, Ohio, a licensed TSCA asbestos disposal facility. The TSCA Waste Manifest number is 56596-C. Please see Appendix A for a copy of the TSCA Waste Manifest.

While locating and removing the above connectors, GEC encountered a linear section of 8-inch diameter pipe that exited from the southeast corner of the Site building, ran approximately twenty feet under pavement and extended into AOC#3 approximately twelve feet. The 8-inch pipe then ran east for approximately thirty feet to where it connected to the aforementioned 10-inch diameter pipe located along the east fence line. The 8-inch diameter piping was excavated and identified as PVC with the exception of approximately six feet of ACP piping which connected to the 10-inch diameter pipe located along the east fence line. The 8-inch diameter PVC pipe exiting the Site building was cut at the point where it emerged from under the asphalt and about six inches from the ACP and removed from the leaching field. The PVC pipe was plugged with foam, cleaned and set aside for disposal as construction debris. The six linear feet of 8-inch diameter ACP pipe was not initially taken off-Site with the ACP connectors due to size constraints but was temporarily stored on-Site (secured inside the fence) to be removed at a later date along with the 30 to 50 feet of 10-inch diameter ACP pipe at the time of soil excavation.

During the week of November 6, 2006 and after completing calcium polysulfide (CaS_x) injection in AOCs#1, #2 and #5, GEC installed six injection points at the southern extent of AOC#3, approximately twenty feet north of the fence/property line. Injection points were located between each of the six leaching structures and were installed to nine feet below grade. Using the same two to one mixture of water to calcium polysulfide and the same 375 gallon volume, Redox Tech injected 125 gallons of CaS_x solution into the soil at nine feet below grade and 250 gallons of CaS_x solution at six feet below grade. No CaS_x solution was injected at three feet below grade because of concerns that soil previously disturbed by test pitting would undermine pumping equipment. This injection procedure was done with the approval of the NYSDEC (refer to correspondence provided in Appendix I) in place of the planned excavation,

in order to prevent undermining of the line of mature white pines located near the fence line. Please refer to Appendix J for copies of Redox Tech's injection sheets which document the amount of ISCO treatment.

GEC returned to the Site on July 23, 2007 to collect composite samples of soils located immediately beside and under the leaching structures proposed to be removed. GEC also collected and composited samples of concrete from three leaching structures. Eastern Environmental Solutions was contracted to conduct the July 2007 subsurface work at the Site. Samples were submitted under chain-of-custody documentation to EcoTest Laboratories, a New York State certified laboratory (NY Lab ID No. 10320, Solid and Hazardous Waste Certificate Serial Numbers 38832 and 38833) located in Babylon, New York for analysis. Samples were analyzed for waste disposal criteria as listed above in this Section. Results of total metals analysis for composite samples and concrete samples are summarized in Table 1A and are included as Appendix B. Results of TCLP analysis for the same samples are summarized in Table 1B and are included as Appendix B

From November 28, 2007 to January 15, 2008 GEC remediated the remaining soil in AOC#3 by excavation, and removal from the Site under manifest documentation for beneficial reuse at Bellmawr Waterfront Development, 204 Harding Avenue, Bellmawr, New Jersey**.** Please refer to Appendix D for copies of the Non-Hazardous Special Waste Manifests and Weight Slips. This phase of site remediation was conducted in close cooperation with, and frequent on-site conferences with, representatives of NYSDEC.

Based on existing data, it appeared that the shallow soils above the leaching structures were less contaminated and may be suitable for backfill. As a result the shallow soil was removed and tested. The initial excavation removed approximately two feet of soil from above each leaching structure. Soil from above the structures (Top) was stored on Site in discrete and labeled stockpiles which were sampled and analyzed for the same confirmatory analytes.

GEC then excavated the stained (blue-green) soil proximate to and beneath each structure (after removing the concrete structure) down to groundwater, which was encountered approximately one or two feet below each structure, or at about 11 feet below ground surface. Each structure was lifted from the excavation and crushed for disposal.

The resulting crushed concrete was placed in a 'roll off' and, based on the results of previous concrete sampling and analysis, was transported off-Site for recycling as construction debris to 110 Sand Company of West Babylon, New York. Please refer to Appendix D for copies of the disposal documentation.

After removing each structure, the soil in the excavation walls was inspected for a bluish-green discoloration, characteristic of trivalent chromium hydroxide (blue-green) copper hydroxide (blue-green) and nickel hydroxide (green), as a visual indicator of residual metals.

Where found, discolored soil was excavated and place in stockpiles designated for off-site disposal. Due to limited space within AOC#3, soils were stockpiled and covered with 3-ml poly in the overflow paved parking area north of AOC#4. In addition, all soil between the base of each structure and the water table within the excavation was excavated and placed in stockpiles designated for off-site disposal. This material was later transported off-site to Bellmawr, as discussed below. Please refer to Appendix D for copies of the disposal documentation.

When all discolored soil had been removed, GEC collected soil samples from numerous locations along the excavation sidewalls, generally within one to two feet of the water table. Soil samples from within each excavation were composited and placed in appropriate laboratory provided sample containers. For every ten confirmatory samples, GEC submitted a matrix spike (MS) and matrix spike duplicate (MSD) to the laboratory in accordance with NYSDEC ASP Category B standards per TAGM SW-96-09. Results of soil sampling and analysis are contained in Appendix C, and are summarized in Table 2 and were forwarded to NYSDEC for their review and approval. GEC subsequently removed additional soil from those cells as required by NYSDEC, therefore Table 2 only provided confirmatory data representative of soils that remain and used as backfill. Backfilling of the remedial excavation was done only with the approval of NYSDEC.

Soil samples identified as "Top" were collected from the soil removed from above the leaching structures when this material was placed into discrete stockpiles. Because this material came from above the highest elevation of the leaching structures, it was hypothesized to not have been in constant contact with the wastewater, and thus should have been less contaminated and/or uncontaminated soil. Soil stockpiles with contaminant concentrations meeting the soil cleanup objectives listed in the table below, were eventually reused as backfill to the excavation. Piles with analyte concentrations greater than SCOs were transported off -site under manifest documentation for reuse by Soil Safe to Bellmawr Waterfront Development, located at 204 Harding Avenue, Bellmawr, New Jersey. Please refer to Appendix D for copies of the disposal documentation.

Sidewall soil samples identified as "Sides" were collected as confirmatory soil samples. Where confirmatory soil sample concentrations exceeded SCOs, additional soil was removed and disposed of at permitted disposal facility/.

According to the Amended ROD, soils were to be excavated down to the water table, and this was done throughout AOC#3.

Because the Remedial Action Plan and Amended ROD did not require removal of soil below the seasonal high water table, and because GEC's contractor actually removed soils into and slightly below the water table, based on visual discoloration, and with oral approval from the NYSDEC, GEC ceased collecting "Floor" samples. Therefore, confirmatory soil samples are not

applicable, and do not exist, from the base or "Floor" of the excavation in AOC#3.

In order to keep track of confirmatory soil samples, AOC#3 was divided into a grid with columns (1 through 6) running north-south and rows (A through G) running east-west, with A1 located in the southeast corner. Please refer to Figure 4. Based on visual observations of pervasive soil discoloration, combined with laboratory analytical results of confirmatory soil samples, the majority of the soil in rows D, E, F, and G (the northern half of AOC#3) were removed for off-site disposal by Soil Safe to Bellmawr Waterfront Development. Copies of manifests for these soils are attached in Appendix D.

Based on historical information and laboratory analytical results of soil samples collected from the rear yard of the residential property (50 Oswego Place) to the east of AOC#3, soil in a portion of the rear yard contained elevated levels of the four metals of concern (chromium, copper, nickel and zinc). Soil in the area shown on Figure 4 was excavated to a depth of three to five feet below grade to attain compliance with TAGM #4046, based on oral guidance from NYSDEC. Soil samples identified as "Norris" in Table 2 are samples collected from the backyard of the residential property abutting the Site to the east prior to soil removal.

Soil samples were collected prior to excavation at multiple depths in order to establish target depths for removal prior to excavation. In addition, GEC "over-excavated" soils to at least five feet below ground surface within the area shown of Figure 4, in order to be conservative because of the proximity to residential property. Also, because of the over-excavation below previously determined vertical limits of contamination, no additional confirmatory soil samples from the base of excavation were required by NYSDEC. As shown in Table 2, residual chromium levels were below the TAGM #4046 SCO of 50 ppm. There were only minor exceedances of the other metals at a depth of five feet below ground surface, but they are believed to have been removed as a result of the over-excavation.

Contaminated soil from both AOC#3 and the residential property at 50 Oswego Place was transported from the Site by Soil Safe of Columbia, Maryland under Non-Hazardous Special Waste Manifests numbers 1 through 123, in tri-axle dump trucks. Ten additional manifests representing numbers 124 through 133 are included but were inadvertently not numbered for the shipping dates January 3, 4, and 15, 2007. Soil was transported to Bellmawr Waterfront Development in Bellmawr, New Jersey for beneficial reuse. Non-Hazardous Special Waste Manifests and weight slips for each load are provided in Appendix D. A total of 4,063 tons of soil were removed from the Site.

The crushed concrete structures were transported in 25-cubic yard roll-off containers to 110 Sand Company of West Babylon, New York as construction debris to be recycled. Approximately 279 cubic yards of concrete were transported off Site. The weight slip documentation is provided in Appendix D.

After all impacted soil was removed from AOC#3, the soil remaining in the excavation, which had been documented as meeting SCOs by confirmatory sampling, or which had been approved to remain by NYSDEC (refer to correspondence between GEC and NYSDEC in Appendix I), was leveled and compacted. Acceptable soil, which had previously been removed from above the structures ("Top" samples) and which had been documented as meeting SCOs, was used as backfill. Once all on-Site backfill had been reused, imported backfill material, comprising clean fill soils, loam and bank run gravel, was obtained from the 110 Sand Company in West Babylon, New York, certified as virgin material, was used to complete the backfilling. See Appendix E for the letter of certification. Weight slips for each load of imported backfill brought on-Site is provided in Appendix F.

AOC#3 was backfilled to the original grade. The fill was distributed and compacted in two to four foot lifts using a bulldozer. Bank run gravel was used to backfill the excavation to about six inches below original grade with the final one-half foot being comprised of a compacted crushed concrete and Recycled Concrete Aggregate (RCA) blend.

The excavation in the backyard of 50 Oswego Place, which abuts AOC#3 on the east, was backfilled with bank run gravel in two to four foot lifts, with the final six inches of fill being loam for the planting of lawn seed. The area was later seeded.

A list of the soil cleanup objectives (SCOs) for the contaminants of concern for this project is provided in Table 1A and 2, and the table below.

In accordance with the requirements of the amended ROD, soils in AOC#3 were to be remediated and confirmatory endpoint soil samples collected to ensure compliance with the recommended soil cleanup objectives specified in TAGM #4046.

As discussed above, assessment and confirmatory soil samples were collected from AOC#3 both prior to and after soil removal. The primary contaminants of concern included chromium, copper, nickel, and zinc. The SCOs that were utilized for soil are summarized in the following table:

Site Clean-up Objectives

Analyte →	Chromium (total)	Copper	Nickel	Zinc
TAGM4046 concentration*[1] (mg/kg)	50	25	13	20

The primary goal was to reduce the total chromium concentration to 50 mg/kg (ppm) or below. In general, once the total chromium concentrations were reduced to acceptable levels the other constituents, copper, nickel and zinc were also found to be acceptable. Chromium levels at 50 Oswego Place were reduced to below 50 ppm. Please refer to an email between GEC and NYSDEC date December 7, 2007 provided in Appendix I regarding this issue.

As indicated in the Amended ROD, the cleanup goals are TAGM #4046 concentrations, however, where it is infeasible and/or unpractical and not cost effective to achieve those goals, institutional controls and an environmental easement have been put in place to ensure future public health, safety and protective of the environment concerns.

A figure of the location of original sources and areas where excavations were performed is shown in Figures 2A and 4.

4.3.2 Disposal Details

The disposal details were provided above in Section 4.3.1 including the following:

- Time frames;
- Total quantities removed:
- Disposal facility name(s);
- Summary of waste characterization sampling. Description of sampling approach (number of grabs/composites, locations, etc.) and table of results.
- Transporter names and license numbers;
- Appendices include:
- Waste characterization analytical data (Appendix B);
- Letter from the New Jersey DEP stating the approval to accept (Appendix I);
- Waste Manifests, and Non-Hazardous Special Waste Manifest (Appendix A and D);

[1] Technical and Administrative Guidance Memorandum 4046, Table 4.

Appendix D shows the weight slips and the total quantities of each category of material removed from the site and the disposal locations (4,063 tons of soil and 279 cubic yards of concrete). A summary of the samples collected to characterize the waste, and associated analytical results are summarized on Table 2.

Acceptance letter from the State of New Jersey to allow the Bellmawr Waterfront Development, LLC disposal facility owners to accept the material is attached in Appendix I.

Manifests are included in electronic format in Appendix A and D.

4.3.3 On-Site Reuse

The on-site reuse of soil was described above in Section 4.3.1 including the following:

- Procedures for segregating, storing and testing;
- Approvals (Appendix I):
- Description of the material reused, analytical results, and placement location.

4.4 REMEDIAL PERFORMANCE/DOCUMENTATION SAMPLING

This section reiterates the methodology and results of end-point sampling and demonstrates that SCOs were achieved and documents the levels of contamination remaining and what will be managed under the approved Site Management Plan. This section is brief because it is also discussed above in Section 4.3.1 above, and includes the following:

- Sampling approach and methodology;

  The sampling approach for AOC#3 was primarily to pre-characterize the soil for disposal, determine what if any soil could be reused, and to document the levels of any residual contamination. Most samples were grab samples from sidewalls, of the bottom of test pit or remedial excavations. Samples from stockpiles were generally composite samples, except for VOC samples, which were always grab samples.

- Results;

  The results were used to characterize the waste and obtain off-site disposal/recycling approvals, to segregate material for disposal and potential reuse as backfill, and for comparison to SCOs.

- QA/QC;

  Along with each data set, additional samples were collected for matrix spikes (MS), matrix spikes duplicates (MSD), field blanks, and trip blanks. These additional analyses were evaluated for quality assurance and quality control of each data set.

- Table;

Please refer to Table 1A and 1B for a summary of the Pre-Remedial Soil Analytical data for metals and TCLP, respectively. The Confirmatory Soil Analytical Data for Metals is provided in Table 2, and a Summary of Groundwater Analytical Data for PAHs and Total Metals is provided in Tables 4 and 5, respectively.

- Figure.

Please refer to Figure 2A Site Plan of Remediation Areas and Sampling Locations, Figure 2B Site Plan of Injection Well Locations, and Figure 4 AOC#3 Remedial Excavation Limits.

A table and figure summarizing all end-point sampling is included in Table 2 and Figure 4, respectively, and all exceedances of SCOs are highlighted on the table.

4.5 IMPORTED BACKFILL

After all impacted soil was removed from AOC#3, the soil remaining in the excavation, which had been documented as meeting the SCOs, or which had been approved to remain by NYSDEC (refer to correspondence between GEC and NYSDEC in Appendix I), was leveled and compacted. Acceptable soil, which had previously been removed from above the structures ("Top" samples) and which had been documented as meeting SCOs, was used as backfill. Once all on-Site backfill had been reused, imported backfill material, comprising clean fill soils, loam and bank run gravel, was obtained from the 110 Sand Company in West Babylon, New York, certified as virgin material, was used to complete the backfilling. See Appendix E for the letter of certification. Weight slips for each load of imported backfill brought on-Site is provided in Appendix F. A summary of the backfill shipments is provided in Table 7. A total of 4,808 tons of backfill material was brought to the site.

4.6 CONTAMINATION REMAINING AT THE SITE

Although ISCO treatment was used for SVOC and CVOC contamination in soil and groundwater, and solidification and stabilization of metals contaminated soil using calcium polysulfide (CaS_x) and soil excavation was used to remediate soils at the site to meet SCOs, some contaminated soil remains on-site which requires restrictions on the current and future use of the site to be implemented using Institutional Controls. In addition, low levels of groundwater contamination remain, which requires long-term monitoring and requires restriction of the current and future use of on-site groundwater to be implemented using Institutional Controls.

In AOC#3 the contaminated soil was removed down to the water table. It is likely that residual contamination remains below the water table. In AOCs#1, #3, and #5, in-situ

solidification/stabilization treatment was used to stabilize metals contamination and in AOC#4 ISCO treatment was used to treat SVOC, CVOCs and MTBE in soil and at the smear zone. In all cases the ROD assumed that residual levels of contamination would remain warranting restrictions on the current and future use of the site. As a result, an Environmental Easement was selected as the appropriate Institutional Control and has been recorded on the property deed (Appendix L).

Table 2 and Figure 4 summarize the results of all soil samples remaining at the site after completion of Remedial Action, with a comparison to the SCOs.

Since contaminated soil and groundwater remains beneath the site after completion of the Remedial Actions, institutional and engineering controls are required to protect human health and the environment. These engineering and institutional controls (ECs/ICs) are described in the following sections. Long-term management of these EC/ICs will include periodic review under the approved Site Management Plan and an annual certification prepared by a New York State licensed professional engineer that the remedy continues to operate as designed and is protective of human health and the environment..

4.7 ENGINEERING CONTROLS: SOIL COVER SYSTEM

Exposure to remaining contamination in soil/fill at the site is prevented by engineering controls, specifically some form of a soil cover system placed over the contaminated soils remaining on the site. The cover system is different in each of the AOCs and is comprised of one or more of the following:

- clean backfill,
- bituminous concrete (“asphalt”) pavement; and/or,
- concrete foundation slabs of buildings.

Figure 2A shows each of the five AOCs and the form of engineering control at each AOC.

AOC#1 is completely covered by the bituminous concrete pavement adjacent to the loading docks.

AOC#2 and AOC#5 are completely within the existing Site building and covered by the concrete foundation slab.

AOC# 3 is covered by approximately 5 feet of clean backfill (0 to 5 feet deep) and 6 feet of excavated soil reused for backfill (6 to 11 feet deep). Approximately 6 to 12 inches of compacted crushed concrete and Recycled Concrete Aggregate (RCA) blend is located at the surface.

Finally, AOC#4 is about 75 percent located beneath the building concrete foundation slab, and about 25 present located in front of the building and covered with approximately 8 to 10 feet of clean backfill soils, including a vegetative cover (grass) at the surface. An Excavation Work Plan, which outlines the procedures required in the event the cover system and/or underlying residual contamination are disturbed, is provided in the SMP.

4.8 INSTIUTIONAL CONTROLS

According to the amended ROD, institutional controls imposed for each AOC area shall include the following provision: Institutional Controls (ICs) will be imposed to prevent the use of groundwater as a source of potable or process water without appropriate water quality treatment. An Environmental Easement (EE) has been recorded on the property Deed with additional restrictions imposed to ensure safety in the event that residual contaminated soils were to be disturbed. The Environmental Easement requires a soil management plan if/when excavation activities take place on Site in any of the AOCs. A Soil Management Plan was submitted as an attachment in the approved Site Management Plan (SMP). The SMP was approved by the NYSDEC in a letter dated August 12, 2009, provided in Appendix I. The Soil Management Plan describes what is required during any future excavation work within the AOCs. The NYSDEC shall be notified in the event that such activities are necessary. Watts will also be required to provide annual certification to NYSDEC certifying that the institutional and engineering controls are still in place and effective.

The site remedy required that an Environmental Easement be recorded on the property Deed to:

1. implement, maintain and monitor the Engineering Controls;
2. prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and,
3. prevent the use of groundwater as a source of potable or process water without necessary water quality treatment.

The Environmental Easement for the site was executed by the Department on August 2, 2010, and filed with the Suffolk County Clerk on September 2, 2010. The Order/Index number for this filing is W1-0956-03-05. A copy of the easement and proof of filing is provided in Appendix L.

GEC will inspect the integrity of the monitoring wells, and that the Environmental Easement and Institutional Controls (EE/IC) are being maintained during each groundwater monitoring round. GEC will certify, on behalf of Watts, that the EE/IC is being maintained in

each annual groundwater monitoring report. The certification will indicate whether the EE/IC employed at the Site is unchanged from the previous certification and are:

- in-place and effective;
- performing as designed;
- nothing has occurred that would impair the ability of the controls to protect the public health and environment;
- nothing has occurred that would constitute a violation or failure to comply with any operation and maintenance plan for such controls;
- access is available to the Site to evaluate continued maintenance of such controls; and
- the certification included in the annual groundwater monitoring report.

4.9 DEVIATIONS FROM THE REMEDIAL ACTION WORK PLAN

Some minor deviations from the RD were implemented as discussed above and include the following:

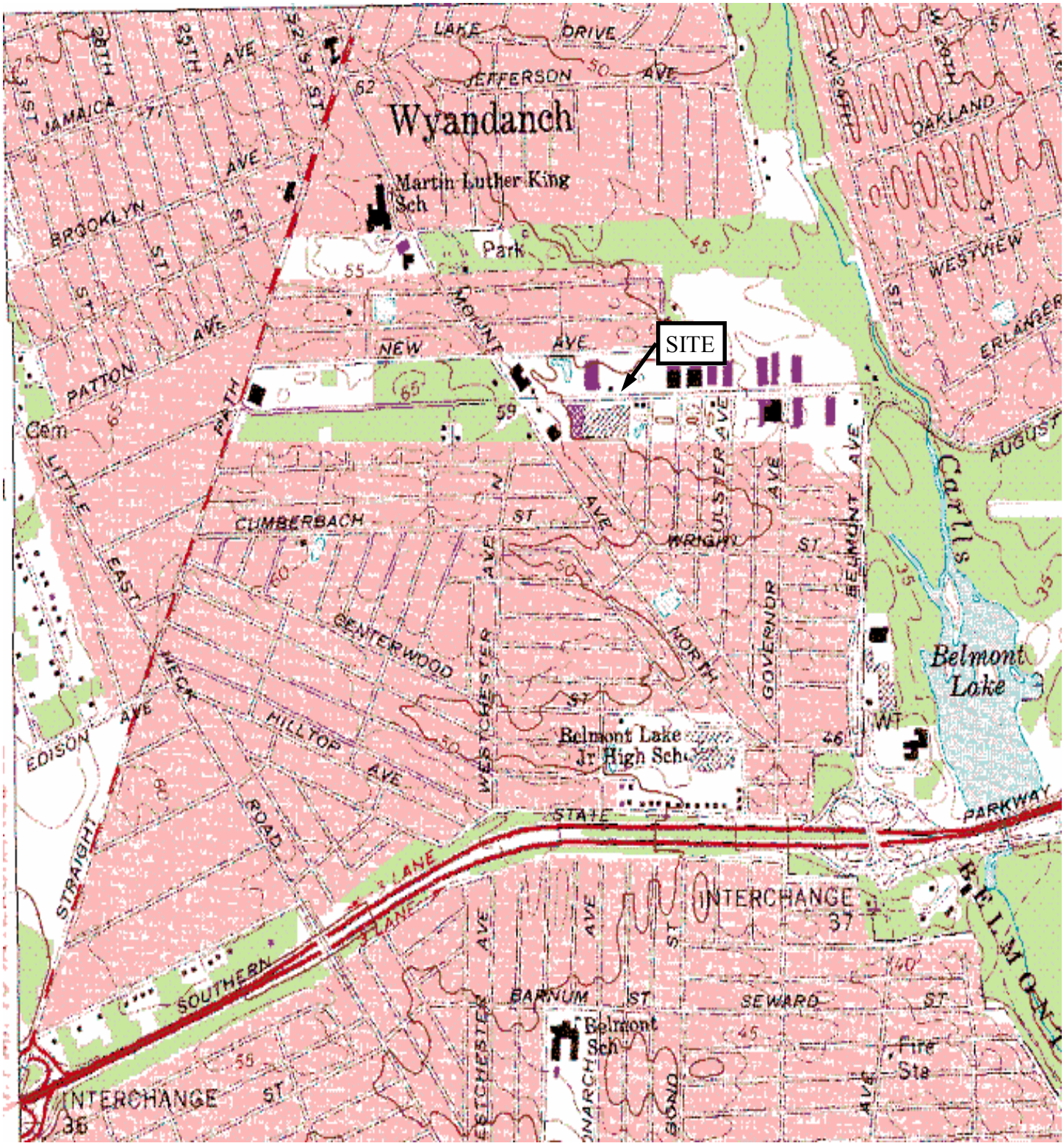
- Upon completion of the pilot test to determine the effectiveness of various ISCO treatments, the specific chemical injection formulas were selected for full scale treatment;
- Due to obstructions in AOC#1 a few proposed injection point locations were modified, however sufficient coverage was provided by increasing the number of injection points in those locations , see Figure 2B;
- In an effort to save a line of mature white pine trees along the southern property line of AOC#3, in-situ solidification/stabilization treatment was conducted instead of soil excavation;
- Some latitude was granted by the NYSDEC regarding cleanup objectives in determining compliance, specifically:
  - TAGM #4046 for total chromium in soil is 50 mg/kg; in some cases NYSDEC allowed chromium levels as high as 100 mg/kg to remain on-site; and,
  - At certain AOCs or portions of AOCs, over-excavation was used to eliminate known exceedances of SCOs, without the requirement for final confirmatory sampling, for example excavation below the water table.
- Approvals for these changes were provided by the NYSDEC (Appendix I).

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

FIGURES



USGS 7.5 Minute Topographic

Bay Shore
NewYork, Quadrangle

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60 Brooks Drive
Braintree, MA 02184
(781)356-9140 Fax: (781)356-9147
www.goldmanenvironmental.com

SITE LOCUS

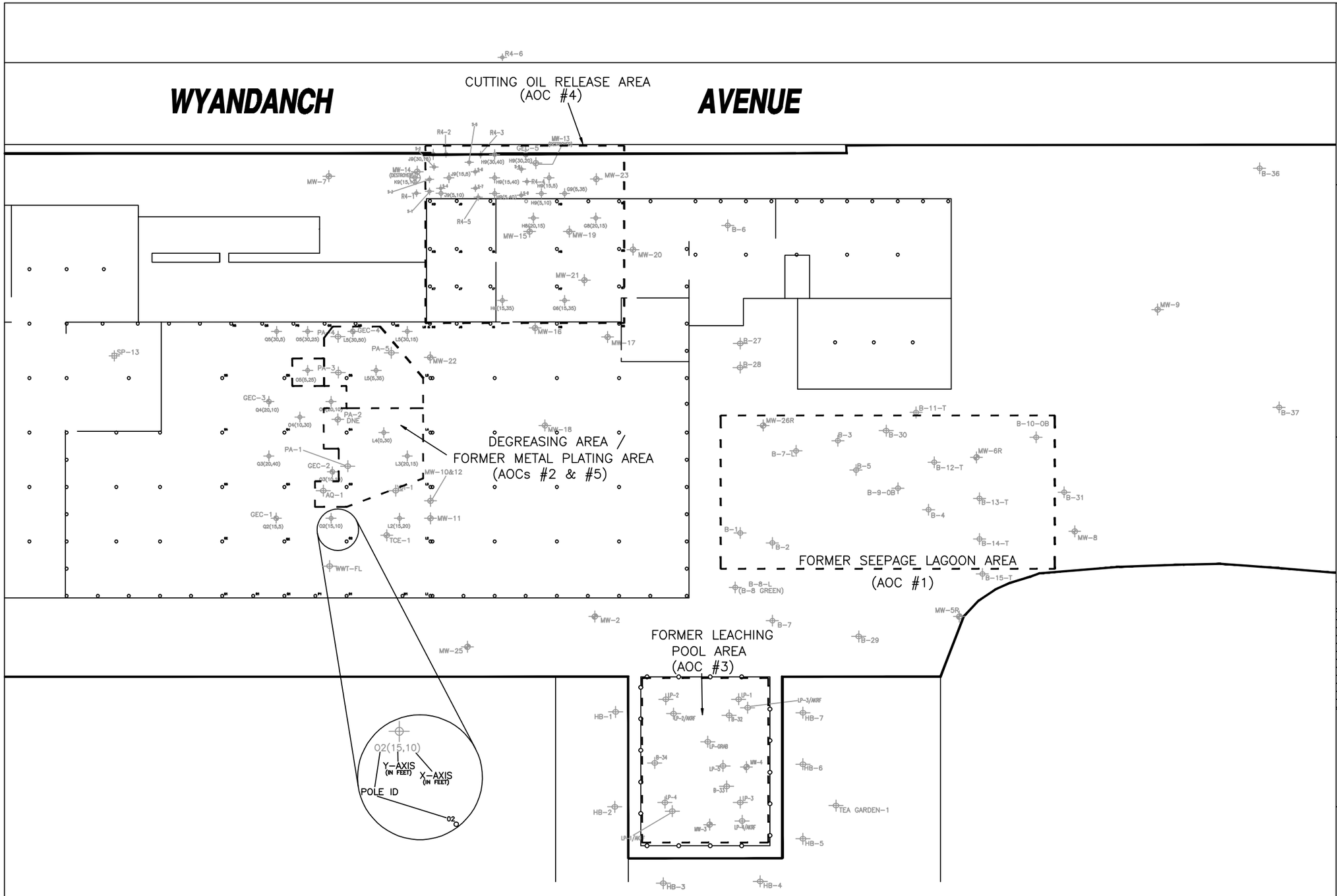
248 Wyandanch Avenue
Wyandanch, New York

GEC Project #: 444-5010

Figure 1

Scale
1 : 25,000

N



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Legend

- Site Boundary
- Area of Concern
- Monitoring Well
- Boring Location
- Support Column

Special Notes

1.) This drawing is a graphical representation only and should not be used as a survey.

2.) Boundary taken from Suffolk County Tax Map Dist. 100 Sect. 52 Block 2 Lot 73.1.

3.) Support Columns based on plan by John Baldassari P.C. Architect, A.I.A. number 2004, A1, dated 1-13-89.

4.) MW-10 Deep well (97') sent to MW-12 shallow well (15').

Revisions

Date	Revision	By	Appr.
February 25, 2004	Update of Engineer's Stock	JEF	DEB

Scale

0 60' 120'

1 : 30'

Site Plan of Remediation Areas & Sample Locations at

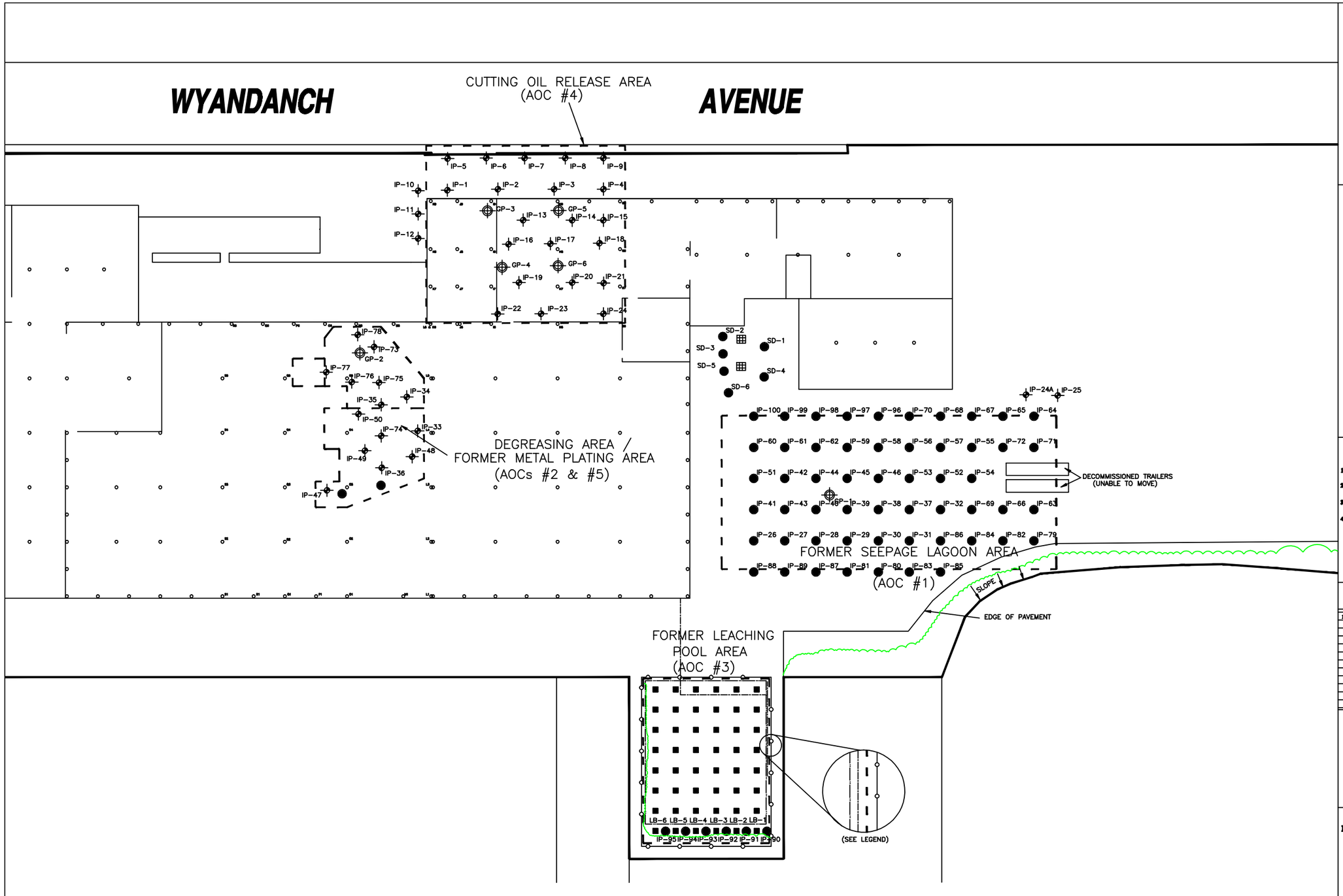
Former Jamaco Facility
240 W. Jamaica Avenue
Wyandanch, New York

Work
GEC Project Number 444-0202

N
W E
S

2A

Figure No.



GEC

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Legend

- Site Boundary
- Area of Concern
- Tree Line
- Excavation Limit
- Fence
- 8/10 Inch Pipe
- Injection Well
- Boring Location
- Support Column
- GP-1 — Geoprobe Boring
- IP-74 — Injection Point
- LB-1 — Leaching Basin

Special Notes

1.) This drawing is a graphical representation only and should not be used as a survey.

2.) Boundary taken from Suffolk County Tax Map Xlist. 100 Sect. 62 Block 2 Lot 73.1.

3.) Support Columns based on plan by John Soldanoff P.C. Architect, A.I.A. number 1004, A1, dated 1-12-93.

4.) MW-10 Deep well (97') next to MW-12 shallow well (19').

Revisions

Date	Revision	By	Appd.
February 25, 2004	Update of Geoprobe Work	JMF	MHB

Scale

0 40' 80'

1 : 30'

Site Plan of Injection Well Locations
at
Former Business Facility
248 Wyandanch Avenue
Wyandanch, New York

Work
GEC Project Number 404-4202

N
W E
S

2B

Figure No.

NOTES

1.) THIS DRAWING IS A GRAPHICAL REPRESENTATION ONLY AND SHOULD NOT BE USED AS A SURVEY.

FORMER LEACHING PIT AREA

N-15
NE-14
NO-12
NW-13
NO-11
E-10
W-9
NO-7
E-6
NO-8
MW-4
E-5
SW-4
S-3
S-2
SE-1
MW-3

HB-1
HB-2
HB-3
HB-4
HB-5
HB-6
HB-7

S-2 SIDE
S-1 BACK
TREE
TEA GARDEN-1

50 OSWEGO PLACE
NORRIS
RESIDENCE

OSWEGO PLACE

Goldman Environmental Consultants, Inc.
60 Brooks Drive
Braintree, MA 02184
(781) 356-9140 Fax: (781) 356-9147
www.GoldmanEnvironmental.com

Legend

- Monitoring Well
- Sample Location
- Stockpile Sampling

Special Notes

1.) This drawing is a graphical representation only and should not be used as a survey.
2.) Basemap taken from Suffolk County Tax Map Dist. 100 Sect. 82 Block 2 Lot 73.1.
3.) Support Columns based on plan by John Schimenti P.C. Architect, A.I.A. number 8864, A1, dated 1-12-99.
4.) MW-10 Deep well (97') next to MW-12 shallow well (15').
5.) Location of AOCs are approximate.

AOC #3
Test Pit Locations at Former Jameco Facility 248 Wyandanch Avenue Wyandanch, New York

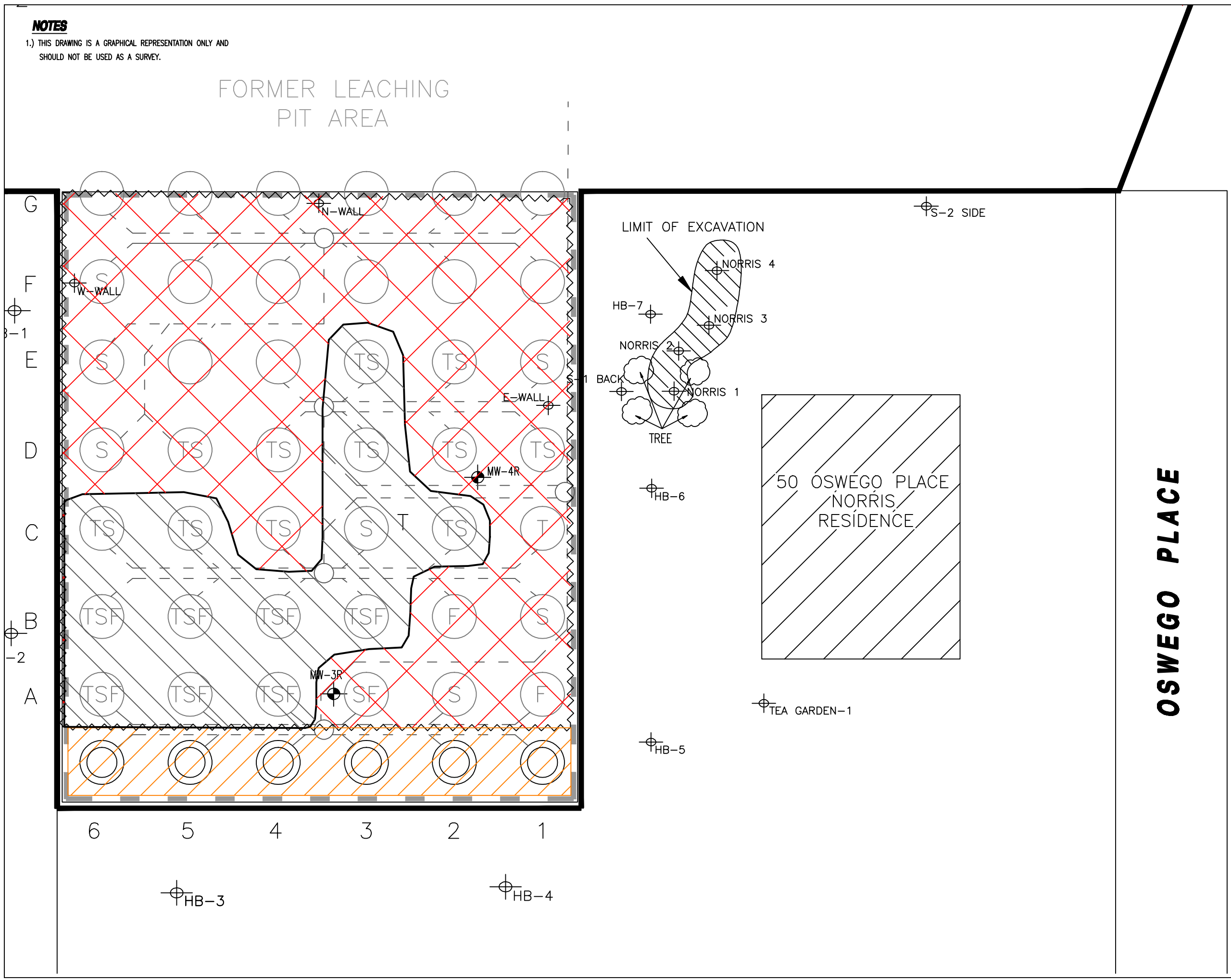
Watts
GEC Project Number 444-4081

N
W E
S

3
Figure No.

NOTES

1.) THIS DRAWING IS A GRAPHICAL REPRESENTATION ONLY AND SHOULD NOT BE USED AS A SURVEY.



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Legend

- Sample Location
- Monitoring Well
- ISCO Treated Area (Injection)
- Partial Excavation Area
- Complete Excavation Area
- Leaching Structures Remaining
- Leaching Structures Removed
- Piping
- Limit of Excavation
- T — Surface Soil Sample
- S — Composite Sidewall Sample
- F — Floor Sample

Special Notes

1.) This drawing is a graphical representation only and should not be used as a survey.

2.) Basemap taken from Suffolk County Tax Map Dist. 100 Sect. 52 Block: 2 Lot 73.1.

3.) Support Columns based on plan by John Schimmel P.C. Architect, A.I.A. number 8864, A1, dated 1-12-99.

4.) Remedial Excavation sample locations are labeled by row and column (B-4).

AOC #3

Remedial Excavation Limits at
Former Jamaco Facility
248 Wyandanch Avenue
Wyandanch, New York

Watts
GEC Project Number 444-088E

N
W E
S

4

Figure No.

PROPOSED ENVIRONMENTAL EASEMENT AREA

(PROPOSED ENVIRONMENTAL EASEMENT AREA SAME AS PROPERTY DESCRIBED IN SCHEDULE "A" IN DEED LIBER 11947 PAGE 375)

DESCRIPTION PARCEL 1

BEGINNING AT A POINT ON THE SOUTHERLY SIDE OF WYANDANCH AVENUE A DISTANCE OF 216.92 FEET EASTERLY FROM THE INTERSECTION FORMED BY THE SOUTHERLY SIDE OF WYANDANCH AVENUE, AS WIDENED, AND THE NORTHEASTERLY SIDE OF MOUNT AVENUE (BELMONT AVENUE)

RUNNING THENCE ALONG THE SOUTHERLY SIDE OF WYANDANCH AVENUE THE FOLLOWING THREE (3) COURSES:
1) N 89°30'20" E, 821.99 FEET;
2)N 00°29'40" W, 5.00 FEET;
3) N 89°30'20" E, 580.00 FEET; TO THE WESTERLY SIDE OF CARROLL STREET,

THENCE ALONG SAID ROAD LINE; S 00°29'40" E, 320.00 FEET; TO NORTHERLY BOUNDARY OF "REVISED MAP OF BELMONT ESTATES SECTION 3", FILED JUNE 21, 1926 FILE No. 1005,

THENCE ALONG SAID MAP LINE; S 89°30'20" W, 200.00 FEET;

THENCE THE FOLLOWING FOUR (4) COURSES AND DISTANCES:
1) N 34°11'04" W, 56.05 FEET;
2) NORTHWESTERLY ALONG THE ARC OF A CURVE BEARING TO THE LEFT HAVING A RADIUS OF 30.00 FEET AND LENGTH OF 29.48 FEET
3) S 89°30'20" W, 205.46 FEET;
4) SOUTHWESTERLY ALONG ARC OF A CURVE BEARING TO THE LEFT HAVING A RADIUS OF 60.00 FEET AND A LENGTH OF 94.25 FEET; TO NORTHERLY BOUNDARY OF "REVISED MAP OF BELMONT ESTATES SECTION 3", FILED JUNE 21, 1926,

THENCE ALONG SAID MAP LINE; S 89°30'20" W, 100.10 FEET; TO LOT 1294 AS SHOWN ON AFOREMENTIONED MAP,

THENCE ALONG SAID LOT THE FOLLOWING THREE (3) COURSES AND DISTANCES:
1) S 02°02'51" W, 115.79 FEET;
2) N 87°57'09" W, 100.00 FEET; TO THE WESTERLY SIDE OF EYRE PLACE,
3) ALONG SAID ROAD LINE; N 02°02'51" E, 111.35 FEET; TO THE NORTHERLY BOUNDARY OF SAID MAP,

THENCE ALONG SAID MAP LINE AND LAND NOW OR FORMERLY OF TORRES, S 89°30'20" W, 533.31 FEET; TO LAND NOW OR FORMERLY OF TUPPINS,

THENCE ALONG SAID LAND THE FOLLOWING TWO (2) COURSES AND DISTANCES:
1) N 00°29'40" , 113.15 FEET;
2) N 36°33'30" W, 249.68 FEET; TO POINT OR PLACE OF BEGINNING

DESCRIPTION PARCEL 3

BEGINNING AT THE NORTHEASTERLY TERMINUS OF OSWEGO PLACE AS SHOWN ON "REVISED MAP OF BELMONT PARKWAY ESTATES SECTION-3"(FILED JUNE 21, 1926; FILE No. 1005)

THENCE THE FOLLOWING FIVE (5) COURSES AND DISTANCES:
1) N 02°02'51" E, 9.47 FEET;
2) NORTHEASTERLY ALONG THE ARC OF A CURVE BEARING TO THE RIGHT HAVING A RADIUS OF 11.03 FEET AND A DISTANCE OF 16.84 FEET;
3) N 89°30'20" E, 19.99 FEET;
4) S 00°29'40" E 20.00 FEET;
5) S 89°30'20" W, 31.43 FEET, TO POINT OR PLACE OF BEGINNING

INSTITUTIONAL/ENGINEERING CONTROLS

AOC #1: ASPHALT WITH MINIMUM OF 6" OF MATERIAL (ASPHALT AND SUB BASE MATERIAL)

AOC #2: CONCRETE WITH A MINIMUM OF 6" OF MATERIAL (CONCRETE AND SUB BASE MATERIAL)

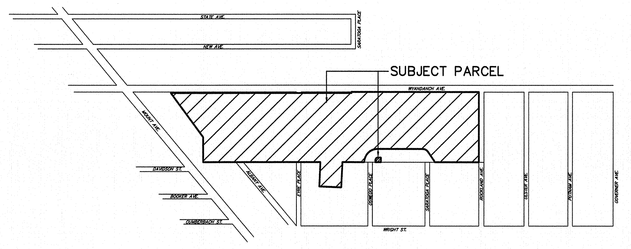
AOC #3: CERTIFIED CLEAN MATERIAL PLACED TO AVERAGE DEPTH OF 8 FEET; SIX LEACHING CHAMBERS FILLED WITH CLEAN MATERIAL THE TOP 6" OF MATERIAL ACROSS AOC #3 COMPACTED REPROCESSED CONCRETE.

AOC #4: CONCRETE WITH A MINIMUM OF 6" OF MATERIAL (CONCRETE AND SUB BASE MATERIAL)

AOC #5: CONCRETE WITH A MINIMUM OF 6" OF MATERIAL (CONCRETE AND SUB BASE MATERIAL)

GROUNDWATER SHALL NOT BE USED AS A SOURCE OF POTABLE OR PROCESS WATER WITHOUT APPROPRIATE QUALITY TREATMENT. REFER TO SITE MANAGEMENT PLAN SUBMITTED TO NEW YORK STATE DEPARTMENT OF CONSERVATION (GROUNDWATER RESTRICTION = 9.36 ACRES)

INSTITUTIONAL/ENGINEERING CONTROLS AS DESCRIBED WERE PROVIDED BY GOLDMAN ENVIRONMENTAL CONSULTANTS AND PREVIOUSLY APPROVED BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION. THESE INSTITUTIONAL/ENGINEERING CONTROLS ARE FURTHER DISCUSSED IN THE SOILS MANAGEMENT PLAN PREPARED AND COMPLETED BY GOLDMAN ENVIRONMENTAL CONSULTANTS ON JULY 27, 2009.



KEY MAP
1" = 600'

DESCRIPTION AOC 1 (AREA=0.42 ACS.±)

SUGGESTED DESCRIPTION OF "AREA OF CONCERN NO. 1", SITUATED AT WYANDANCH, TOWN OF BABYLON, COUNTY OF SUFFOLK, STATE OF NEW YORK

BEGINNING at the northeast corner of herein described parcel. Said point located the following two (2) courses and distances from the intersection formed by the westerly side of Carroll Street (Rockland Avenue) and the southerly side of Wyandanch Avenue.
1) S 89° 30' 20" W, 417.2 feet;
2) S 00° 29' 40" E, 183.5 feet; to the POINT or PLACE of BEGINNING

RUNNING THENCE the following four (4) courses:
1) S 00° 29' 40" E, 76.66 feet;
2) S 89° 30' 20" W, 240.06 feet;
3) N 00° 29' 40" W, 76.66 feet;
4) N 89° 30' 20" E, 240.06 feet; to the POINT or PLACE of BEGINNING.

DESCRIPTION AOC 2 (AREA=0.13 ACS.±)

SUGGESTED DESCRIPTION OF "AREA OF CONCERN NO. 2", SITUATED AT WYANDANCH, TOWN OF BABYLON, COUNTY OF SUFFOLK, STATE OF NEW YORK

BEGINNING at the northeast corner of herein described parcel. Said point located the following two (2) courses and distances from the intersection formed by the easterly side of Mount Avenue (Belmont Avenue) and the southerly side of Wyandanch Avenue.
1) N 89° 30' 20" E, 777.1 feet;
2) S 00° 29' 40" E, 109.06 feet; to the POINT or PLACE of BEGINNING

RUNNING THENCE the following four (4) courses:
1) S 00° 29' 40" E, 60.06 feet;
2) S 89° 30' 20" W, 95.06 feet;
3) N 00° 29' 40" W, 60.06 feet;
4) N 89° 30' 20" E, 95.06 feet; to the POINT or PLACE of BEGINNING.

DESCRIPTION AOC 3 (AREA=0.26 ACS.±)

SUGGESTED DESCRIPTION OF "AREA OF CONCERN NO. 3", SITUATED AT WYANDANCH, TOWN OF BABYLON, COUNTY OF SUFFOLK, STATE OF NEW YORK

BEGINNING at the northerly terminus of the easterly side of Eyre Place.
RUNNING THENCE the following four (4) courses:
1) N 89° 30' 20" E, 100.10 feet;
2) S 02° 02' 51" W, 115.79 feet;
3) N 87° 57' 09" W, 100.00 feet;
4) N 02° 02' 51" E, 111.35 feet; to the POINT or PLACE of BEGINNING.

DESCRIPTION AOC 4 (AREA=0.30 ACS.±)

SUGGESTED DESCRIPTION OF "AREA OF CONCERN NO. 4", SITUATED AT WYANDANCH, TOWN OF BABYLON, COUNTY OF SUFFOLK, STATE OF NEW YORK

BEGINNING at the northwest corner of herein described parcel. Said point located the following course and distance from the intersection formed by the easterly side of Mount Avenue (Belmont Avenue) and the southerly side of Wyandanch Avenue.
1) N 89° 30' 20" E, 777.1 feet; to the POINT or PLACE of BEGINNING

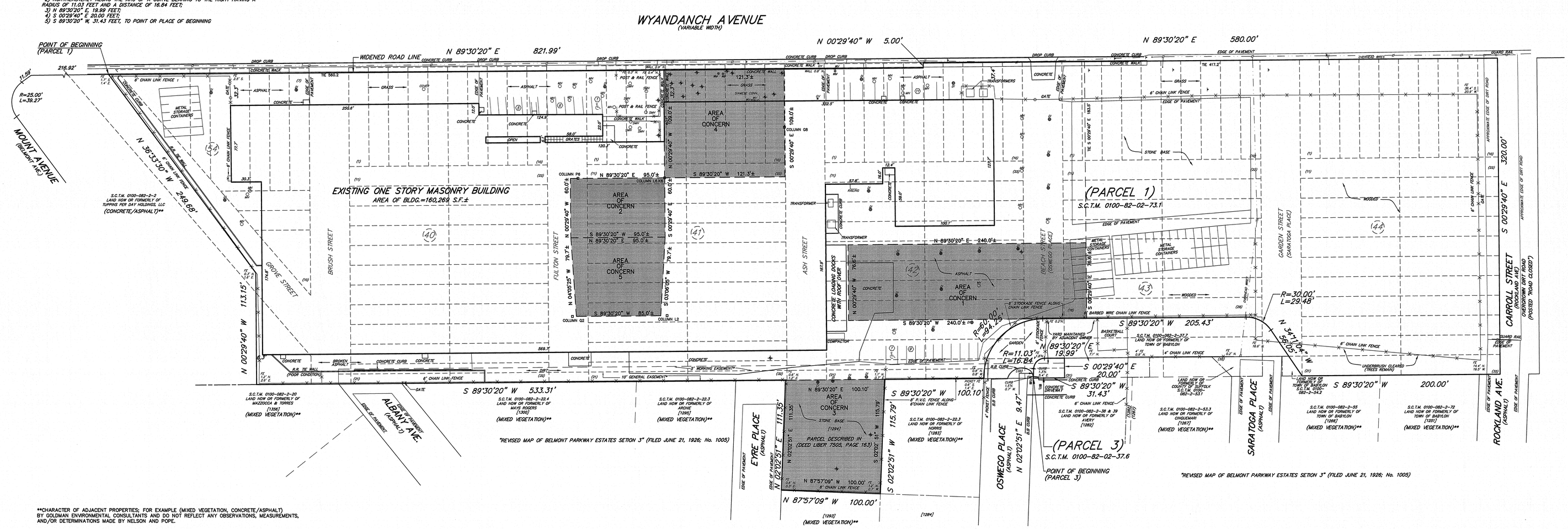
RUNNING THENCE the following four (4) courses:
1) N 89° 30' 20" E, 121.26 feet;
2) S 00° 29' 40" E, 109.06 feet;
3) S 89° 30' 20" W, 121.26 feet;
4) N 00° 29' 40" W, 109.06 feet; to the POINT or PLACE of BEGINNING.

DESCRIPTION AOC 5 (AREA=0.16 ACS.±)

SUGGESTED DESCRIPTION OF "AREA OF CONCERN NO. 5", SITUATED AT WYANDANCH, TOWN OF BABYLON, COUNTY OF SUFFOLK, STATE OF NEW YORK

BEGINNING at the northeast corner of herein described parcel. Said point located the following two(2) courses and distances from the intersection formed by the easterly side of Mount Avenue (Belmont Avenue) and the southerly side of Wyandanch Avenue.
1) N 89° 30' 20" E, 777.1 feet;
2) S 00° 29' 40" E, 169.06 feet; to the POINT or PLACE of BEGINNING

RUNNING THENCE the following four (4) courses:
1) S 03° 06' 05" W, 79.74 feet;
2) S 89° 30' 20" W, 85.06 feet;
3) N 04° 05' 25" W, 79.74 feet;
4) N 89° 30' 20" E, 95.06 feet; to the POINT or PLACE of BEGINNING.



**CHARACTER OF ADJACENT PROPERTIES; FOR EXAMPLE (MIXED VEGETATION, CONCRETE/ASPHALT) BY GOLDMAN ENVIRONMENTAL CONSULTANTS AND DO NOT REFLECT ANY OBSERVATIONS, MEASUREMENTS, AND/OR DETERMINATIONS MADE BY NELSON AND POPE.

LOT NUMBERS IN PARENTHESIS ( ) REFER TO "MAP OF NORTH BABYLON PARK" (FILED MARCH 27, 1908, ALSO FILED SEPT. 22, 1908; No. 368)
LOT NUMBERS IN BRACKETS [ ] REFER TO "REVISED MAP OF BELMONT PARKWAY ESTATES SETION 3" (FILED JUNE 21, 1926, No. 1005)

*EASEMENT NOTE

10' GENERAL EASEMENT AND 5' WORKING EASEMENT SHOWN AS PER "MAP OF PROPERTY" BY HAROLD R BAUSCH,PC DATED JULY 3, 1998

CERTIFICATION

I HERE BY CERTIFY TO THE NEW YORK STATE DEPARTMENT OF ENVIROMENTAL CONSERVATION THAT THIS MAP AND SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE "MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEYS", JOINTLY ESTABLISHED AND ADOPTED BY THE AMERICAN CONGRESS ON SURVEYING AND MAPPING IN 2005 AND THIS SURVEY AS DEFINED THEREIN.. THIS SURVEY WAS MADE ON THE GROUND ON JULY 31, 2008 AND SHOWS THE AREA OF THE SUBJECT PROPERTY, THE LOCATION AND TYPE OF BUILDINGS, STRUCTURES AND OTHER VISIBLE IMPROVEMENTS SITUATED ON THE SUBJECT PROPERTY.

FLOOD NOTE

SAID DESCRIBED PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION "X" (AREA DETERMINED TO BE OUTSIDE 500 YEAR FLOOD PLAIN) BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) AS PER FLOOD INSURANCE RATE MAP No. 3610130855 G, WITH AN EFFECTIVE DATE OF MAY 4, 1998.

FIELD SURVEY DATE: JULY 31, 2008
AREA PARCEL 1 = 9.35 ACS.
AREA PARCEL 3 = 596 S.F.

NOTES PERTAINING TO ITEMS LISTED IN "SCHEDULE B" OF A TITLE REPORT PREPARED BY COMMONWELTH TITLE INSURANCE COMPANY (TITLE NO. 70983714)

DECLARATION OF COVENANTS AND RESTRICTIONS IN LIBER 7505; PAGE 163 (CONCERNS SUBJECT PARCEL)

DECLARATION OF EASEMENTS IN DOCUMENT No 227473, LIBER 7761; PAGE 227 (DOES NOT CONCERN SUBJECT PARCEL)

TELEPHONE AGREEMENT IN LIBER 9690; PAGE 565 (DOES NOT CONCERN SUBJECT PARCEL)

LEGEND

- ⊢ – SIGN
- ⊏ – UTILITY POLE
- ⊕ – MONITORING WELL
- DI – DRAIN INLET
- MH – MANHOLE
- SMH – SANITARY MANHOLE
- WM – WATER METER
- WV – WATER VALVE
- GV – GAS VALVE

NOTES

UNDERGROUND, OVERHEAD AND GROUND LEVEL UTILITIES ARE NOT GUARANTEED AS TO ACCURACY, EXISTENCE, EXACT LOCATION, TYPE OR USE, ACTIVE OR INACTIVE. VERIFICATION IS MANDATORY WITH MUNICIPAL AGENCIES AND/OR PUBLIC OR PRIVATE UTILITY COMPANIES PRIOR TO CONSTRUCTION AND/OR EXCAVATION.

NO PHYSICAL EASEMENTS ON PROPERTY UNLESS NOTED. RECORDED EASEMENTS OR RIGHTS-OF-WAY, IF ANY, NOT SHOWN ARE NOT CERTIFIED.

UNAUTHORIZED ALTERATION OR ADDITION TO THIS MAP IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW. COPIES OF THIS MAP NOT BEARING THE LAND SURVEYORS INKED SEAL OR EMBOSSED SEAL SHALL NOT BE CONSIDERED TO BE A VALID TRUE COPY. GUARANTEES INDICATED HEREON SHALL RUN ONLY TO THE PERSON FOR WHOM THE MAP IS PREPARED, AND ON HIS BEHALF TO THE TITLE COMPANY, GOVERNMENTAL AGENCY AND LENDING INSTITUTION LISTED HEREON, AND TO THE ASSIGNEES OF THE LENDING INSTITUTION. GUARANTEES ARE NOT TRANSFERABLE TO ADDITIONAL INSTITUTIONS OR SUBSEQUENT OWNERS.

GRAPHIC SCALE
40 0 20 40 80 160
(IN FEET)
1 inch = 40 ft.

No.	DATE	REVISION	BY:
3.	08/19/09	REVISE AS PER DEC	BY:PF
2.	08/07/09	REVISE AS PER DEC	BY:PF
1.	12/03/08	REVISE AS PER CLIENT	BY:PF

STATE OF NEW YORK PAUL M. RAGE LIC. No. 050113 LICENSED LAND SURVEYOR

ALTA/ASCM LAND TITLE SURVEY OF PARCELS 1 AND 3
(@ 248 WYANDANCH AVENUE)
AS DESCRIBED IN DEED (LIBER 11947; PAGE 375, LIBER 9250; PAGE 385)
SITUATED AT
WYANDANCH
TOWN OF BABYLON, SUFFOLK COUNTY, NEW YORK
S.C.T.M. DISTRICT 0100 SECTION 82 BLOCK 02 LOTS 73.1 AND 37.6

DWN. BY:	PF
DATE:	AUG. 26, 2008
CHK'D BY:	
DATE:	
JOB No.:	93119
FILE No.:	X
CADD:	93119_S
SCALE:	1"=40'
SHEET:	X

NELSON & POPE
ENGINEERS • DESIGNERS • SURVEYORS
572 WALT WHITMAN ROAD, MELVILLE, N.Y. 11747-2188
(631) 427-5665 FAX (631) 427-5620

TABLES

Table 1A
Summary of Pre-Remedial Soil Analytical Data: Metals
248 Wyandanch Avenue, Wyandanch, New York
(unit, parts per million [ppm], mg/kg)

Sample Identification	Sample Grid	Sample Depth (ft)	Sample Date	Chromium	RDL	Copper	RDL	Nickel	RDL	Zinc	RDL
AOC #3 Historical Data											
MW-3	S-2	4-6	11/1991	2.99	- -	6.15	- -	5.83	- -	5.03	- -
	S-2	9-11	11/1991	8.13	- -	14.3	- -	**18.3**	- -	7.53	- -
	S-2	14-16	11/1991	**19.6**	- -	**40.0**	- -	**13.4**	- -	12.1	- -
	S-2	19-21	11/1991	**27.2**	- -	**65.4**	- -	**40.6**	- -	15.5	- -
MW-4	E-6	4-6	11/1991	9.43	- -	3.25	- -	**28.7**	- -	16.6	- -
	E-6	9-11	11/1991	**57.1**	- -	**83.1**	- -	**33.7**	- -	11.9	- -
	E-6	14-16	11/1991	**68.2**	- -	**89.7**	- -	**37.9**	- -	11.5	- -
	E-6	19-21	11/1991	**43.7**	- -	**90.6**	- -	**42.5**	- -	12.0	- -
LP-1	NG	NG	11/1991	**474**	- -	**182**	- -	**326**	- -	**104**	- -
LP-2	NG	NG	11/1991	**800**	- -	**496**	- -	**754**	- -	**317**	- -
LP-3	NG	NG	11/1991	**1,340**	- -	**299**	- -	**1,095**	- -	**468**	- -
LP-4	NG	NG	11/1991	**1,100**	- -	**280**	- -	**938**	- -	**236**	- -
LP-1	NE-14	6-8	11/18/1998	**602**	- -	**98.3**	- -	**777**	- -	**155**	- -
LP-1**	NE-14	6-8	11/18/1998	**17,500**	- -	**1,900**	- -	**13,300**	- -	**3440**	- -
LP-2	NW-13	6-8	11/18/1998	**23,700**	- -	**4,400**	- -	**8,420**	- -	**2,120**	- -
LP-2**	NW-13	6-8	11/18/1998	**31,700**	- -	**4,760**	- -	**20,600**	- -	**6,800**	- -
LP-3	E-5	6-8	11/18/1998	**905**	- -	**197**	- -	**1,220**	- -	**226**	- -
LP-4	SW-4	6-8	11/18/1998	**580**	- -	**106**	- -	**752**	- -	**164**	- -
LP-4 Duplicate	SW-4	6-8	11/18/1998	**693**	- -	**119**	- -	**904**	- -	**203**	- -
B-32	NO-11	0-2	11/18/1998	**961**	- -	**955**	- -	**516**	- -	**190**	- -
B-32	NO-11	5-7	11/18/1998	3.40	- -	1.60	- -	2.20	- -	**28.9**	- -
B-33	S-2	0-2	11/18/1998	**85.1**	- -	**51.6**	- -	**32.3**	- -	18.9	- -
B-33	S-2	5-7	11/18/1998	2.00	- -	1.20	- -	1.90	- -	7.00	- -
B-34	W-9	0-2	11/18/1998	**182**	- -	**262**	- -	**440**	- -	**89.9**	- -
B-34	W-9	5-7	11/18/1998	3.70	- -	1.90	- -	2.40	- -	**24.9**	- -
50 Oswego Street - Norris Residence											
HB-5	NA	Surface	11/19/1998	**19.8**	- -	**38.9**	- -	12.8	- -	**87.4**	- -
HB-6	NA	Surface	11/19/1998	**31.8**	- -	**31.0**	- -	**20.0**	- -	**45.2**	- -
HB-7	NA	Surface	11/19/1998	**34.4**	- -	**32.4**	- -	**24.8**	- -	**81.6**	- -
Tea Garden	NA	Surface	11/19/1998	**24.0**	- -	**42.3**	- -	**20.8**	- -	**53.2**	- -
NYSDEC		Soil Cleanup Objective		10 or SB		25 or SB		13 or SB		20 or SB	

Notes:

Bold = **Bold results exceed standards.**
Grid Samples = Composite samples from each gri
50 Oswego St.= Samples from property abutting A
Composite # = Composite samples from stained s from beside and beneath leaching structure.

RDL = Laboratory Reported Detection Limit
NA = Not Analyzed
ND = Not detected above RDL
SB = Site Background

Prepared by: BTB
Reviewed by: NI
Revised: 12/18/2006

Table 1A
Summary of Pre-Remedial Soil Analytical Data: Metals
248 Wyandanch Avenue, Wyandanch, New York
(unit, parts per million [ppm], mg/kg)

Sample Identification	Sample Grid	Sample Depth (ft)	Sample Date	Chromium	RDL	Copper	RDL	Nickel	RDL	Zinc	RDL
AOC #3 Recent Data											
Grid Samples											
SE-1	SE-1	NA	9/19/06	**25.3**	0.5	14.8	0.5	**14.4**	0.5	7.82	0.5
E-5	E-5	NA	9/19/06	**248**	5	**90.9**	0.5	**81.4**	0.5	**25.5**	0.5
S-2	S-2	NA	9/19/06	**25.6**	0.5	12.7	0.5	**15.3**	0.5	11.9	0.5
E-6	E-6	NA	9/19/06	**114**	0.5	**59.6**	0.5	**130**	5	**41.2**	0.5
E-10	E-10	NA	9/19/06	**578**	5	**122**	0.5	**261**	5	**61.8**	0.5
NE-14	NE-14	NA	9/20/06	**121**	0.5	**100**	0.5	**111**	0.5	**60.6**	0.5
NO-7	NO-7	NA	9/20/06	**34.9**	0.5	**35.6**	0.5	**38.2**	0.5	**22**	0.5
NO-11	NO-11	NA	9/20/06	**80**	0.5	**64.8**	0.5	**62.1**	0.5	**26.4**	0.5
N-15	N-15	NA	9/20/06	**680**	5	**242**	5	**498**	5	**136**	0.5
NO-12	NO-12	NA	9/20/06	**54.3**	0.5	**67.5**	0.5	**63.5**	0.5	**23.8**	0.5
NO-8	NO-8	NA	9/20/06	**98**	0.5	**113**	0.5	**64.4**	0.5	**23.1**	0.5
S-3	S-3	NA	9/21/06	**66.4**	0.5	**35.9**	0.5	**84.7**	0.5	**26.9**	0.5
SW-4	SW-4	NA	9/21/06	**57.4**	0.5	**25.5**	0.5	**27.2**	0.5	8.78	0.5
W-9	W-9	NA	9/21/06	**352**	5	**198**	5	**140**	0.5	**42.7**	0.5
NW-13	NW-13	NA	9/21/06	**85.3**	0.5	**34.1**	0.5	**37.2**	0.5	12.1	0.5
A-6 Top	A-6	Top	11/30/07	**135**	1.7	**79.3**	1.7	**80.5**	1.7	**45.4**	1.65
B-4 Top	B-4	Top	11/30/07	**272**	1.7	**419**	1.7	**408**	1.7	**115**	1.65
D-1 Top	D-1	Top	12/4/07	**101**	1.7	**107**	1.7	**112**	1.7	**58.9**	1.65
E-2 Top	E-2	Top	12/6/07	**133**	1.7	**105**	1.7	**109**	1.7	**46**	1.65
E-3 Top	E-3	Top	12/6/07	**159**	1.7	**429**	1.7	**148**	1.7	**136**	1.65
A-2 Side Wall	A-2	Sides	11/29/07	34	1.7	23.7	1.7	8.7	1.7	8.5	1.65
A-3 Sides	A-3	Sides	11/29/07	**185**	1.7	**47.3**	1.7	**52.8**	1.7	18.2	1.65
C-4 Sides	C-4	Sides	12/4/07	**143**	1.7	**34.4**	1.7	**23.8**	1.7	16.8	1.65
D-1 Sides	D-1	Sides	12/4/07	**113**	1.7	**100**	1.7	**107**	1.7	**51.7**	1.65
D-2 Sides	D-2	Sides	12/5/07	**115**	1.7	**39.6**	1.7	**32.9**	1.7	12	1.65
D-4 Sides	D-4	Sides	12/5/07	**107**	1.7	**42**	1.7	**25.6**	1.7	18.2	1.65
D-5 Sides	D-5	Sides	12/5/07	**124**	1.7	**52.7**	1.7	**19.8**	1.7	12.7	1.65
D-6 Sides	D-6	Sides	12/5/07	**165**	1.7	**31.7**	1.7	**30.5**	1.7	14.6	1.65
E-1 Sides	E-1	Sides	12/6/07	**146**	1.7	**78.2**	1.7	**60**	1.7	**39.3**	1.65
E-2 Sides	E-2	Sides	12/6/07	**132**	1.7	**63.4**	1.7	**57.3**	1.7	**30.4**	1.65
E-6 Sides	E-6	Sides	12/7/07	**106**	1.7	**40.3**	1.7	**13.1**	1.7	8.5	1.65
50 Oswego Street - Norris Residence											
S-1 Back	NA	0.3	1/24/2007	**140**	12	**75**	23	**41**	12	**120**	58
S-2 Side	NA	0.3	1/24/2007	**29**	11	23	22	**13**	11	**69**	56
Norris-1	NA	6"	12/19/2007	**46.6**	1.7	**73.3**	1.65	**47.1**	1.65	**64.6**	1.65
Norris-2	NA	1"	12/19/2000	**69.1**	1.7	**97.5**	1.65	**82.9**	1.65	**64**	1.65
Norris-2	NA	6"	12/19/2007	**485**	1.7	**673**	1.65	**1,016**	1.65	**347**	1.65
Norris-2	NA	12"	12/19/2007	**329**	1.7	**472**	1.65	**779**	1.65	**397**	1.65
Norris-2	NA	1-2'	12/26/2007	**107**	1.7	**148**	1.65	**522**	1.65	**226**	1.65
Norris-2	NA	2-3'	12/26/2007	**28.1**	1.7	**26.1**	1.65	**152**	1.65	**59.3**	1.65
Norris-3	NA	0-1'	12/26/2007	**252**	1.7	**340**	1.65	**464**	1.65	**164**	1.65
Norris-3	NA	1-2'	12/26/2007	**68.3**	1.7	**144**	1.65	**770**	1.65	**263**	1.65
Norris-3	NA	2-3'	12/26/2007	**10.8**	1.7	21.1	1.65	**346**	1.65	**114**	1.65
Norris-3	NA	3.5-4'	1/2/2008	5.6	1.7	5.5	1.65	**108**	1.65	**49.4**	1.65
Norris-4	NA	1.5-2'	1/2/2008	**293**	1.7	**488**	1.65	**1,008**	1.65	**353**	1.65
Norris-4	NA	3.5-4'	1/2/2008	**11.8**	1.7	**25.2**	1.65	**237**	1.65	**67**	1.65
Composite 1	NA	NA	7/23/2007	**1500**	0.538	**320**	1.075	**970**	1.08	**260**	1.08
Composite 2	NA	NA	7/23/2007	**570**	0.556	**190**	1.111	**320**	1.11	**72**	1.11
Composite 3	NA	NA	7/23/2007	**850**	0.543	**200**	1.087	**350**	1.09	**98**	1.09
Concrete 1	NA	NA	7/23/2007	**430**	0.625	**450**	1.25	**1200**	1.25	**230**	1.25
NYSDEC	Soil Cleanup Objective			10 or SB		25 or SB		13 or SB		20 or SB	

Notes:

Bold = Bold results exceed standards.
Grid Samples = Composite samples from each grid location
50 Oswego St.= Samples from property abutting AOC #3
Composite # = Composite samples from stained soil collected from beside and beneath leaching structure.
RDL = Reported Detection Limit
NA = Not Analyzed
ND = Not detected above RDL
SB = Site Background

Prepared by: BTB
Reviewed by: NI
Revised: 12/18/2006

TABLE 1B
SUMMARY OF PRE-REMEDIAL SOIL ANALYTICAL DATA:
TOXICITY CHARACTERISTICS LEACHATE PROCEDURE (TCLP)
248 Wyandanch Avenue, Wyandanch, New York
(unit, parts per million [ppm], mg/l)

Sample Identification	Sample Depth	Sample Date	Analytical Method	Arsenic	LRL	Barium	LRL	Cadmium	LRL	Chromium	SQL	Copper	SQL	Lead	SQL	Mercury	LRL	Selenium	LRL	Silver	LRL	Nickel	SQL	Zinc	SQL
MW-3	4 - 6	11/91	NG	NA	- -	NA	- -	NA	- -	1.41	- -	NA	- -	ND	- -	NA	- -	NA	- -	NA	- -	NA	- -	NA	- -
	9 - 11	11/91	NG	NA	- -	NA	- -	NA	- -	0.82	- -	NA	- -	ND	- -	NA	- -	NA	- -	NA	- -	NA	- -	NA	- -
	14 - 16	11/91	NG	NA	- -	NA	- -	NA	- -	1.88	- -	NA	- -	ND	- -	NA	- -	NA	- -	NA	- -	NA	- -	NA	- -
	19 - 21	11/91	NG	NA	- -	NA	- -	NA	- -	2.38	- -	NA	- -	ND	- -	NA	- -	NA	- -	NA	- -	NA	- -	NA	- -
MW-4	4 - 6	11/91	NG	NA	- -	NA	- -	NA	- -	**6.00**	- -	NA	- -	ND	- -	NA	- -	NA	- -	NA	- -	NA	- -	NA	- -
	9 - 11	11/91	NG	NA	- -	NA	- -	NA	- -	2.70	- -	NA	- -	ND	- -	NA	- -	NA	- -	NA	- -	NA	- -	NA	- -
	14 - 16	11/91	NG	NA	- -	NA	- -	NA	- -	3.45	- -	NA	- -	ND	- -	NA	- -	NA	- -	NA	- -	NA	- -	NA	- -
	19 - 21	11/91	NG	NA	- -	NA	- -	NA	- -	3.59	- -	NA	- -	ND	- -	NA	- -	NA	- -	NA	- -	NA	- -	NA	- -
LP-1	NG	11/91	NG	NA	- -	NA	- -	NA	- -	**5.08**	- -	NA	- -	ND	- -	NA	- -	NA	- -	NA	- -	NA	- -	NA	- -
LP-2	NG	11/91	NG	NA	- -	NA	- -	NA	- -	**21.8**	- -	NA	- -	ND	- -	NA	- -	NA	- -	NA	- -	NA	- -	NA	- -
LP-3	NG	11/91	NG	NA	- -	NA	- -	NA	- -	**38.5**	- -	NA	- -	ND	- -	NA	- -	NA	- -	NA	- -	NA	- -	NA	- -
LP-4	NG	11/91	NG	NA	- -	NA	- -	NA	- -	**30.1**	- -	NA	- -	ND	- -	NA	- -	NA	- -	NA	- -	NA	- -	NA	- -
LP-GRAB	NG	11/91	NG	NA	- -	NA	- -	NA	- -	**47.3**	- -	NA	- -	ND	- -	NA	- -	NA	- -	NA	- -	NA	- -	NA	- -
SLUDGE	NG	11/91	NG	NA	- -	NA	- -	NA	- -	**91.8**	- -	NA	- -	**14.1**	- -	NA	- -	NA	- -	NA	- -	NA	- -	NA	- -
SEDIMENT	NG	11/91	NG	NA	- -	NA	- -	NA	- -	ND	- -	NA	- -	ND	- -	NA	- -	NA	- -	NA	- -	NA	- -	NA	- -
LP-1A *	5-7	6/23/1999	3010/6010	NA	- -	NA	- -	NA	- -	0.14	- -	1.35	- -	0.0191	- -	NA	- -	NA	- -	NA	- -	0.51	- -	0.17	- -
LP-1B *	10-12	6/23/1999	3010/6010	NA	- -	NA	- -	NA	- -	0.044	- -	0.52	- -	0.0053	- -	NA	- -	NA	- -	NA	- -	0.16	- -	0.079	- -
LP-1C *	15-17	6/23/1999	3010/6010	NA	- -	NA	- -	NA	- -	0.023	- -	0.40	- -	0.0056	- -	NA	- -	NA	- -	NA	- -	0.17	- -	0.053	- -
LP-2A *	5-7	6/23/1999	3010/6010	NA	- -	NA	- -	NA	- -	0.27	- -	0.17	- -	0.0153	- -	NA	- -	NA	- -	NA	- -	0.07	- -	0.052	- -
LP-2B *	10-12	6/23/1999	3010/6010	NA	- -	NA	- -	NA	- -	0.53	- -	0.42	- -	0.0109	- -	NA	- -	NA	- -	NA	- -	0.11	- -	0.084	- -
LP-2C *	15-17	6/23/1999	3010/6010	NA	- -	NA	- -	NA	- -	ND	0.010	0.13	- -	0.0047	- -	NA	- -	NA	- -	NA	- -	ND	0.040	0.078	- -
LP-5A *	5-7	6/23/1999	3010/6010	NA	- -	NA	- -	NA	- -	0.18	- -	0.50	- -	0.0310	- -	NA	- -	NA	- -	NA	- -	0.21	- -	0.14	- -
LP-5B *	10-12	6/23/1999	3010/6010	NA	- -	NA	- -	NA	- -	0.77	- -	0.40	- -	0.0182	- -	NA	- -	NA	- -	NA	- -	0.13	- -	0.11	- -
LP-5C *	15-17	6/23/1999	3010/6010	NA	- -	NA	- -	NA	- -	0.18	- -	0.24	- -	0.0044	- -	NA	- -	NA	- -	NA	- -	ND	0.040	0.044	- -
SE-1	0-10	9/19/06	1311-6010	NA	- -	NA	- -	NA	- -	0.015	0.01	NA	--	0.020	0.015	NA	- -	NA	- -	NA	- -	NA	--	NA	--
E-5	0-10	9/19/06	1311-6010	NA	- -	NA	- -	NA	- -	0.054	0.01	NA	--	0.021	0.015	NA	- -	NA	- -	NA	- -	NA	--	NA	--
S-2	0-10	9/19/06	1311-6010	NA	- -	NA	- -	NA	- -	0.013	0.01	NA	--	0.018	0.015	NA	- -	NA	- -	NA	- -	NA	--	NA	--
E-6	0-10	9/19/06	1311-6010	NA	- -	NA	- -	NA	- -	<0.01	0.01	NA	--	0.024	0.015	NA	- -	NA	- -	NA	- -	NA	--	NA	--
E-10	0-10	9/19/06	1311-6010	NA	- -	NA	- -	NA	- -	0.153	0.01	NA	--	0.084	0.015	NA	- -	NA	- -	NA	- -	NA	--	NA	--
NE-14	0-10	9/19/06	1311-6010	NA	- -	NA	- -	NA	- -	0.015	0.01	NA	--	0.021	0.015	NA	- -	NA	- -	NA	- -	NA	--	NA	--
NO-7	0-10	9/19/06	1311-6010	NA	- -	NA	- -	NA	- -	<0.01	0.01	NA	--	0.032	0.015	NA	- -	NA	- -	NA	- -	NA	--	NA	--
NO-11	0-10	9/19/06	1311-6010	NA	- -	NA	- -	NA	- -	0.021	0.01	NA	--	0.058	0.015	NA	- -	NA	- -	NA	- -	NA	--	NA	--
N-15	0-10	9/19/06	1311-6010	NA	- -	NA	- -	NA	- -	0.270	0.01	NA	--	0.060	0.015	NA	- -	NA	- -	NA	- -	NA	--	NA	--
NO-12	0-10	9/19/06	1311-6010	NA	- -	NA	- -	NA	- -	0.014	0.01	NA	--	0.036	0.015	NA	- -	NA	- -	NA	- -	NA	--	NA	--
NO-8	0-10	9/19/06	1311-6010	NA	- -	NA	- -	NA	- -	0.088	0.01	NA	--	0.038	0.015	NA	- -	NA	- -	NA	- -	NA	--	NA	--
S-3	0-10	9/19/06	1311-6010	NA	- -	NA	- -	NA	- -	0.103	0.01	NA	--	0.053	0.015	NA	- -	NA	- -	NA	- -	NA	--	NA	--
SW-4	0-10	9/19/06	1311-6010	NA	- -	NA	- -	NA	- -	0.015	0.01	NA	--	<0.015	0.015	NA	- -	NA	- -	NA	- -	NA	--	NA	--
W-9	0-10	9/19/06	1311-6010	NA	- -	NA	- -	NA	- -	0.051	0.01	NA	--	0.051	0.015	NA	- -	NA	- -	NA	- -	NA	--	NA	--
NW-13	0-10	9/19/06	1311-6010	NA	- -	NA	- -	NA	- -	0.029	0.01	NA	--	0.030	0.015	NA	- -	NA	- -	NA	- -	NA	--	NA	--
Composite 1	6-8	7/23/07	1311-6010	ND	0.1	2.00	0.05	ND	0.05	0.23	0.05	1.5	0.1	1.5	0.05	ND	0.001	ND	0.1	ND	0.05	1.80	0.1	1.6	0.1
Composite 2	6-8	7/23/07	1311-6010	ND	0.1	1.80	0.05	ND	0.05	0.16	0.05	1.3	0.1	0.10	0.05	ND	0.001	ND	0.1	ND	0.05	0.86	0.1	0.9	0.1
Composite 3	6-8	7/23/07	1311-6010	ND	0.1	2.20	0.05	ND	0.05	0.20	0.05	1.6	0.1	0.07	0.05	ND	0.001	ND	0.1	ND	0.05	1.30	0.1	1.7	0.1
Concrete 1	4-8	7/23/07	1311-6010	ND	0.1	0.39	0.05	ND	0.05	ND	0.05	ND	0.1	ND	0.05	ND	0.001	ND	0.1	ND	0.05	ND	0.1	ND	0.1
Leachate Sump	10	10/26/2006	1311-6010	NA	- -	NA	- -	NA	- -	0.030	0.01	0.016	0.01	<0.015	0.015	NA	- -	NA	- -	NA	- -	9.6	0.100	3.32	0.01

Notes:

1) The laboratory did not provide the SQL for samples in which the constituent was detected. No SQLs are available for samples collected and data compiled by other consultants in 1991.

NA= Not Analyzed; the sample was not analyzed for this constituent.

N/A= Not applicable, no standard.

SQL= Sample Quantitation Limit

3010/6010= USEPA Method 3010/6010

ND= Not Detected above the sample quantitation / laboratory reporting limit.

Bold= Above the standard

Prepared By: PCS/EAF
Reviewed By: SWB
Revised: 8/14/2009

Table 2
Confirmatory Soil Analytical Data: Metals
248 Wyandanch Avenue, Wyandanch, New York
(ppm, mg/kg)

Sample ID	Sample Grid	Sample Depth	Sample Date	Chromium	Copper	Nickel	Zinc
AOC #3							
A-4 Top	A-4	Top	11/29/2007	29.2	28.3	26.3	17.3
Top-1	A-5	Top	11/29/2007	27.0	23.4	25.9	16.9
B-3 Top	B-3	Top	11/29/2007	65.4	43.2	41.2	20.4
B-5 Top	B-5	Top	11/30/2007	43.3	35.9	32.1	17.7
B-6 Top	B-6	Top	11/30/2007	38.5	33.2	33.8	15.8
Pile 3	A-3	Top	12/3/2007	71.8	57.8	75.2	28.8
C-2 Top	C-2	Top	12/3/2007	60.8	50.8	48.2	28.2
C-2/3 Top	C-2/3	Top	12/3/2007	47.6	42.3	46.9	22.3
C-4 Top	C-4	Top	12/4/2007	29.7	29.2	25.2	18.0
C-5 Top	C-5	Top	12/4/2007	83.7	86.0	71.2	28.5
C-6 Top	C-6	Top	12/4/2007	35.9	26.8	22.6	12.1
D-2 Top	D-2	Top	12/4/2007	78.7	27.4	18.4	10.3
D-2/3 Top	D-2/3	Top	12/5/2007	59.5	80.1	92.2	49.1
D-3 Top	D-3	Top	12/5/2007	60.0	61.9	87.1	47.8
D-4 Top	D-4	Top	12/5/2007	99.7	88.9	107	48.0
D-5 Top	D-5	Top	12/5/2007	44.7	36.7	47.5	19.7
A-4 Sides	A-4	Sides	11/29/2007	10.2	8.2	12.7	11.0
A-5 Sides	A-5	Sides	11/30/2007	11.8	8.5	6.3	6.8
B-3 Sides	B-3	Sides	11/30/2007	48.1	24.3	10.9	6.1
B-4 Sides	B-4	Sides	11/30/2007	12.9	6.7	5.2	4.7
B-5 Sides	B-5	Sides	11/30/2007	39.1	13.8	6.3	5.3
B-6 Sides	B-6	Sides	11/30/2007	63.7	26.9	17.4	9.5
C-2 Sides	C-2	Sides	12/3/2007	48.8	30.5	26.0	13.3
C-3 Sides	C-3	Sides	12/3/2007	40.9	37.2	17.1	10.5
C-5 Sides	C-5	Sides	12/4/2007	95.0	38.0	24.9	12.1
C-6 Sides	C-6	Sides	12/4/2007	64.1	16.4	13.5	5.5
D-3 Sides	D-3	Sides	12/5/2007	49.9	30.6	27.3	16.5
Site Objectives				10 or 100	25	13	20

Notes:

RDL = Reported Detection Limit
ND = Not Detected above RDL
NA= Not Applicable
Bold = Exceeds the Site Objective
Objectives do not apply to Floor Samples
B-5 Sides = Samples are numbered by row - column and location within excavation. Refer to Figure 4.
Top = Soil sampled from above leaching structures. Soil below Site Objectives were returned to excavation. Soil with exceedences were disposed.
Sides = sample collected from multiple locations of excavation walls.

Prepared by: BTB
Reviewed by: RK
Revised 8/14/2009

Table 2
Confirmatory Soil Analytical Data: Metals
248 Wyandanch Avenue, Wyandanch, New York
(ppm, mg/kg)

Sample ID	Sample Grid	Sample Depth	Sample Date	Chromium	Copper	Nickel	Zinc
E-3 Sides	E-3	Sides	12/6/2007	50.5	20.5	19.6	8.9
F-6W Side	F-6W	Sides	12/7/2007	7.2	5.4	7.3	7.3
N-Wall	North	Wall	12/19/2007	7.5	2.2	3.1	9.2
E-Wall	East	Wall	12/19/2007	9.1	24.0	35.5	16.9
W-Wall	West	Wall	12/19/2007	11.6	29.9	49.6	37.2
A-1 Floor	A-1	Floor	11/29/2007	178	46.8	46.8	17.5
A-3 Floor	A-3	Floor	11/29/2007	397	79.2	315	41.2
A-4 Floor	A-4	Floor	11/29/2007	499	101	256	29.3
A-5 Floor	A-5	Floor	11/30/2007	120	40.8	52.0	12.0
A-6 Floor	A-6	Floor	11/30/2007	142	46.9	46.5	12.6
B-2 Floor	B-2	Floor	11/29/2007	167	58.2	68.2	21.0
B-3 Floor	B-3	Floor	11/30/2007	143	51.1	47.4	10.9
B-4 Floor	B-4	Floor	11/30/2007	319	141	65.9	25.7
B-5 Floor	B-5	Floor	11/30/2007	372	125	147	27.3
B-6 Floor	B-6	Floor	11/30/2007	191	94.4	146	18.1
Norris Residence							
S-2 Side	NA	4"	1/24/2007	29.0	23.0	13.0	69.0
Norris-1	NA	12"	12/19/2007	23.8	46.0	25.0	32.7
Norris-2	NA	3-4'	12/26/2007	17.3	13.5	59.2	21.8
Norris-3	NA	4.5-5	1/7/2008	28.0	43.0	91.4	34.8
Norris-4	NA	4.5-5	1/7/2008	31.9	43.3	**178**	55.4
Site Objectives				10 or 100	25	13	20

Notes:

RDL = Reported Detection Limit
ND = Not Detected above RDL
NA= Not Applicable
Floor = Soil sampled from excavation at or below water table
Norris-# = Confirmatory samples from soil remediation at Norris residence, 50 Oswego St.

Bold = Exceeds the Site Objective. Objectives do not apply to Floor Samples
Sides = sample collected from multiple locations of excavation walls.

Prepared by: BTB
Reviewed by: RK
Revised 8/14/2009

Table 2
Confirmatory Soil Analytical Data: Metals
248 Wyandanch Avenue, Wyandanch, New York
(ppm, mg/kg)

Sample ID	Sample Grid	Sample Depth	Sample Date	Chromium	Copper	Nickel	Zinc
Unknown Leaching Pool							
Leaching Pool	NA	Bottom	12/26/2007	18.9	164	40.3	66.8
Catch Basins							
CB-27	NA	Bottom	12/19/2007	53.1	834	77.5	663
CB-28	NA	Bottom	12/19/2007	55.7	149	60.5	133
QA/QC							
A-3 Sides (MS)	A-3	Sides	11/29/2007	297	83.8	97.8	46.2
A-3 Sides (MSD)	A-3	Sides	11/29/2007	275	76.4	84.3	45.1
A-5 Sides (MS)	A-5	Sides	11/30/2007	41.6	39.0	38.2	35.1
A-5 Sides (MSD)	A-5	Sides	11/30/2007	43.0	39.8	38.2	35.5
B-5 Sides (MS)	B-5	Sides	11/30/2007	73.6	48.4	38.8	35.8
B-5 Sides (MSD)	B-5	Sides	11/30/2007	72.0	45.6	38.0	35.6
C-2 Sides (MS)	C-2	Sides	12/3/2007	83.3	65.7	58.1	43.8
C-2 Sides (MSD)	C-2	Sides	12/3/2007	71.3	53.6	49.6	38.9
C-4 Sides (MS)	C-4	Sides	12/4/2007	177	69.4	56.9	47.9
C-4 Sides (MSD)	C-4	Sides	12/4/2007	167	64.5	54.7	48.6
D-2 Sides (MS)	D-2	Sides	12/5/2007	174	87.2	78.3	46.5
D-2 Sides (MSD)	D-2	Sides	12/5/2007	151	93.5	74.2	50.6
E-6 Sides (MS)	E-6	Sides	12/7/2007	121	66.0	45.8	37.5
E-6 Sides (MSD)	E-6	Sides	12/7/2007	137	83.2	59.8	57.3
N-Wall (MS)	N-Wall	Sides	12/19/2007	46.7	39.2	47.5	46.9
N-Wall (MSD)	N-Wall	Sides	12/19/2007	42.2	37.0	38.1	42.5
Norris-4 (MS)	Norris-4	Sides	1/2/2008	46.6	62.3	303	103
Norris-4 (MSD)	Norris-4	Sides	1/2/2008	47.9	62.6	298	113
Norris-4 (MS)	Norris-4	Sides	1/7/2008	85.6	99.7	297	109
Norris-4 (MSD)	Norris-4	Sides	1/7/2008	68.2	84.2	285	104
Site Objectives				10 or 100	25	13	20

Notes:

RDL = Reported Detection Limit
ND = Not Detected above RDL
NA= Not Applicable
QA/QC = Splits of samples collected for quality control.

Bold = Exceeds the Site Objective
Objectives do not apply to Floor Samples

Prepared by: BTB
Reviewed by: RK
Revised 8/14/2009

Table 3
Groundwater Monitoring Plan
248 Wyandanch Avenue, Wyandanch, New York

Monitoring Well	Associated AOC	Total Metals (1)	Semi-VOCs (2)
MW-2	AOC-2	X	
MW-3	AOC-3	X	X
MW-4	AOC-3	X	
MW-5R	AOC-1	X	X
MW-6R	AOC-1	X	
MW-7 (3)	- - -	- - -	- - -
GEC-5 (3)	AOC-4	X	X
MW-10	AOC-2 and -5	X	X
MW-11	AOC-2 and -5	X	X
MW-12	AOC-2 and -5	X	X
MW-16	AOC-4		X
MW-17	AOC-4		X
MW-19	AOC-4		X
MW-20	AOC-4		X
MW-21	AOC-4		X
MW-23	AOC-4		X
MW-26R	AOC-1 and 4	X	X
Total		**10**	**13**

(1) Total metals analysis for chromium, copper, nickel, and zinc.
Analysis via EPA Method 60108/7000s.
(2) Semi-VOCs analysis.
Analysis via EPA Method 8270C.
(3) Monitoring Well MW-7 was paved over and has been replaced by GEC-5

TABLE 4
SUMMARY OF GROUNDWATER ANALYTICAL DATA:
POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)
248 Wyandanch Avenue, Wyandanch, New York
(unit, parts per billion [ppb] µg/L)

Sample Identification	Sample Date	Analytical Method	Acenaphthene	SQL	Anthracene	SQL	Benzo (a) anthracene	SQL	Chrysene	SQL	Fluoranthene	SQL	Fluorene	SQL	2-Methyl naphthalene	SQL	Naphthalene	SQL	Phenanthrene	SQL	Pyrene	SQL	2,4-Dichlorophenol	SQL
MW-3	1/25/2007	8270	ND	10	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
(AOC #3)	12/4/2007***	well not sampled, destroyed during soil excavation					- - -		- - -		- - -		- - -		- - -		- - -		- - -		- - -		- - -	
	4/16/2008***	Well destroyed during soil remediation, to be replaced.					- - -		- - -		- - -		- - -		- - -		- - -		- - -		- - -		- - -	
	9/11/2008***	8270M(SIM)	ND	0.5	ND	0.5	ND	0.1	ND	0.02	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	NA	- - -
MW-4	12/4/2007***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
(AOC #3)	4/16/2008***	Well destroyed during soil remediation, to be replaced.					- - -		- - -		- - -		- - -		- - -		- - -		- - -		- - -		- - -	
	3/30/2009***	8270	ND	1.02	ND	0.84	ND	1.03	ND	0.95	ND	0.86	ND	0.91	ND	0.82	ND	0.87	ND	0.90	ND	1.01	ND	0.98
MW-5R	12/15/2003	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
(AOC #1)	4/6/2006	8270	ND	0.30	ND	0.20	ND	0.05	ND	0.20	ND	0.5	ND	1	ND	1	ND	1	ND	0.1	ND	1	ND	1
	1/29/2007***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	13	5
	12/4/2007***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	4/16/2008***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	9/11/2008***	8270M(SIM)	ND	0.5	ND	0.5	ND	0.1	ND	0.02	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	NA	- - -
	3/30/2009***	8270	ND	1.02	ND	0.84	ND	1.03	ND	0.95	ND	0.86	ND	0.91	ND	0.82	ND	0.87	ND	0.90	ND	1.01	ND	0.98
MW-10	1/24/2007***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
(AOC # 2/5)	4/16/2008***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	9/11/2008***	Sample container broken in transit to laboratory					- - -		- - -		- - -		- - -		- - -		- - -		- - -		- - -		- - -	
	3/30/2009***	8270	ND	1.02	ND	0.84	ND	1.03	ND	0.95	ND	0.86	ND	0.91	ND	0.82	ND	0.87	ND	0.90	ND	1.01	ND	0.98
MW-11	1/29/2007***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
(AOC # 2/5)	12/4/2007***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	4/16/2008***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	9/11/2008***	8270M(SIM)	ND	0.5	ND	0.5	ND	0.1	ND	0.02	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	NA	- - -
	3/30/2009***	8270	ND	1.02	ND	0.84	ND	1.03	ND	0.95	ND	0.86	ND	0.91	ND	0.82	ND	0.87	ND	0.90	ND	1.01	ND	0.98
MW-12	1/24/2007***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
(AOC # 2/5)	4/16/2008***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	9/11/2008***	8270M(SIM)	ND	0.5	ND	0.5	ND	0.1	ND	0.02	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	NA	- - -
	3/30/2009***	8270	ND	1.02	ND	0.84	ND	1.03	ND	0.95	ND	0.86	ND	0.91	ND	0.82	ND	0.87	ND	0.90	ND	1.01	ND	0.98
MW-16	4/6/1999	8270	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10
(AOC #4)	12/15/2003	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	4/6/2006	8270	ND	0.3	ND	0.2	ND	0.05	ND	0.2	ND	0.5	ND	1	ND	1	ND	1	ND	0.1	ND	1	ND	1
	1/25/2007***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	12/4/2007***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	4/16/2008***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	9/11/2008***	Sample container broken in transit to laboratory					- - -		- - -		- - -		- - -		- - -		- - -		- - -		- - -		- - -	
	3/30/2009***	8270	ND	1.02	ND	0.84	ND	1.03	ND	0.95	ND	0.86	ND	0.91	ND	0.82	ND	0.87	ND	0.90	ND	1.01	ND	0.98
Standard and Guidance Values			20**		50**		0.0020**		0.0020**		50**		50**		NV		10**		50**		50**		50**	

Notes:
1) Ambient Water Quality Standards and Guidance Values provided in the New York State and Technical Operational Guidance Series (TOGS 1.1.1). For Class GA Groundwater, developed in support of 6 NYCRR Part 700-705 (revised June 1998).
2) Analytical data for method blank is grouped with appropriate laboratory sample batch. Dates provided for method blanks represent the data of laboratory analysis.
3) Phenol was detected in sample MW-20 on 12/11/02 but not a significant amount, results is less than RL but greater than or equal to MDL

SQL= Sample Quantitation Limit

ND= Not Detected above SQL
NV= No standard or guidance value available as of June 1998 revision.
**= Refers to a Guidance value where no Standard exists
J= Compound analyzed for and determined to be present in sample. Mass spectrum of compound meets identification criteria for method. Concentration listed as estimated value, less than contract required detection limit but greater than instrument detection limit.
*** = Samples collected after completion of remedial action.
8270= USEPA Method 8270
GEC-5^{T} = Replaces MW-7 in groundwater sampling plan. M

Prepared By: PCS/EAF
Reviewed By: SWB
Revised: 8/14/2009

TABLE 4
SUMMARY OF GROUNDWATER ANALYTICAL DATA:
POLYCYCLIC AROMATIC HYDROCARBONS (PAHs)
248 Wyandanch Avenue, Wyandanch, New York
(unit, parts per billion [ppb] µg/L)

Sample Identification	Sample Date	Analytical Method	Acenaphthene	SQL	Anthracene	SQL	Benzo (a) anthracene	SQL	Chrysene	SQL	Fluoranthene	SQL	Fluorene	SQL	2-Methyl naphthalene	SQL	Naphthalene	SQL	Phenanthrene	SQL	Pyrene	SQL	2,4-Dichlorophenol	SQL
MW-17	4/6/1999	8270	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10
(AOC #4)	12/15/2003	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	1/25/2007***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	12/4/2007***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	4/16/2008***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	9/11/2008***	Sample container broken in transit to laboratory					- - -		- - -		- - -		- - -		- - -		- - -		- - -		- - -		- - -	
	3/30/2009***	8270	ND	1.02	ND	0.84	ND	1.03	ND	0.95	ND	0.86	ND	0.91	ND	0.82	ND	0.87	ND	0.90	ND	1.01	ND	0.98
MW-20	4/6/2006	8270	ND	0.3	ND	0.2	ND	0.05	ND	0.2	ND	0.50	ND	1	ND	1	ND	1	ND	0.1	ND	1	ND	1
(AOC #4)	1/25/2007***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	4/16/2008***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	9/11/2008***	Well was not sampled.			- - -		- - -		- - -		- - -		- - -		- - -		- - -		- - -		- - -		- - -	
	3/30/2009***	8270	ND	1.02	ND	0.84	ND	1.03	ND	0.95	ND	0.86	ND	0.91	ND	0.82	ND	0.87	ND	0.90	ND	1.01	ND	0.98
MW-21	4/6/1999	8270	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10
(ACO #4)	4/6/2006	8270	ND	0.29	ND	0.19	ND	0	ND	0	ND	0	ND	0.95	ND	1	ND	1	ND	0	ND	1	ND	1
	1/25/2007***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	12/4/2007***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	4/16/2008***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	9/11/2008***	8270M(SIM)	ND	0.5	ND	0.5	ND	0.1	**0.03**	0.02	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	NA	- - -
	3/30/2009***	8270	ND	1.02	ND	0.84	ND	1.03	ND	0.95	ND	0.86	ND	0.91	ND	0.82	ND	0.87	ND	0.90	ND	1.01	ND	0.98
MW-23	4/6/1999	8270	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10
(AOC #4)	12/15/2003	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	4/6/2006	8270	ND	0.3	ND	0.2	ND	0.5	ND	0.2	ND	0.5	ND	1	ND	1	ND	1	ND	0.1	ND	1	ND	1
	1/25/2007***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	12/4/2007***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	4/16/2008***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	9/11/2008***	8270M(SIM)	ND	0.5	ND	0.5	ND	0.1	**0.02**	0.02	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	NA	- - -
	3/30/2009***	8270	ND	1.02	ND	0.84	ND	1.03	ND	0.95	ND	0.86	ND	0.91	ND	0.82	ND	0.87	ND	0.90	ND	1.01	ND	0.98
MW-26R	12/15/2003	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
(AOC #1)	4/6/2006	8270	ND	0.3	ND	0.2	ND	0.05	ND	0.2	ND	0.5	ND	1	ND	1	ND	1	ND	0.1	ND	1	ND	1
	1/25/2007***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	12/4/2007***	8270	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10	ND	10
	4/16/2008***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	9/10/2008***	8270M(SIM)	ND	0.5	ND	0.5	ND	0.1	ND	0.02	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	ND	0.5	NA	- - -
	3/30/2009***	8270	ND	1.02	ND	0.84	ND	1.03	ND	0.95	ND	0.86	ND	0.91	ND	0.82	ND	0.87	ND	0.90	ND	1.01	ND	0.98
GEC-5^{+}	12/15/2003	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
(AOC #4)	4/6/2006	8270	ND	0.3	ND	0.2	ND	0.05	ND	0.2	ND	0.5	ND	1	ND	1	ND	1	ND	0.1	ND	1	ND	1
	4/16/2008***	8270	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5	ND	5
	9/11/2008***	Sample container broken in transit to laboratory					- - -		- - -		- - -		- - -		- - -		- - -		- - -		- - -		- - -	
	3/30/2009***	8270	ND	1.02	ND	0.84	ND	1.03	ND	0.95	ND	0.86	ND	0.91	ND	0.82	ND	0.87	ND	0.90	ND	1.01	ND	0.98
Standard and Guidance Values			20**		50**		0.0020**		0.0020**		50**		50**		NV		10**		50**		50**		50**	

Notes:
1) Ambient Water Quality Standards and Guidance Values provided in the New York State and Technical Operational Guidance Series (TOGS 1.1.1). For Class GA Groundwater, developed in support of 6 NYCRR Part 700-705 (revised June 1998).
2) Analytical data for method blank is grouped with appropriate laboratory sample batch. Dates provided for method blanks represent the data of laboratory analysis.
3) Phenol was detected in sample MW-20 on 12/11/02 but not a significant amount, results is less than RL but greater than or equal to MDL

SQL= Sample Quantitation Limit

ND= Not Detected above SQL
NV= No standard or guidance value available as of June 1998 revision.
**= Refers to a Guidance value where no Standard exists
J= Compound analyzed for and determined to be present in sample. Mass spectrum of compound meets identification criteria for method. Concentration listed as estimated value, less than contract required detection limit but greater than instrument detection limit.
*** = Samples collected after completion of remedial action.
8270= USEPA Method 8270

GEC-5^{+} = Replaces MW-7 in groundwater sampling plan. MW-7 previously paved over.

Prepared By: PCS/EAF
Reviewed By: SWB
Revised: 8/14/2009

TABLE 5
SUMMARY OF GROUNDWATER ANALYTICAL DATA:
TOTAL METALS
248 Wyandanch Avenue
Wyandanch, New York
(unit, parts per million [ppm], mg/L)

Sample Identification	Sample Date	Analytical Method	Total Chromium		SQL	Copper		SQL	Nickel		SQL	Zinc		SQL
MW-2	5/23/1994	NG	**9.12**		--	**3.16**		- -	**4.49**		- -	0.747		- -
(AOC #2/5)	1/27/1995	NG	**4**		--	**3.8**		- -	**5.7**		- -	0.70		- -
	11/18/1998	3010/6010	NS		--	**0.231**		- -	**10.6**		- -	0.263	*	- -
	11/15/2000	NG	**0.2560**		--	NA		--	NA			NA		--
	12/11/2002	6010/7470/7196	**0.389**		--	**0.292**	0.010		**1.4**	0.010		0.048	B	0.05
	12/15/2003	200.7/6010	ND		--	0.0197	0.0005		NA		- -	0.015		0.01
	4/5/2006	6010	0.017		0.005	0.0623	0.005		NA		- -	0.042		0.01
	4/5/2006	6010	0.010		0.005	NA		- -	NA		- -	NA		- -
	1/24/2007***	6010B	ND		0.010	0.088	0.025		**0.44**	0.04		ND		0.2
	12/4/2007***	200.7	ND		0.05	ND	0.05		**0.30**	0.05		ND		0.05
	4/16/2008***	200.7	ND		0.05	ND	0.05		**0.30**	0.05		ND		0.05
	9/10/2008***	200.7	ND		0.001	0.024	0.001		**0.202**	0.001		0.119		0.002
	3/30/2009***	610/200.7	ND		0.002	ND	0.003		**0.150**	0.0005		0.040		0.004
MW-3	5/23/1994	NG	**0.139**		--	**0.597**		- -	**1.75**		- -	0.109		- -
(AOC #3)	1/27/1995	NG	**0.320**		--	**4.5**		- -	**3.5**		- -	0.68		- -
	11/17/1998	3010/6010	NA		--	0.13		- -	**0.195**		- -	0.0492	*	- -
	12/11/2002	6010/7470/7196	**0.203**		--	**0.30**	0.010		**1.39**	0.010		0.0956		0.05
	12/16/2003	200.7/6010	**0.056**		--	0.0837	0.0005		NA		- -	0.071		0.01
	1/24/2007	6010B	ND		0.01	ND	0.025		ND	0.04		ND		0.2
	12/4/2007***	Well not sampled, destroyed during remediation							- -	- -		- -		- -
	4/16/2008***	Well destroyed during soil remediation, to be replaced.						- -	- -	- -		- -		- -
	9/10/2008***	200.7	0.050		0.001	0.094	0.001		**0.225**	0.001		0.053		0.002
	3/30/2009***	610/200.7	ND		0.002	0.066	0.003		**0.130**	0.0005		0.045		0.004
MW-4	12/11/2002	6010/7470/7196	0.049		--	0.102	0.010		**2.1**	0.010		0.0561		0.05
(AOC #3)	12/16/2003	200.7/6010	0.010		--	0.0769	0.0005		NA		- -	0.151		0.01
	4/6/2006	6010	**0.160**		0.005	0.1040	0.005		NA		- -	0.181		0.01
	4/6/2006	6010	**0.150**		0.005	NA		- -	NA		- -	NA		- -
	1/24/2007	6010B	**0.19**		0.01	0.14	0.025		**2.2**	0.04		0.3		0.2
	12/4/2007***	200.7	**0.08**		0.05	0.14	0.05		**1.65**	0.05		0.26		0.05
	4/16/2008***	Well destroyed during soil remediation, to be replaced.												
	9/10/2008***	200.7	0.035		0.001	0.048	0.001		**1.11**	0.001		0.124		0.002
	3/30/2009***	610/200.7	0.017		0.002	ND	0.003		**0.620**	0.0005		0.130		0.004
MW-5R	12/16/2003	200.7/6010	ND		--	0.0419	0.0005		NA		- -	0.090		0.005
(AOC #1)	4/6/2006	6010	0.009		0.005	0.1260	0.005		NA		- -	0.1020		0.0100
	4/6/2006	6010	0.007		0.005	NA		- -	NA		- -	NA		- -
	1/25/2007***	6010B	ND		0.01	**1.4**	0.025		**0.14**	0.04		ND		0.2
	12/4/2007***	200.7	ND		0.05	ND	0.05		**0.19**	0.05		0.21		0.05
	4/16/2008***	200.7	ND		0.05	ND	0.05		**1.61**	0.05		0.85		0.05
	9/10/2008***	200.7	0.0009	B	0.001	0.008	0.001		0.070	0.001		0.089		0.002
	3/30/2009***	610/200.7	0.017		0.002	ND	0.003		**0.20**	0.0005		0.130		0.004
MW-6R	12/16/2003	200.7/6010	ND		--	0.0076	0.0005		NA		- -	0.106		0.005
(AOC #1)	4/6/2006	6010	0.043		0.005	0.0329	0.005		NA		- -	0.053		0.010
	4/6/2006	6010	0.023		0.005	NA		- -	NA		- -	NA		- -
	1/24/2007***	6010B	ND		0.01	ND	0.025		ND	0.04		ND		0.2
	12/4/2007***	200.7	ND		0.05	ND	0.05		ND	0.05		ND		0.05
	4/16/2008***	200.7	ND		0.05	ND	0.05		ND	0.05		0.05		0.05
	9/10/2008***	200.7	ND		0.001	0.005	0.001		0.014	0.001		0.018		0.002
	3/30/2009***	610/200.7	0.008		0.002	ND	0.003		0.032	0.0005		0.063		0.004

TABLE 5
SUMMARY OF GROUNDWATER ANALYTICAL DATA:
TOTAL METALS
248 Wyandanch Avenue
Wyandanch, New York
(unit, parts per million [ppm], mg/L)

Sample Identification	Sample Date	Analytical Method	Total Chromium	SQL	Copper	SQL	Nickel	SQL	Zinc	SQL
MW-10	1/24/2007***	6010B	ND	0.01	ND	0.025	ND	0.04	ND	0.2
(AOC #2/5)	4/16/2008***	200.7	ND	0.05	ND	0.05	ND	0.05	ND	0.05
	9/10/2008***	200.7	0.030	0.001	0.017	0.001	0.011	0.001	0.022	0.002
	3/30/2009***	610/200.7	**0.11**	0.002	ND	0.003	**0.12**	0.0005	0.16	0.004
MW-11	7/6/1994	NG	**0.08**	--	**0.22**	- -	0.07	- -	0.23	- -
(AOC #2/5)	11/17/1998	3010/6010	NS #	--	0.0105 B	- -	ND	0.0060	ND *	0.017
	12/15/2003	200.7/6010	0.015	--	0.0071	0.00050	NA	- -	0.014	0.005
	4/5/2006	6010	**0.620**	0.005	0.0592	0.00500	NA	- -	0.030	0.010
	4/5/2006	6010	**0.420**	0.005	NA	- -	NA	- -	NA	- -
	1/25/2007***	6010B	0.04	0.01	ND	0.025	ND	0.04	ND	0.2
	12/4/2007***	200.7	**0.14**	0.05	ND	0.05	ND	0.05	ND	0.05
	4/16/2008***	200.7	ND	0.05	ND	0.05	ND	0.05	ND	0.05
	9/10/2008***	200.7	0.032	0.001	0.011	0.001	0.004	0.001	0.009	0.002
	3/30/2009***	610/200.7	0.044	0.002	ND	0.003	0.038	0.0005	0.056	0.004
MW-12	5/23/1994	NG	NS	--	NS	- -	NS	- -	NS	- -
(AOC #2/5)	7/6/1994	NG	ND	--	ND	- -	ND	- -	0.06	- -
	1/27/1995	NG	**18.00**	--	**21**	- -	**21**	- -	**5.60**	- -
	11/17/1998	3010/6010	NS	--	**5.31**	- -	**7.07**	- -	0.859 *	- -
	12/15/2003	200.7/6010	0.007	--	**0.530**	0.0005	NA	- -	0.289	0.005
	4/5/2006	6010	0.047	0.005	0.0224	0.005	NA	- -	0.059	0.010
	4/5/2006	6010	0.040	0.005	NA	- -	NA	- -	NA	- -
	1/25/2007***	6010B	ND	0.01	**0.44**	0.025	**0.29**	0.04	ND	0.2
	4/16/2008***	200.7	ND	0.05	0.13	0.05	0.09	0.05	ND	0.05
	9/10/2008***	200.7	ND	0.001	0.079	0.001	0.073	0.001	0.022	0.002
	3/30/2009***	610/200.7	ND	0.002	**0.20**	0.003	**0.24**	0.0005	0.11	0.004
Duplicate	3/30/2009***	610/200.7	ND	0.002	**0.23**	0.003	**0.28**	0.0005	0.086	0.004
MW-26R	12/15/2003	200.7/601	ND	--	0.0018	0.00050	NA	- -	0.019	0.005
(AOC #1 and 4))	4/6/2006	3010/6010	0.018	0.005	0.040	0.01	NA	- -	0.0740	0.010
	4/6/2006	6010	0.017	0.005	NA	- -	NA	- -	NA	- -
	1/24/2007***	6010B	ND	0.01	ND	0.025	ND	0.04	ND	0.2
	12/4/2007***	200.7	ND	0.05	ND	0.05	ND	0.05	ND	0.05
	4/16/2008***	200.7	ND	0.05	ND	0.05	ND	0.05	ND	0.05
	9/10/2008***	200.7	ND	0.001	0.005	0.001	ND	0.001	0.006	0.002
	3/30/2009***	610/200.7	**0.095**	0.002	ND	0.003	**0.120**	0.0005	0.170	0.004
GEC-5^{+}	4/16/2008***	200.7	ND	0.05	ND	0.05	ND	0.05	ND	0.05
(AOC #4)	9/10/2008***	200.7	ND	0.001	0.0008 B	0.001	ND	0.001	0.003	0.002
	3/30/2009***	610/200.7	ND	0.002	ND	0.003	ND	0.0005	0.017	0.004
NYSDEC Class GA Groundwater Standard			0.05		0.2		0.1		2.0	

Notes:

NS= Not Sampled
SQL= Sample Quantitation Limit
NA= Not Analyzed
ND= Not detected above SQL
NG = Analytical Method not provided by previous consultant
Methods = Standard USEPA Methods
GEC-5^{+} = Replaces MW-7 in groundwater sampling plan. MW-7 previously paved over.

B= Analyte is found in the blanks as well as the sample.
*** = Sample collected after completion of remedial actions
- - = Sample quantitation limits not provided or not available.
E= Detected concentration exceeds calibration curve range.
T= Analysis by EcoTest due to short holding time
*= Duplicate analysis not within control limit.
Bold= Exceeds Standard