REMEDIAL SYSTEM OPTIMIZATION REPORT

SHORE REALTY CORPORATION (AES)
1 SHORE ROAD, GLENWOOD LANDING, NEW YORK 11547

NYSDEC Site No. 130006
Work Assignment No. D009812-01

Prepared for:

NEW YORK STATE OF OPPORTUNITY. Department of Environmental Conservation

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1.0 Introduction

This Remedial System Optimization (RSO) Report has been prepared for the Shore Realty Corporation (AES) Site (the "Site"; Site No. 130006), located at 1 Shore Road, Glenwood Landing, New York. A Site Location Map is presented in **Figure 1**, and the overall Site Layout is presented in **Figure 2**. This RSO Report has been completed in accordance with New York State Department of Environmental Conservation (NYSDEC or the "Department") Division of Environmental Remediation (DER) Work Assignment (WA) No. D009812-01 and NYSDEC *Technical Guidance for Site Investigation and Remediation* (DER-10).

The Site has been under investigation and/or remediation since 1984, with the overall goals of remediating contaminated soil, groundwater, surface water, sediment, and air at the Site. Several hundred drums and approximately 700,000 gallons of hazardous waste were removed from the Site by the owner [Shore Realty Corporation (Shore Realty)] and the Department between 1985 and 1986. The Site was added to the National Priority List (NPL) in 1986 and a group of Potentially Responsible Parties (PRPs), originally referred to as the "Common Defense Group," who had shipped waste to the Site, assumed responsibility for investigating the Site. Remedial Investigations began in November 1987 and the final Remedial Investigation Report (RIR) was issued in April 1991. A Feasibility Study (FS) was issued in April 1991 and the Record of Decision (ROD) was issued in June 1991.

Subsequent to the ROD, a new organization of PRPs, known as the Participating Performing Group (PPG), assumed responsibility for implementing remedial actions at the Site. A remedial design was prepared, and construction of three remedial systems [air sparging (AS), soil vapor extraction (SVE) and treatment, and groundwater extraction and treatment] was completed in January 1995. Operation, maintenance, and monitoring (OM&M) of the remedial systems began in June 1995 and has continued, with significant modification and optimization, to present. A detailed description of historic OM&M and optimization activities is included in Section 2.3. In addition to remediation of contaminated soil and groundwater at the Site, a salt marshland and coastline restoration project was completed in May 2003 and a new bulkhead was installed along a portion of the Site in 2004.

Petroleum-related volatile organic compounds (VOCs) continue to be detected at concentrations greater than standards, criteria and guidance (SCGs) in two "hot spots" (Investigation Area 1 and Investigation Area 2, shown on **Figure 2**) in the western portion of the Site identified in a January 6, 2019 decision ordered (the 2019 Order) by the United States District Court Eastern District of New York. TRC Engineers, Inc. (TRC) completed supplemental soil investigation activities between July 2019 and December 2019 to delineate the likely source(s) of ongoing groundwater impacts in each Investigation Area. Details regarding findings are described in Section 4.0 and the *Summary of Supplemental Investigation Activities*, dated January 2020, prepared by TRC is included as **Appendix A**. At the request of the Department, TRC prepared a *Revised Interim Remedial Measure Conceptual Plan*, dated June 2020, which is included as **Appendix B**, to address the two "hot spots" delineated during the Supplemental Investigation. The Conceptual Plan includes excavation and off-site disposal of contaminated soil, an evaluation of four

support of excavation (SOE) approaches, application of an amendment to enhance in-situ bioremediation, and backfilling of excavation areas with clean fill.

1.1 Report Objectives

The objectives of this RSO Report are to:

- Evaluate performance of the existing remedial systems with respect to achieving the Remedial Action Objectives (RAOs) established for the Site in the two "hot spots"; and
- Recommend a Corrective Action to be implemented for the "hot spots", as needed.

1.2 Report Organization

The RSO Report has been organized into nine sections as follows:

- **Section 1.0 –** Introduction/background information and report organization.
- **Section 2.0** – Description of the Site location, setting, and history.
- **Section 3.0** – Description of the RAOs and cleanup goals for this RSO Report.
- **Section 4.0** – Description of the investigations conducted to date, summary of findings from investigations, and the nature and extent of contamination to be addressed.
- **Section 5.0** – Presentation of the Conceptual Site Model (CSM).
- **Section 6.0** – Description of existing remedial systems.
- **Section 7.0** – Evaluation of the performance of the existing remedial systems.
- **Section 8.0** – Recommendations for implementation of a Corrective Measure.
- **Section 9.0** – Description of the recommended Corrective Measure.
- **Section 10.0** – A listing of references used for preparation of this report.

2.0 Site Description and History

2.1 Site Location, Ownership, and Description

The Site is located at 1 Shore Road, Glenwood Landing, New York. The Site is approximately 3.31 acres and is identified as Section 20, Block A, Lot 35. A Site Location Map depicting the approximate boundaries of the Site is provided as **Figure 1**. The owner of the Site is Shore Realty. The parcel to the north of the Site is being developed as condominiums and the parcel to the east is used for commercial purposes. The remainder of the Site is surrounded by Hempstead Harbor and Motts Cove and a bulkhead is present along the southern and western portions of the Site.

The western and eastern borders, and southwestern portion, of the Site (historically referred to as the Lower Area) are flat and paved at elevations between approximately 6 and 8 feet, North American Vertical Datum (NAVD88). The ground surface rises steeply to the central and northern portions of the Site (historically referred to as the Upper Area) to elevations between approximately 20 and 30 feet NAVD88.

2.2 Site History

The Site was first used for the bulk storage of petroleum products in 1939 by Texaco Oil Company. Texaco reportedly sold the property to Phillips Petroleum (Phillips) in 1964. Phillips used the property to store gasoline and fuel oil in aboveground storage tanks (ASTs) until 1972. In 1974 Phillips leased a portion of the Site to Circle Terminal Corp. Additionally, a portion of the Site was leased to the Mattiace Petrochemical Company (Mattiace) for the storage and distribution of chemical solvents.

In 1978 3,000 gallons of toluene were released from an overturned truck onto the western portion of the Site. Undetermined amounts of toluene infiltrated into the subsurface and spilled into Hempstead Harbor. Numerous smaller spills are known or suspected to have occurred throughout the history of commercial operation.

In July 1980 Phillips sold the property to Joseph Saleh and Amnon Bartur. In October 1980, Mattiace received 34 citations regarding the poor condition of the storage tanks and safety violations. Mattiace was also ordered by the New York State Department of Transportation (NYSDOT) and United States Coast Guard (USCG) to initiate a clean-up of the property, but failed to comply with the orders. Eventually, the Site owners installed a series of monitoring wells and a product recovery trench.

The Site was leased to Applied Environmental Services (AES) in 1980. AES operated a facility for the blending of various chemical waste materials. AES also operated a hazardous waste storage facility and installed a floating liquid chemical recovery pump. AES continued the monitoring and recovery efforts previously undertaken and installed additional product recovery equipment. The recovery trench reportedly recovered approximately 500 gallons of product per month between 1981 and 1982. Volatile halogenated and nonhalogenated hydrocarbons were detected in groundwater samples collected in 1982.

Shore Realty purchased the Site in October 1983, and evicted AES in January 1984. New York State filed suit against Shore Realty and its owner, Donald Leogrande, in February 1984. As a result of that suit, Shore Realty and Leogrande were ordered by the court to undertake remedial actions at the Site. Subsequently, Shore Realty and Leogrande commenced a third-party action suit against defendants, including prior Site owners, prior Site operators, and a number of companies that had allegedly shipped chemicals to the Site during AES' operations. No commercial activity has occurred at the Site since 1984.

2.3 Previous Investigations/Remedial Actions

In March 1984, the Department inventoried, and sampled chemicals contained on-Site and collected surface water samples from Hempstead Harbor. Between 1985 and 1986, a Department contractor removed more than 700,000 gallons of chemicals in ASTs. Shore Realty, under state supervision, removed several hundred drums of waste.

The Site was added to the NPL in 1986. The RI, performed by the Common Defense Group, began in November 1987 and the final RI Report was issued in April 1991. The RI Report concluded that Site soil, groundwater, and sediments were contaminated and identified the primary Site contaminants of concern (COCs) as benzene, benzo(b)fluoranthene, bis-2-ethylhexylphthalate, ethylbenzene, lead, naphthalene, tetrachloroethene, toluene, 1,1,1-trichloroethane, and xylenes. A Feasibility Study was issued in April 1991 and the ROD was issued in June 1992.

The remedy selected in the ROD consisted of AS, groundwater extraction and treatment, SVE and treatment, and enhanced in-situ bioremediation. The ROD concluded that treatment of impacted soil and groundwater would result in improved sediment conditions. In August 1992 the PPG entered into a Consent Judgement with the State of New York to design, construct, and operate the remedy selected in the ROD. The Consent Judgement also required the PPG to conduct restoration activities of the mudflats west and south of the Site.

A pre-design investigation (PDI) was performed in 1993 and confirmed the findings of the RI Report. The remedial design was prepared, and construction of remedial systems was completed in January 1995. In 1994, during construction of the remedy, approximately 14 tons of contaminated sludge, 870 tons of building debris, and two 700,000-gallon underground storage tanks (USTs) containing 3,200 gallons of flammable liquids were removed and disposed of off-Site. OM&M of remedial systems began in June 1995 and has continued, with significant modification and optimization, to present. OM&M of remediation systems and upgrade/optimization efforts are described in Section 6.0.

Inspections of the mudflats near the Site concluded that optimum conditions for long-term survival of a saltmarsh community were not present. Therefore, in a 2002 Stipulation and Proposed Order (2002 Stipulation) issued by the State of New York against Shore Realty, the Bar Beach Lagoon in North Hempstead, New York was selected as an alternative location for restoration activities. Restoration of salt marshland and coastline of Bar Beach Lagoon was completed in May 2003. In February 2004, a new steel bulkhead was installed along the eastern boundary of Hempstead Harbor. In 2006 the United States

Department of Justice (USDOJ) concurred that the PPG had completed actions that were required by the 1992 Consent Judgment and 2002 Stipulation to address Natural Resource Damage.

In 2008, the PPG submitted a *Remedial Effectiveness Plan (REP)*, prepared by ERM and dated February 2008, to USEPA, which concluded Site remediation systems, as configured at the time, had reached their effective limits for further reducing significant concentrations of contaminants in the soil or groundwater. However, the United States Environmental Protection Agency (USEPA) and NYSDEC disagreed and recommended further evaluation of the remediation systems. The PPG completed an extensive refurbishment in 2009, as documented in *SVE/AS and Groundwater Remedial System Performance July 1995 through March 2010*, prepared by ERM and dated September 2010. While the refurbishment improved system uptime performance and increased groundwater extraction rates, contaminant mass recovery did not substantially improve. As a result, in May 2011 USEPA requested the PPG complete additional remediation system upgrades.

In response to USEPA's request the PPG performed additional investigation activities, including Site-wide well inventory and inspections, a Site-wide hydraulic evaluation, and an expanded groundwater sampling event. Results of the investigation are documented in *Supplemental Data Acquisition Summary & Analysis* (SDASA), prepared by ERM and dated March 2012. It was concluded that remaining concentrations of VOCs in groundwater greater than Class GA Values at the Site were limited to the shallow aquifer in the vicinity of existing groundwater extraction wells. Additionally, the SDASA concluded that the hydraulic regime below the shallow aquifer and the bulkhead installed at the Site mitigated migration of Site groundwater contaminants to Hempstead Harbor. In response to the SDASA, NYSDEC:

- Requested that the PPG make a robust attempt to optimize the existing remedial system with the goal of achieving additional reductions in VOCs in the shallow groundwater aquifer near existing monitoring wells at the Site;
- Indicated that certain procedural requirements outlined in Chapter 6.4 (Remedial Process Closure Requirements) of DER-10 needed to be met to advance the Site toward closure;
- Noted that the technical modifications to optimize the remedial system may be beneficial, even if meeting the performance objectives in the ROD for the Site ultimately proved infeasible; and
- Further advised that these modifications were necessary before a decision could be made whether the remedy had reached the practical limits of its effectiveness and thus should be discontinued pursuant to the 1992 Consent Judgment.

As a result, the PPG prepared and submitted to the Agencies for approval a *Remedial System Optimization Plan (RSOP)*, prepared by ERM and dated June 2013. The goal of the RSOP was to modify/optimize the physical configuration and OM&M of the existing remedial system, without altering the agreed funding limits in the 1992 Consent Judgment, to meet the following objectives specified by NYSDEC:

- Further reduce hot-spot VOC concentrations in the shallow layer of groundwater in the area of the existing recovery wells along the western edge of the Site; and
- Satisfy DER-10 requirements.

Activities to modify/optimize the remedial system pursuant to the RSOP were undertaken and completed between September and November 2013. The actions focused on modifying the configuration and OM&M of the existing remedial systems. The following significant modifications were implemented:

- Installation and connection of three new groundwater extraction wells [two (GX-5 and GX-6) in the vicinity of existing groundwater extraction well GX-2, and the third (GX-07) near monitoring well WP-5A];
- Replacement of failing instrumentation control wiring/conduit for extraction wells GX0 through GX4;
- Replacement of the Tank-01 pump and motor;
- Repair of the Site water service line;
- Replacement of the treated water infiltration gallery;
- Installation of additional bag filters; and
- Pulse operation (cyclic 2 months on and 1 month off operation) of the remedial system.

The PPG continued OM&M of the remediation systems from November 2013 to December 2018, when the remediation systems were shut down. On January 6, 2019 the 2019 Order was issued by the United States District Court Eastern District of New York indicating that the PPG's obligations under the 1992 Consent Judgment were terminated and NYSDEC assumed responsibility for Site remediation. Additionally, the 2019 Order stated "the performance standards for the Remedy have been met in all areas across the Site except in two identified locations (the "Residual VOC Hotspots") and continuing the Remedy will not meaningfully reduce soil or groundwater concentrations of VOCs in the Residual VOC Hotspots."[1] In March 2019 NYSDEC issued WA No. D007620-47 to TRC to perform OM&M activities and complete a Supplemental Investigation of the two remaining "hot spots" identified in the 2019 Order (Investigation Areas 1 and 2) in the western portion of the Site. In April 2019 Shore Realty granted and filed an Environmental Easement limiting future Site use to Commercial or Industrial in accordance with a Site Management Plan (SMP). TRC restarted operation of the remediation systems in July 2019 and completed a "shake-down" evaluation. Normal pulsed operation of the remediation systems resumed in August 2020 and continues to present.

TRC completed supplemental soil investigation activities between July 2019 and December 2019 to delineate the likely source(s) of ongoing groundwater impacts in two Investigation Areas (refer to **Figure**

[1] Independent evaluation of Site-wide impacts is beyond the scope of this RSO Report.

2). Details regarding the scope and findings are described in Section 4.0 and the *Summary of Supplemental Investigation Activities – January 2020*, prepared by TRC (refer to **Appendix A**).

3.0 Regulatory Requirements and Cleanup Goals

3.1 Remedial Action Objectives

RAOs are developed in order to set objectives for protecting public health and the environment. The ROD states that, at a minimum, the remedy selected should eliminate or mitigate all significant threats to public health and the environment presented by the hazardous waste disposed at the Site, through the proper application of scientific and engineering principles. The RAOs in the ROD are listed below.

Soil

- Reduction of the concentrations of benzene and methylene chloride so that the presence of these chemicals at the site do not present an added risk of cancer of more than one in one million under the most conservative exposure scenario; and
- Reduction of the concentrations of organic contaminants in soils so that, to the extent feasible, contaminants do not leach from soils and contaminate groundwater to levels above standards.

Groundwater

- Reduce the concentrations of contaminants in groundwater to below New York State groundwater standards, to the extent technically feasible.

Sediments

- Indirectly remediate sediments by treating the source of contaminants to the sediments, Site soils, and groundwater.

Air

- Eliminate exceedances of ambient air standards over the mud flats.

Surface Water

- Eliminate the sheen on surface waters to comply with applicable surface water standards.

3.2 Cleanup Goals

Soil

Soil remediation, in accordance with NYSDEC 6 NYCRR 375-6, is required to achieve compliance with Soil Cleanup Objectives (SCOs) for the protection of public health, protection of groundwater, and protection of ecological resources.

The Site is primarily comprised of disturbed (i.e., developed) land and is located adjacent to surface water and wetlands. A marshland/wetland restoration project and limited bulkhead replacement were completed

in 2004, fulfilling the Site owner's obligations to restore Natural Resource Damage. As such, Protection of Ecological Resources SCOs are not applicable to the Site.

As identified in Section 5.3, ethylbenzene, toluene, and total xylenes are the primary Site COCs in soil. Considering the recorded Environmental Easement limits Site use to Commercial and Industrial purposes, the Commercial Use (CU), Industrial Use (IU), and Protection of Groundwater (PGW) SCOs for ethylbenzene, toluene, and total xylenes are applicable and shown in **Table 1**.

Groundwater

The New York State groundwater classification for the Site is GA, which indicates waters that could be used as a source of drinking water. Therefore, groundwater quality Standards and Guidance Values established in the Division of Water TOGS 1.1.1 (Class GA Values) are the applicable cleanup goals for groundwater. Since Class GA Values are protective of sources of drinking water federal Maximum Contaminant Levels (MCLs) are not considered applicable for the purposes of this RSO Report.

As identified in Section 5.3, benzene, ethylbenzene, isopropylbenzene, methylene chloride, toluene, and total xylenes are the COCs in groundwater. The Class GA Values for benzene, ethylbenzene, isopropylbenzene, methylene chloride, toluene, and total xylenes in groundwater are shown in **Table 2**.

4.0 Summary of Supplemental Investigation and Findings

4.1 Summary of Supplemental Investigation

A total of 13 soil borings in Investigation Area 1 and seven soil borings in Investigation Area 2 were advanced using direct-push drilling techniques (DPT) during the first mobilization between July 8, 2019 and July 11, 2019. A total of seven soil borings in Investigation Area 1 and five soil borings in Investigation Area 2 were advanced using DPT during the second mobilization between December 2, 2019 and December 4, 2019. Soil boring locations are shown in **Appendix A**. Each soil boring was hand-cleared to 5 feet below ground surface (bgs) and then sampled continuously in 5-foot increments, using Macro-Core® samplers, to a maximum depth of 20 feet bgs. The samples were inspected and screened for indications of contamination [e.g., elevated photoionization detector (PID) readings, staining, odors, etc.]. Soils generally consisted of heterogeneous mixtures of silty sands with clay and gravel. Saturated soil was generally encountered between 2.5 and 4.0 feet bgs. Soil boring logs are included in **Appendix A**.

An aliquot of soil from the sample exhibiting the greatest indications of potential impacts from each soil boring was analyzed using an Oil-In-Soil™ dye test. At least one additional aliquot of soil collected from each of the soil borings SB-105, SB-106, SB-115, SB-119, SB-210, and SB-211 was analyzed using an Oil-In-Soil™ dye test. The Oil-In-Soil™ dye test provides qualitative visual indications of the presence of non-aqueous phase liquid (NAPL) in soil. Photographs of each Oil-In-Soil™ dye test are presented in **Appendix A**.

Generally, two soil samples from each boring (with the exception of SB-114 – one sample, SB-204 – three samples, SB-211 – four samples, and SB-212 – one sample) were submitted for laboratory analysis for Target Compound List (TCL) VOCs via USEPA Method 8260. Selected for analysis from each boring, generally, were the interval exhibiting the greatest evidence of impacts and the apparent underlying clean interval. At two locations, SB-114 and SB-212, no evidence of impacts was observed and one soil sample from the interval directly above the saturated zone was submitted for analysis. Soil samples were containerized, and the containers were labeled, sealed, and placed in a chilled cooler for shipment to Eurofins TestAmerica Laboratories, Inc. (Eurofins). Eurofins is an Environmental Laboratory Approval Program (ELAP)-certified laboratory approved by the New York State Department of Health (NYSDOH) located in Edison, NJ. Standard chain-of-custody procedures were followed. Boring identification numbers, depth intervals of samples selected for analysis, and the maximum PID measurement for each soil sample selected for analysis are presented in **Appendix A**.

The analytical results were compared to 6 NYCRR 375-6.8 Unrestricted Use (UU), CU, and PGW SCOs and are presented in **Appendix A**. Acetone, a common laboratory contaminant, was detected at concentrations greater than the UUSCO and PGWSCO in 19 of the 65 soil samples submitted for analysis. Methylene chloride was detected at a concentration slightly greater than the UUSCO and PGWSCO in one soil sample. While methylene chloride has been historically detected at concentrations above the NYSDEC

Standard for Class GA Water ("Class GA Value") in Site groundwater, it has not been detected in groundwater for over two years and was not considered a COC for the Supplemental Investigation (SI).

One or more ethylbenzene, toluene, and xylenes (ETX) compounds were detected at concentrations greater than the PGW SCOs and/or UU SCOs in 18 of the 65 soil samples submitted for analysis. Total xylenes were detected at concentrations greater than the CUSCO in SB-204 (5'-6') and SB-209 (5'-7'). A summary of field observations, Oil-In-Soil™ test results (and corresponding interpretations of the results) and the analytical laboratory results are presented in **Appendix A**. Additionally, the results of the analyses of soil samples for ETX compounds are summarized on **Figures 3 and 4**. PID measurement and Oil-In-Soil™ results are also summarized in **Figures 3 and 4**. A geologic cross-section location map; and geologic cross-sections, with PID screening results, ETX in soil concentrations, and Oil-In-Soil™ test results are included in **Appendix A**.

4.2 Nature and Extent of Contamination

Remaining impacts to Site soil and groundwater that are the subject of this RSO Report are limited to the two "hot spots" Investigation Areas 1 and 2 in the Lower Area delineated during the SI. A discussion of remaining concentrations of COCs in soil and groundwater in each Investigation Area is presented below.

Investigation Area 1

Evidence of petroleum-related impacts to soil were generally limited to between 3 and 11 feet bgs. The highest PID measurements were recorded during screening of soil recovered from SB-101, SB-102, and SB-204 between 4 to 6 feet bgs, in the northern and eastern portions of Investigation Area 1. Oil-In-Soil™ test results indicate evidence of impacts throughout Investigation Area 1. Ethylbenzene and/or total xylenes were detected at concentrations above PGW SCOs in eight samples collected from seven borings in Investigation Area 1. Total xylenes were detected at a concentration of 709 mg/kg, greater than the CU SCO of 500 mg/kg, in the soil sample collected 5 to 6 feet bgs from SB-204. The highest total ETX concentrations were detected in samples collected from SB-104 [(4'-5'), 34.7 milligrams per kilograms (mg/kg)], SB-111 [(4'-5'), 472 mg/kg], SB-113 [(6'-7'), 9.4 mg/kg], SB-203 [(5'-6'), 227.23 mg/kg)], and SB-204 [(5'-6'), 755 mg/kg] located east of monitoring well WP-5A or south of extraction well GX-7, and representing the most likely residual sources of impacts to groundwater in Investigation Area 1.

Concentrations of benzene, ETX, isopropylbenzene, and methylene chloride detected in groundwater samples collected within and near Investigation Area 1 between April 2018 and October 2020 are shown on **Figure 5**. Benzene and methylene chloride were not detected at concentrations greater than Class GA Values during this time period.

Prior to the October 2020 sampling event, ethylbenzene, isopropylbenzene, and xylenes had been consistently detected at concentrations greater than Class GA Values in groundwater samples collected from monitoring well WP-5A and extraction well GX-7. Between April 2018 and July 2020 total ETX concentrations ranged between 16.3 and 10,469.3 micrograms per liter (µg/L) in samples collected from

WP-5A and 0.36 and 1,034.8 µg/L in samples collected from GX-7. Individual ETX compounds were not detected at concentrations above Class GA Values in the samples collected from monitoring well WP-5A and extraction well GX-7 in October 2020. Isopropylbenzene concentrations have ranged between 29 and 66.3 µg/L in samples collected from WP-5A and non-detect and 22 µg/L in samples collected from GX-7 between April 2018 and October 2020. Isolated exceedances of total xylenes or isopropylbenzene were detected in samples collected from GX-0 in April and July 2018 and December 2019. Benzene has not been detected in the wells within and near Investigation Area 1 during the period between April 2018 and October 2020.

Investigation Area 2

The greatest evidence of petroleum impacts to soil were generally encountered between 5 and 15 feet bgs in Investigation Area 2. The highest PID measurements were recorded during screening of soil recovered from SB-209, SB-210, and SB-211, between 5 and 15 feet bgs, in the southern and eastern portions of Investigation Area 2. Oil-In-Soil™ test results indicate evidence of impacts throughout Investigation Area 2. Ethylbenzene, toluene, and/or total xylenes were detected at concentrations above PGW SCOs in six samples collected from five borings in Investigation Area 2. The soil sample collected from 5 to 6 feet bgs at SB-120 was saturated with NAPL. However, ETX compounds were not detected at elevated concentrations in the soil sample collected 5 to 6 feet bgs from SB-120, suggesting the encountered NAPL may be weathered and not a significant source of ETX impacts to groundwater. Total xylenes were detected at a concentration of 641 mg/kg, greater than the CU SCO of 500 mg/kg, in the sample collected from 5 to 7 feet bgs at SB-209. The highest total ETX concentrations were detected in samples collected from SB-115 [(7'-8'), 349 mg/kg], SB-119 [(9'-10'), 480 mg/kg], SB-209 [(5'-7'), 819 mg/kg], SB-210 [(7'-9'), 113.1 mg/kg], and SB-211 [(10'-11'), 100.264 mg/kg] located south or east of extraction well GX-2, and representing the most likely residual sources of impacts to groundwater in Investigation Area 2.

Concentrations of benzene, ETX, and isopropylbenzene detected in groundwater samples collected from within and near Investigation Area 2 between April 2018 and October 2020 are shown on **Figure 6**. Methylene chloride was not detected at a concentration greater than the Class GA Value during this time period.

Prior to the October 2020 sampling event, ETX were consistently detected at concentrations greater than Class GA Values in groundwater samples collected from extraction well GX-2. Between April 2018 and July 2020 total ETX concentrations have ranged between 0.53 and 572 µg/L in samples collected from GX-2. ETX was not detected in the sample collected from extraction well GX-2 in October 2020. Isopropylbenzene concentrations ranged between 0.52 and 8.2 µg/L in samples collected from GX-2 between April 2018 and July 2020. Isopropylbenzene was not detected in any of the wells sampled in October 2020. An isolated exceedance of the Class GA Value for total xylenes was detected in the sample collected from GX-5 in April 2018. Benzene was not detected in the wells within and near Investigation Area 2 during the three groundwater sampling events completed in 2020.

5.0 Conceptual Site Model

Described below is the conceptual site model for the two "hot spots" at the Site delineated during the SI.

5.1 Surface and Subsurface Characteristics

Soils in Investigation Areas 1 and 2 consist of highly heterogeneous distributed fine to coarse sands, gravel, silt and clay. During the SI, saturated soil in Investigation Area 1 was encountered between 2 and 3 feet bgs and underlying clay was encountered intermittently between approximately 15 and 19 feet bgs. Saturated soil in Investigation Area 2 was encountered between 2.5 and 4.0 feet bgs and underlying clay was encountered intermittently between approximately 11 and 18 feet bgs. Geological cross-sections are presented in **Attachment A**.

5.2 Contaminant Sources

Site soil and groundwater impacts are the result of historic chemical storage and management activities that likely resulted in several unreported releases to the environment, as well as one reported release of 3,000 gallons of toluene in the western portion of the Site. The likely sources of residual concentrations of petroleum-related VOCs in groundwater in the "hot spots" delineated during the SI are VOCs sorbed to soil below the water table.

5.3 Contaminants of Concern

ETX are the primary COCs in soil and benzene, ETX, isopropylbenzene, and methylene chloride are the primary COCs in groundwater that are the focus of this RSO Report.

5.4 Extent of Contamination

During the SI, individual ETX compounds were detected at concentrations greater than applicable PGW SCOs at depths up to 11 feet bgs in Investigation Area 1 and 15 feet bgs in Investigation Area 2. Individual ETX compounds and isopropylbenzene have been consistently detected at concentrations greater than Class GA Values in groundwater samples collected from monitoring well WP-5A and extraction well GX-7 in Investigation Area 1 and extraction well GX-2 in Investigation Area 2. (The exception to this is the most-recent, October 2020, groundwater sampling event. Only isopropylbenzene in WP-5A was detected at a concentration greater than the Class GA Value in the groundwater samples collected in October 2020.)

Total xylenes were detected at concentrations greater than the Class GA Value in groundwater samples collected from GX-0, located north of Investigation Area 1, in April and July 2018. Total xylenes were detected at a concentration greater than the Class GA Value in the groundwater sample collected from GX-5, located in the southern portion of Investigation Area 2, in April 2018. Isopropylbenzene was detected at a concentration greater than the Class GA Value in the groundwater sample collected from GX-0 in December 2019. Exceedances of Class GA Values have not been detected in samples collected quarterly from GX-0 since December 2019 or from GX-5 since April 2018.

5.5 Exposure Pathways

Exposure to a contaminant occurs when an exposure pathway is complete. An exposure pathway consists of five elements: (1) a contaminant source, (2) a contaminant release and transport mechanism, (3) a point of exposure, (4) a route of exposure, and (5) a receptor population. An exposure pathway is complete when all five elements are present. If one or more of the elements is absent, the pathway is potentially incomplete. An exposure pathway may be eliminated from consideration if any one of the five elements has not existed in the past, does not exist in the present, and will not exist in the future.

Based on the results of the SI and quarterly groundwater monitoring, VOCs are present in soil and groundwater at concentrations above applicable SCGs. A qualitative exposure assessment was prepared to evaluate the potential for exposure to VOCs in soil and groundwater.

Dermal contact, ingestion of soil or groundwater, or inhalation of vapors or dust represent the potential routes of exposure. Potential receptors include Site visitors, Site workers, property owners/occupants, construction workers, and off-Site residents during ground-intrusive maintenance, demolition, and/or redevelopment.

Considering the current conditions at the Site, the following exposure pathways are considered incomplete:

- **Groundwater ingestion:** The Hamlet of Glenwood Landing supplies potable water for businesses and residents in this area via a municipal water supply system; therefore, this exposure pathway is not complete.
- **Soil dermal contact or ingestion by Site occupants and visitors:** The portion of the Site with remaining contamination is covered by asphalt pavement or vegetation, thereby minimizing the potential for exposure of occupants and visitors to soil.
- **Inhalation of vapors by Site occupants and visitors:** The SVE system is operating during the majority of time spent on-Site by remediation technicians. Additionally, the concrete foundation and floor slab of treatment building, the only occupied structure on-Site, is elevated approximately 4 to 5 feet above the surrounding grade. Therefore, this exposure pathway is not complete.

The following exposure pathways are considered potentially complete:

- **Groundwater dermal contact by construction workers and maintenance workers:** Groundwater was encountered between approximately 2 and 4 feet bgs. Therefore, the potential that groundwater will be encountered during utility and/or property maintenance and future redevelopment activities exists.
- **Soil dermal contact by construction workers and maintenance workers:** Potential future construction and maintenance activities (e.g., utility repairs) could result in contact with impacted soil.

- **Inhalation of vapors and dust by construction workers and maintenance workers:** Potential future construction and maintenance activities (e.g., utility repairs, redevelopment, etc.) could result in the generation of and exposure to impacted vapors and dust.
- **Inhalation of vapors and dust by off-Site residents:** Remedial actions and future ground-intrusive activities (e.g., utility repairs, redevelopment, etc.) could result in the generation of impacted vapors and dust that have the potential to migrate off-Site during construction.
- **Inhalation of vapors by future Site occupants and visitors:** Soil vapor intrusion could occur if slab on grade structures are constructed on the Site in the future, resulting in exposure of Site occupants or visitors.

6.0 Description of Remedy

6.1 Remedial Systems Overview

The original AS, SVE, and groundwater extraction systems installed in 1995 include:

- A 30-foot by 60-foot metal building constructed on a raised foundation housing treatment equipment
- 42 AS wells
- 6 horizontal SVE wells
- 14 vertical SVE wells
- 5 groundwater extraction wells

In 2005, twelve additional air sparge points and an additional horizontal SVE well were installed in the Lower Area. The horizontal SVE well located near GX-2 was expanded approximately 50 feet to the northeast. Additionally, it was determined in October 2005 that cleanup goals had been achieved for soil and groundwater in the Upper Area and operation of the AS and SVE wells in the Upper Area was terminated. In 2013, two additional groundwater extraction wells (GX-5 and GX-6) were installed in the vicinity of extraction well GX-2 and one additional extraction well (GX-7) was installed in the vicinity of monitoring well WP-5A. The layout of the Site remediation systems is presented in **Appendix C**.

Historically, compressed air was delivered to AS wells to volatilize dissolved-phase VOCs into the vadose zone. Due to low concentrations of VOCs detected in recovered soil vapor, operation of the air sparge system was terminated in August 2020. Prior to termination, 24 AS wells had been in operation in the Lower Area. Currently, 10 vertical and horizontal SVE wells, connected via underground piping to a 25 horsepower (hp) blower, convey extracted vapors to the treatment system. Extracted soil vapor was originally treated via thermal oxidization prior to discharge to the atmosphere. In 2009, the thermal oxidizer was removed and replaced with two 400-pound vapor phase granular activated carbon (VGAC) vessels, operated in parallel.

Groundwater extraction from wells GX-1, GX-3, GX-4, GX-5, and GX-6 was terminated in April 2020 based on low concentrations of VOCs detected in groundwater samples collected from these wells. Extracted groundwater was originally treated via settling, flocculation, precipitation, air stripping, and bag filtration; amended with nutrients to stimulate in-situ bioremediation; and discharged to a horizontal reinjection well in the Upper Area. Flocculation and chemical precipitation were removed from the treatment system at an unknown date. In 2009, the air stripper was removed from the groundwater treatment system and replaced with two 165-pound liquid phase granular activated carbon vessels, operated in parallel. Accumulated sludge is transferred to a settling tank where water is decanted and recirculated through the treatment system. Accumulated sludge is transported off-Site for disposal.

6.2 Operation, Maintenance, and Monitoring Program

Since September 2013 the soil vapor and groundwater extraction and treatment systems have been operated on a 2-month on/1-month off pulse cycle. OM&M of the remediation systems is performed in accordance with Schedule 1 of WA No. D009812-01, included in **Appendix D**.

7.0 Remedial System Performance

7.1 System Runtime/Downtime Summary

A summary of remediation system uptime during operating months from November 2018 to March 2020 is presented in **Table 3** below.

Table 3
Remediation System Uptime Summary[1]
(SVE/GW)

Pulse Cycle No. 21		Pulse Cycle No. 22		Pulse Cycle No. 23		Pulse Cycle No. 24	
November 2018	December 2018	August 2019	September 2019	November 2019	December 2019	February 2020	March 2020
0%/100%	60%/96%	65%/74%	89%/57%	88%/88%	63%/63%	75%/91%	89%/100%

[1] Percent of scheduled operation period. The remediation systems PLC is not equipped with remote telemetry monitoring, an alarm log download port, or a log of hours of operation for the groundwater extraction and treatment systems. Therefore, up-time calculations for the groundwater extraction and treatment system are estimated.

GW – Groundwater

Significant downtime events between November 2018 and March 2020 are described in detail in the *Semi-Annual Report/Technical Memorandum*, prepared by ERM, dated January 9, 2019 and *Semi-Annual Monitoring Reports (SMRs)*, prepared by TRC, dated November 29, 2019 and May 22, 2020.

7.2 Contaminant Mass Recovery Assessment

As of March 2020, the most-recent period for which an SMR has been prepared, approximately 90,000 pounds of VOCs have been removed from soil vapor and groundwater since June 1995. Of this total, only approximately 1 percent of the contaminant mass has been recovered since November 2013, when three additional groundwater monitoring wells were installed and the remediation systems were last optimized to enhance mass recovery. Additionally, only approximately 5 pounds of total VOCs have been recovered between August 2019 and March 2020. Therefore, it is not likely that continued operation of Site remediation systems will result in substantial contaminant mass recovery from soil vapor or groundwater.

7.3 Regulatory Compliance

Remediation system air and wastewater discharges are not subject to regulatory permit requirements. Remediation systems are operated in accordance with the ROD and modifications approved by NYSDEC and/or USEPA. SMRs are prepared and submitted to NYSDEC in accordance with WA No. D009812-01.

7.4 Health and Safety Records

No health or safety-related incidents have occurred at the Site since TRC assumed responsibility for OM&M of the remediation systems in March 2019.

7.5 Assessment of Cleanup Progress/Achievement of Remedial Action Objectives

The remediation systems have removed significant mass from the subsurface and achieved cleanup goals in the Upper Area and portions of the Lower Area of the Site. However, in two "hot spots" (within Investigation Areas 1 and 2, in the Lower Area of the Site) petroleum-related VOCs have consistently been detected in groundwater at concentrations above Class GA Values. Results of the SI indicate that concentrations of VOCs greater than PGW SCOs in soil below the water table are likely the source of continued groundwater impacts in these areas. Progress with respect to achieving Site cleanup goals described in Section 3.2 within and near Investigation Areas 1 and 2 is summarized below:

Investigation Area 1

Soil

- **Achievement of Industrial Use SCOs** – None of the 41 soil samples analyzed as part of the SI exhibited results above the IU SCOs.
- **Achievement of Commercial Use SCOs** – Total xylenes were detected at a concentration above the CU SCO in one soil sample collected from one soil boring as part of the SI. All other SI soil sampling results are below the CU SCOs.
- **Achievement of Protection of Groundwater SCOs** – At least one COC was detected at a concentration above the applicable PGW SCO in eight soil samples collected from a total of seven soil borings as part of the SI.

Groundwater

- **Achievement of Class GA Values** – Since April 2018 groundwater sampling results for two of the five wells (A11 and GX-1) included in the quarterly monitoring well network within and near Investigation Area 1 have been below Class GA Values. Additionally, with the exception of an exceedance of the GA Value for isopropylbenzene detected in the sample collected from monitoring well WP-5A, the results of analysis of the groundwater samples collected in October 2020 from monitoring wells within and near Investigation Area 1 were below Class GA Values.

Investigation Area 2

Soil

- **Achievement of Industrial Use SCOs** – None of the 24 soil samples analyzed as part of the SI exhibited results above the IU SCOs.
- **Achievement of Commercial Use SCOs** – Total xylenes were detected at a concentration above the CU SCO in one soil sample collected from one soil boring as part of the SI. All other SI soil sampling results are below the CU SCOs.

- **Achievement of Protection of Groundwater SCOs** – At least one COC was detected at a concentration above the applicable PGW SCO in six soil samples collected from a total of five soil borings as part of the SI.

Groundwater

- **Achievement of Class GA Values** – Since April 2018 groundwater sampling results have been below Class GA Values in one of the three extraction wells (GX-6) included in the quarterly monitoring network within and near Investigation Area 2. Additionally, results of analysis of groundwater samples collected quarterly from extraction well GX-5 have been below Class GA Values since July 2018. The results of analysis of all groundwater samples collected in October 2020 from monitoring wells within and near Investigation Area 2 were below Class GA Values.

7.6 Operations, Maintenance, and Monitoring Costs

A summary of OM&M costs incurred by TRC between August 2019 and April 2020, the last month for which an SMR has been prepared, is presented below.

Table 4
Summary of Site OM&M Costs

Task Description	April 2019 to October 2019	November 2019 to April 2020	Total
OM&M Labor	$49,456.97	$60,469.07	$109,926.04
OM&M Subcontractors	$13,864.72	$19,515.53	$33,380.25
OM&M Expenses	$3,281.45	$10,345.51	$13,626.96
Utilities	$12,918.18	$15,847.00	$28,765.18
Groundwater Sampling Labor	$6,289.97	$10,266.18	$16,556.15
Groundwater Sampling Subcontractors	$1,079.47	$805.54	$1,885.01
Groundwater Sampling Expenses	$1,086.67	$921.21	$2,007.88
Total:	**$87,977.43**	**$118,170.04**	**$206,147.47**

8.0 Conclusions and Recommendations

Petroleum-related VOCs present in soil at concentrations above PGW SCOs are the likely source of ongoing exceedances of Class GA Values in the two remaining "hot spots" (in Investigation Areas 1 and 2) in the Lower Area of the Site delineated during the SI. Extensive refurbishment and optimization of the remediation systems have been performed over the past 25 years, including the installation of three groundwater extraction wells in the hot spot areas and optimization activities in 2013 to improve contaminant mass recovery and advance the Site towards closure. The 2013 optimization efforts failed to substantially increase contaminant mass recovery rates. It is likely that mass recovery is limited by the rate of contaminant desorption from soil to groundwater. Therefore, continued OM&M of the remediation systems, as configured, is not expected to recover a significant amount of the remaining contaminant mass nor achieve soil and groundwater cleanup goals within a reasonable timeframe. Considering the extensive reconfiguration and optimization activities previously performed at the Site, it is likely that removal of source material via excavation will be more effective at achieving Site cleanup goals than additional modification of the AS, SVE, and/or groundwater extraction systems.

Therefore, a Corrective Measure consisting of soil excavation, off-site disposal, and application of an amendment to enhance in-situ bioremediation of Site COCs, as described in the June 2020 Conceptual Plan (**Appendix B**), should be implemented in the two "hot spots" delineated during the SI. A conceptual description of the Corrective Measure, including estimated costs for implementation, is presented below in Section 9.0. Subsequent to approval of this RSO Report, TRC will prepare a Technical Scope of Work for implementation of the Corrective Measure. Contractor requirements for a Health and Safety Plan and a Community Air Monitoring Plan, to be prepared and implemented in accordance with NYSDEC DER-10, will be included in the Technical Scope of Work. Upon completion of the Corrective Measure existing remediation systems would be decommissioned and a long-term groundwater monitoring program should be implemented to monitor progress towards achieving Site RAOs. Existing remediation systems would not be disassembled and removed until groundwater monitoring demonstrates the Corrective Measure has been effective at achieving Site cleanup goals.

9.0 Corrective Measure

In June 2020, TRC prepared a Conceptual Plan (presented in **Appendix B**) for a Corrective Measure to remove petroleum-impacted soil from the two remaining "hot spots" at the Site (Investigation Areas 1 and 2) delineated during the SI. The objective of the Corrective Measure is to, within the "hot spots," remove residual sources of petroleum-related VOCs in soil, primarily ETX, detected in groundwater samples collected from extraction wells GX-2 and GX-7 and monitoring well WP-5A. Soil will be removed in four zones, as summarized in the table below. Limits of the Excavation Zones are shown on **Figures 1 and 2** in **Appendix B.**

Table 5
Summary of Excavation Zones

Investigation Area	Excavation Zone	Area of Excavation (square feet)	Average Depth of Excavation (feet)	Excavation Volume (Rounded) (cubic yards)
1	1A	790	8.0	240
1	1B	500	15.0	280
2	2A	420	13.5	210
2	2B	170	18.0	110
Total (Rounded)				**840**

Note: All quantities are approximate.

9.1 Basis of Excavation Limits

The objective of the Corrective Measure is to remove the source of ongoing concentrations of groundwater COCs greater than Class GA Values in the two remaining "hot spots" at the Site delineated during the SI. Therefore, horizontal and vertical limits of excavation were established to remove exceedances of PGW SCOs. In certain instances, complete delineation to UU SCOs was not achieved during the SI. In these instances, recommended excavations limits were extended an appropriate distance from impacted monitoring or extraction wells. Additionally, proximity to monitoring or extraction wells not exhibiting VOC impacts was considered when establishing excavation limits.

Due to the non-uniform distribution of contamination identified at the Site and gaps in horizontal and vertical delineation of VOC concentrations above SCOs, uncertainty exists as to whether the planned soil removal alone would result in adequate reduction of VOC concentrations in groundwater at extraction wells GX-2 and GX-7 and monitoring well WP-5A. Therefore, as described below, the Corrective Measure includes the application of amendments to enhance post-excavation anaerobic bioremediation of petroleum-related VOCs.

9.2 Description of Corrective Measure

Major Corrective Measure work elements are described below. An evaluation of four excavation support options (Option 1 – Large Slide Rail System, Option 2 – Small Slide Rail System, Option 3 – Trench Box, and Option 4 – Sheeting) was completed as part of development of the Conceptual Plan (refer to **Appendix B**). However, the selected contractor will determine means and methods to complete the work.

Mobilization and Site Preparation

Prior to mobilization, an existing conditions survey would be performed, and excavation limits would be staked out in the field. Erosion and sediment controls would be installed and locations of subsurface utilities and bulkhead tie backs (if present) would be identified. Since overhead power lines are located near proposed excavation areas, electrical service to the Site would be temporarily deactivated. The existing groundwater treatment system would be connected to a temporary power source. Subsurface utilities running through the excavation areas (e.g., potable water) would be re-routed outside the limits of planned excavations. Additionally, clearing, grubbing, and grading would be performed in Excavation Zone 1B to prepare the area for installation of an excavation support system. Equipment, materials, and temporary facilities would be mobilized and staged at the Site.

Excavation Support Options

Potential excavation support systems are described in the Conceptual Plan in **Appendix B**. Excavation support systems for Options 1, 2, and 3 would be installed and advanced concurrent with excavation activities. Sheeting under Option 4 would be installed prior to commencing excavation activities. As such, the time to implement each excavation support option varies. It is expected that the selected contractor would be required to submit a schedule for each phase of the work and description of means and methods proposed for excavation support, and that the contractor would be required to obtain Department approval of the schedule and excavation support system prior to start of the work.

Dewatering

Since excavations will be advanced several feet below the water table, dewatering will be required. Dewatering liquids could be treated utilizing the existing Site groundwater treatment system and discharged to the reinjection gallery. However, the selected contractor will determine means and methods to complete the work.

Soil Removal, Staging, Transportation, Disposal, and Backfilling

Soil would be excavated to the target elevation in each Excavation Zone and staged on-Site for disposal. Wells and existing remediation system infrastructure within the limits of excavations would be removed. Disturbed remediation system infrastructure and wells outside the limits of excavation would be abandoned in place. Components of the bulkhead would be identified, clearly marked and protected from disturbance by soil staging and loading operations.

Excavated soil would be characterized and transported off-Site for disposal. Two confirmatory soil samples would be collected from the bottom of each Excavation Zone, for a total of eight confirmatory samples. The coordinates of the horizontal limits and elevation of the bottom of each Excavation Zone would be surveyed by a New York State-licensed surveyor. Excavations would be backfilled with imported clean fill, placed in lifts and compacted. Imported clean fill placed in lifts in the saturated and smear zones of excavations would be mixed with amendment (e.g., gypsum), to enhance anaerobic bioremediation of residual dissolved-phase petroleum-related VOCs.

Utility Reconnection, Surface Restoration, and Demobilization

At the completion of backfilling, excavation supports would be removed, electrical service would be reconnected and reactivated and all equipment, excess materials, waste, and temporary tanks would be removed from the Site. Disturbed asphalt would be restored with either asphalt or compacted gravel and disturbed vegetated areas would be restored with topsoil and seed. Infrastructure associated with existing remediation systems which is disturbed or removed would not be restored or replaced. Appropriately located and screened groundwater monitoring wells would be installed and included in the long-term groundwater monitoring network.

9.3 Cost Estimate

Based on the work elements described above, and the basis of cost described in the Conceptual Plan, the estimated concept-level cost (including 20% contingency) to complete the Corrective Measure is between $1.3 million and $2.0 million. Cost estimate summaries are presented in **Appendix B**.

10.0 References

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2. 6 NYCRR 703, Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations.
3. ERM, Remedial Effectiveness Plan, February 2008.
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6. ERM, Remedial System Optimization Plan, June 2013.
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8. Moskopf, Roslynn R., United States Attorney, USDOJ, to Strong, Andrew L., Attorney, Pillsbury Winthrop Shaw Pitman LLP. 2006. The State of New York v. Shore Realty Corp, et al., Civil Action Nos. 84 Civ. 0864, 85 Civ. 2270 (Weinstein, J.). March 10. Letter.
9. NYSDEC, DER-10, Technical Guidance for Site Investigation and Remediation, May 2010.
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14. Remediation Technologies, Inc., Revised Remedial Action Report, February 1996.
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18. TRC Engineers, Inc., Semi-Annual Monitoring Report, May 2020.
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20. TRC Engineers, Inc., Revised Interim Remedial Measure Conceptual Plan, June 2020.
21. United States District Court Eastern District of New York, The State of New York, et al. against Shore Realty Corp, et al., Consent Judgment Order Nos. 84 Civ. 0864 and 2270, 1992.
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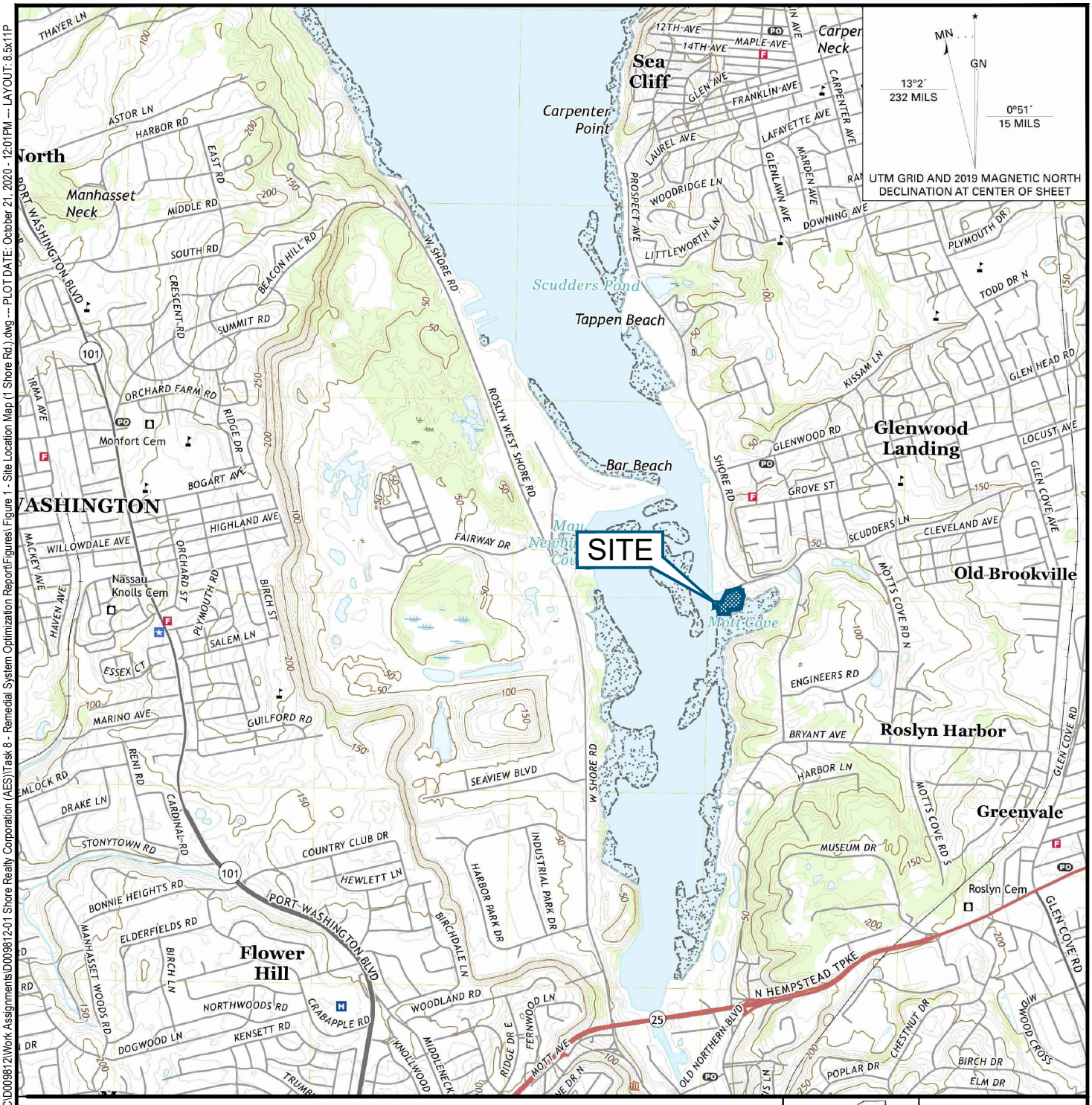
25. USEPA, Fourth Five-Year Review for Applied Environmental Services/Shore Realty Superfund Site, Nassau County, New York, August 2016.

FIGURES



SCALE: 1:2400

1 0.5 0 KILOMETERS 1 2

1000 500 0 METERS 1000 2000

1 0.5 0 MILES 1

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000 FEET

MAP INCLUDES INFORMATION FROM THE FOLLOWING MAP SHEET(S): TP, SEA CLIFF, NY, 7.5 MINUTE DATED 2019.

MAP OBTAINED THROUGH USE OF TOPOVIEW WITH THE INTERFACE CREATED BY THE NATIONAL GEOLOGIC MAP DATABASE PROJECT (NGMDB), IN SUPPORT OF THE TOPOGRAPHIC MAPPING PROGRAM, MANAGED BY THE USGS NATIONAL GEOSPATIAL PROGRAM (NGP).

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PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
REMEDIAL SYSTEM OPTIMIZATION REPORT
SHORE REALTY CORPORATION (AES) - SITE NO. 130006, WA NO. D009812-01
1 SHORE ROAD
GLENWOOD LANDING, NEW YORK 11547

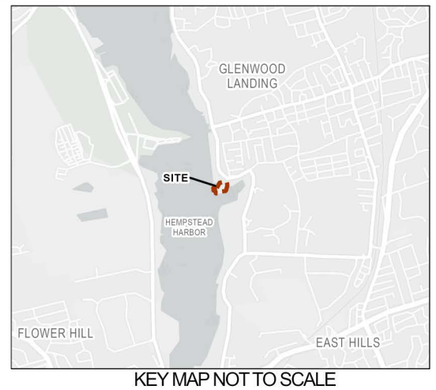
TITLE:

SITE LOCATION MAP

DRAWN BY:	H. DELGADO
CHECKED BY:	D. WARREN
APPROVED BY:	D. GLASS
DATE:	OCTOBER 2020
PROJ. NO.:	386138
FILE:	Figure 1 - Site Location Map (1 Shore Rd.).dwg

FIGURE 1

8.5x11 --- ATTACHED XREF'S: --- ATTACHED IMAGES: NY_Sea Cliff_20190925.TIM;
DRAWING NAME: \\CLIFTONPARK-VFP\clifton park\ECR\Projects\NYSDEC\D009812\Work Assignments\D009812-01 Shore Realty Corporation (AES)\Task 8 - Remedial System Optimization Report\Figures\ Figure 1 - Site Location Map (1 Shore Rd.).dwg --- PLOT DATE: October 21, 2020 - 12:01PM --- LAYOUT: 8.5x11P



KEY MAP NOT TO SCALE

LEGEND

- AIR SPARGE WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- VAPOR MONITORING POINT
- INVESTIGATION AREA
- FENCE

NOTES

1. BASE MAP IMAGERY FROM NEARMAP DATED MARCH 18, 2019.
2. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES ARE APPROXIMATE, UNLESS STATED OTHERWISE.
3. AIR SPARGE WELLS, SOIL VAPOR EXTRACTION WELLS, VAPOR MONITORING POINTS, GROUNDWATER EXTRACTION WELLS, GROUNDWATER MONITORING WELLS, AND FENCE LOCATION ARE APPROXIMATE BASED ON ERM DRAWING TITLED "QUARTERLY SITE MONITORING POINTS" DATED JUNE 25, 2014 AND AERIAL IMAGERY.
4. GROUNDWATER EXTRACTION WELLS GX-0 THROUGH GX-7, GROUNDWATER MONITORING WELLS SW-4 THROUGH SW-6 AND WP-5A, AND AIR SPARGE WELLS A11 AND A23, ARE INCLUDED IN THE QUARTERLY SAMPLING NETWORK.

0 50 100 Feet

SCALE: 1" = 50' (1:600)
SHEET SIZE: 11" BY 17"

N

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
REMEDIAL SYSTEM OPTIMIZATION REPORT
SHORE REALTY CORPORATION (AES) - SITE NO. 130006
1 SHORE ROAD
GLENWOOD LANDING, NEW YORK 11547

TITLE:

SITE LAYOUT

DRAWN BY:	E. CORDERO	PROJ NO.:	386138.0000.0000
CHECKED BY:	H. DELGADO		
APPROVED BY:	D. WARREN		**FIGURE 2**
DATE:	NOVEMBER 2020		

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FILE NO.: 386138-004_REMEDIALSYSTEMOPTIMIZATION.APRX

PLOT DATE: 11/5/2020, 03:30:23 AM BY ECORDERO -- LAYOUT: ANSI B(11"X17")
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COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW YORK LONG ISLAND FIPS 3104 FEET (FOOT US)
MAP ROTATION: 0
TRC - GIS

TRC - GIS

COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW YORK LONG ISLAND FIPS 3104 FEET (FOOT US)
MAP ROTATION: 0

PLOT DATE: 11/6/2020, 13:20:38 PM BY ECORDERO -- LAYOUT: ANSI B(11"X17")
PATH: S:\1-PROJECTS\NYSDEC\327138_SHORE_REALTY\7-APRX\386138-004_REMEDIALSYSTEMOPTIMIZATION.APRX

LABORATORY ANALYTICAL RESULTS LEGEND
RESULTS ARE IN MILLIGRAMS PER KILOGRAM (MG/KG).
BOLD AND HIGHLIGHTED RESULT EXCEEDS PROTECTION OF GROUNDWATER SOIL CLEANUP OBJECTIVE.
BOLD AND HIGHLIGHTED RESULT EXCEEDS COMMERCIAL USE SOIL CLEANUP OBJECTIVE.
NYSDEC PROTECTION OF GROUNDWATER/COMMERCIAL USE SOIL CLEANUP OBJECTIVES:
ETHYLBENZENE - 1 MG/KG / 390 MG/KG
TOLUENE - 0.7 MG/KG / 500 MG/KG
TOTAL XYLENES - 1.6 MG/KG / 500 MG/KG
PID RESULTS LEGEND
PID MEASUREMENTS ARE IN PARTS PER MILLION (PPM).
GREEN SHADING INDICATES A PID RESPONSE OF 5 PPM OR LOWER.
YELLOW SHADING INDICATES A PID RESPONSE FROM GREATER THAN 5 TO 25 PPM.
ORANGE SHADING INDICATES A PID RESPONSE FROM GREATER THAN 25 PPM TO 100 PPM.
RED SHADING INDICATES A PID RESPONSE GREATER THAN 100 PPM.

SB-109

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
3 TO 4	0.11	0.095	1.1	55	SLIGHT PINK BEAD
15 TO 16	<0.0010	<0.0010	0.0051	0.0	NA

SB-108

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
3 TO 4	<0.00094	0.0022	<0.0019	52	PINK BEAD
7 TO 8	<0.0011	<0.0011	0.0053	7.8	NA

SB-207

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
7 TO 8	0.00098	0.00027 J	0.0097	51	SLIGHT PINK BEAD
11 TO 12	0.00053 J	0.00034 J	0.00513	0.0	NA

SB-107

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
4 TO 5	0.30	0.29	**1.7**	24	SLIGHT PINK BEAD
11 TO 12	0.0098	0.0023	0.29	0.0	NA

SB-106

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
3.5 TO 4.5	<0.00090	0.0015 J+	0.0018 J+	57	SLIGHT PINK BEAD
6 TO 6.5	0.00045 J	0.00074 J	0.0053	34	NEGATIVE

SB-206

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
5 TO 6	0.00080 J	0.00081 J	0.02075	71	PINK BEAD
8 TO 9	0.00096	0.00021 J	0.00822	0.0	NA

SB-105

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
6 TO 6.5	<0.00093	<0.00093	0.0027 J+	69	SLIGHT PINK BEAD
14 TO 15	0.00025 J	<0.0011	0.0016 J	0.4	NEGATIVE

SB-104

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
4 TO 5	**2.7**	<0.080	**32**	42	PINK BEAD
11 TO 12	0.00032 J	0.00084 J	0.0033	0.2	NA

SB-205

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
5 TO 6	0.057	0.46	0.344	19.7	NEGATIVE
10 TO 11	<0.00020	<0.00023	0.00102	0.0	NA

SB-201

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
5 TO 6	0.0011 J	<0.00030	0.00484	126	NEGATIVE
14 TO 15	0.0010	<0.00021	0.00894	0.0	NA

SB-110

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
4 TO 4.5	<0.00090	<0.00090	0.0020 J+	54	PINK BEAD
6.5 TO 7	0.00019 J	<0.00096	0.0016 J	7.0	NA

SB-202

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
6 TO 7	0.0010	0.0013	0.00629	43.4	NEGATIVE
9 TO 10	0.00079 J	<0.00024	0.00732	0.0	NA

SB-101

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
4 TO 5	0.23	0.053 J	0.64	198	PINK BEAD
8 TO 9	0.023	0.0018	0.0027	3.2	NA

SB-102

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
4 TO 5	<0.0011	0.00095 J	0.0023 J+	155	NEGATIVE
14 TO 15	0.0011	<0.0011	0.0033	0.7	NA

SB-203

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
5 TO 6	**26 J+**	0.23 J	**201**	84	SLIGHT PINK BEAD
13 TO 14	0.0020	<0.00022	0.0165	0.0	NA

SB-111

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
4 TO 5	**62**	<0.95	**410**	68	PINK BEAD
15 TO 16	0.0046	<0.00082	0.033	0.0	NA

SB-103

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
4 TO 5	<0.0010	0.00098 J	0.0025	27	NEGATIVE
14 TO 15	0.0015	<0.0011	0.011	4.0	NA

SB-112

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
4.5 TO 5	0.038 J	<0.085	**2.1**	38	SLIGHT PINK BEAD
14.5 TO 15	<0.0011	<0.0011	0.0011 J	0.0	NA

SB-204

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
5 TO 6	**46**	<0.77	**709**	338	SLIGHT PINK BEAD
10 TO 11	0.2	<0.016	**3.05**	6.7	NA
19 TO 20	0.00039 J	<0.00020	0.00444	0.0	NA

SB-113

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
6 TO 7	**1.2**	<0.11	**8.2**	52	NEGATIVE
19 TO 19.5	0.0031	0.00081 J	0.019	0.0	NA

KEY MAP NOT TO SCALE

LEGEND

- SOIL BORING
- AIR SPARGE WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITORING WELL
- VAPOR MONITORING POINT
- FENCE

NOTES

1. BASE MAP IMAGERY FROM NEARMAP DATED MARCH 18, 2019.
2. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES ARE APPROXIMATE, UNLESS STATED OTHERWISE.
3. SOIL BORINGS WERE SURVEYED ON JANUARY 10, 2020, THE LOCATION OF SB-103 IS APPROXIMATE.
4. RED RING AROUND BORING SYMBOL INDICATES ETHYLBENZENE, TOLUENE, AND/OR TOTAL XYLENES WERE DETECTED AT A CONCENTRATION GREATER THAN THE PROTECTION OF GROUNDWATER SOIL CLEANUP OBJECTIVE.
5. FT BGS: FEET BELOW GROUND SURFACE.
6. PID: PHOTOIONIZATION DETECTOR.
7. J/J+: ESTIMATED VALUE/ESTIMATED VALUE BIASED HIGH.
8. REFER TO SUPPLEMENTAL INVESTIGATION REPORT FOR INTERPRETATIONS OF OIL-IN-SOIL TEST RESULTS.
9. NA: NOT ANALYZED.

0 5 10 Feet

SCALE: 1" = 5' (1:60)
SHEET SIZE: 11" BY 17"

N

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
REMEDIAL SYSTEM OPTIMIZATION REPORT
SHORE REALTY CORPORATION (AES) - SITE NO. 130006
1 SHORE ROAD
GLENWOOD LANDING, NEW YORK 11547

TITLE:
INVESTIGATION AREA 1
ETHYLBENZENE, TOLUENE, AND TOTAL XYLENES IN SOIL

DRAWN BY:	E. CORDERO	PROJ NO.:	386138.0000.0000
CHECKED BY:	H. DELGADO		
APPROVED BY:	D. WARREN		**FIGURE 3**
DATE:	NOVEMBER 2020		

TRC
1430 BROADWAY, 10TH FLOOR
NEW YORK, NY 10018
PHONE: 212.221.7822
WWW.TRCCOMPANIES.COM

FILE NO.: 386138-004_REMEDIALSYSTEMOPTIMIZATION.APRX

LABORATORY ANALYTICAL RESULTS LEGEND
RESULTS ARE IN MILLIGRAMS PER KILOGRAM (MG/KG).
BOLD AND HIGHLIGHTED RESULT EXCEEDS PROTECTION OF GROUNDWATER SOIL CLEANUP OBJECTIVE.
BOLD AND HIGHLIGHTED RESULT EXCEEDS COMMERCIAL USE SOIL CLEANUP OBJECTIVE.
NYSDEC PROTECTION OF GROUNDWATER/COMMERCIAL USE SOIL CLEANUP OBJECTIVES:
ETHYLBENZENE - 1 MG/KG / 390 MG/KG
TOLUENE - 0.7 MG/KG / 500 MG/KG
TOTAL XYLENES - 1.6 MG/KG / 500 MG/KG
PID RESULTS LEGEND
PID MEASUREMENTS ARE IN PARTS PER MILLION (PPM).
GREEN SHADING INDICATES A PID RESPONSE OF 5 PPM OR LOWER.
YELLOW SHADING INDICATES A PID RESPONSE FROM GREATER THAN 5 TO 25 PPM.
ORANGE SHADING INDICATES A PID RESPONSE FROM GREATER THAN 25 PPM TO 100 PPM.
RED SHADING INDICATES A PID RESPONSE GREATER THAN 100 PPM.

SB-114

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
2 TO 2.5	<0.00090	<0.00090	<0.0018	0.6	NA
11 TO 12	NA	NA	NA	0.1	NEGATIVE

SB-118

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
7 TO 8	0.0013	0.0061	0.0068	65	SLIGHT PINK BEAD
10 TO 11	<0.00094	<0.00094	0.00045 J	1.1	NA

SB-117

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
6.5 TO 7.5	<0.096	<0.096	<0.19	41	SLIGHT PINK BEAD
11.5 TO 12.5	<0.0010	0.00066 J	0.00018 J	1.2	NA

SB-116

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
6.5 TO 7.5	0.0040	0.00079 J	0.0021	55	PINK BEAD
15 TO 16	0.0023	0.0014	0.010	0.0	NA

SB-115

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
7 TO 8	**29**	**140**	**180**	594	PINK BEAD AND PINK STAINING ON JAR
14.5 TO 15	0.0020	0.0064	0.015	0.0	NEGATIVE

SB-208

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
5 TO 7	<0.00017	<0.00019	<0.00016	120	NEGATIVE
14 TO 15	<0.00017	<0.00020	0.00024 J	10	NA

SB-212

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
1 TO 3	0.00021 J	0.0010	0.0011	0.0	NA
10	NA	NA	NA	0.0	NEGATIVE

SB-119

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
9 TO 10	**100**	**110**	**270**	388	PINK BEAD
16 TO 17	0.0021	0.0038	0.014	0.0	NEGATIVE

SB-211

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
10 TO 11	**32**	0.064 J	**68.2**	> 2000	PINK BEAD
13 TO 14	0.016	<0.00020	0.0828	> 2000	NEGATIVE
14.5 TO 15	0.67	<0.014	**3.26**	170	NEGATIVE
19 TO 20	0.00031 J	0.00091 J	0.00146	2.6	NA

SB-210

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
7 TO 9	**25**	**3.1**	**85**	1185	SLIGHT PINK BEAD
14 TO 15	0.00052 J	0.00021 J	0.00304	29	NEGATIVE

SB-120

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
5 TO 6	0.6	<0.074	0.18	192	PINK BEAD AND FLOATING PRODUCT
13 TO 14	0.00019 J	0.00055 J	0.0011 J	0.0	NA

SB-209

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
5 TO 7	**150**	**28**	**641**	855	PINK BEAD
12 TO 13	0.00086	0.00026 J	0.0042	29	NA

KEY MAP NOT TO SCALE

LEGEND

- SOIL BORING
- AIR SPARGE WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITORING WELL
- FENCE

NOTES

1. BASE MAP IMAGERY FROM NEARMAP DATED MARCH 18, 2019.
2. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES ARE APPROXIMATE, UNLESS STATED OTHERWISE.
3. SOIL BORINGS WERE SURVEYED ON JANUARY 10, 2020.
4. RED RING AROUND BORING SYMBOL INDICATES ETHYLBENZENE, TOLUENE, AND/OR TOTAL XYLENES WERE DETECTED AT A CONCENTRATION GREATER THAN THE PROTECTION OF GROUNDWATER SOIL CLEANUP OBJECTIVE.
5. FT BGS: FEET BELOW GROUND SURFACE.
6. PID: PHOTOIONIZATION DETECTOR.
7. J: ESTIMATED VALUE.
8. REFER TO SUPPLEMENTAL INVESTIGATION REPORT FOR INTERPRETATIONS OF OIL-IN-SOIL TEST RESULTS.
9. NA: NOT ANALYZED.

0 5 10 Feet

SCALE: 1" = 5' (1:60)
SHEET SIZE: 11" BY 17"

N

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
REMEDIAL SYSTEM OPTIMIZATION REPORT
SHORE REALTY CORPORATION (AES) - SITE NO. 130006
1 SHORE ROAD
GLENWOOD LANDING, NEW YORK 11547

TITLE:
INVESTIGATION AREA 2
ETHYLBENZENE, TOLUENE, AND TOTAL XYLENES IN SOIL

DRAWN BY:	E. CORDERO	PROJ NO.:	386138.0000.0000
CHECKED BY:	H. DELGADO		
APPROVED BY:	D. WARREN		**FIGURE 4**
DATE:	NOVEMBER 2020		

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NEW YORK, NY 10018
PHONE: 212.221.7822
WWW.TRCCOMPANIES.COM

FILE NO.: 386138-004_REMEDIALSYSTEMOPTIMIZATION.APRX

PLOT DATE: 11/6/2020, 13:35:53 PM BY ECORDERO – LAYOUT: ANSI B (11"X17")
PATH: S:\1-PROJECTS\NYSDEC\327138_SHORE_REALTY\7-APRX\386138-004_REMEDIALSYSTEMOPTIMIZATION.APRX
COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW YORK LONG ISLAND FIPS 3104 FEET (FOOT US)
MAP ROTATION: 0
TRC – GIS

HEMPSTEAD HARBOR

INVESTIGATION AREA 1

GX-0								
SAMPLE DATE	4/19/2018	7/26/2018	10/25/2018	9/25/2019	12/30/2019	4/15/2020	7/17/2020	10/14/2020
BENZENE	0.17 U	0.43 U	0.43 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ETHYLBENZENE	1.8	3.60	0.6 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TOLUENE	0.25 U	0.53 U	0.53 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
XYLENES, TOTAL	**23.4**	**70.5**	0.59 U	1.7	1.0 U	1.0 U	1.0 U	1.0 U
METHYLENE CHLORIDE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ISOPROPYLBENZENE	1.4	1.4	1.4	2.6	**5.3**	1.0 U	1.0 U	1.0 U

WP-5A								
SAMPLE DATE	4/19/2018	8/14/2018	10/25/2018	9/27/2019	12/30/2019	4/15/2020	7/17/2020	10/14/2020
BENZENE	0.17 U	0.43 U	0.43 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U
ETHYLBENZENE	**1,720**	**137**	**314**	**12**	**440**	**660**	**120**	4.2
TOLUENE	**9.3 J**	0.53 U	0.53 U	1.0 U	0.38 J	5.0 U	1.0 U	1.0 U
XYLENES, TOTAL	**8,740**	**21**	**24.8**	4.3	**443.5**	**1,758**	**330**	1.7
METHYLENE CHLORIDE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	1.0 U	1.0 U
ISOPROPYLBENZENE	**65.3**	**66.3**	**52.5**	**60**	**29**	**47**	**59**	**40**

GX-1								
SAMPLE DATE	4/19/2018	7/26/2018	10/25/2018	9/25/2019	12/27/2019	4/14/2020	7/17/2020	10/14/2020
BENZENE	0.17 U	0.43 U	0.43 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ETHYLBENZENE	0.22 U	0.60 U	0.6 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TOLUENE	0.25 U	0.53 U	0.53 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
XYLENES, TOTAL	0.22 U	0.59 U	0.59 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
METHYLENE CHLORIDE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ISOPROPYLBENZENE	0.25 U	0.65 U	0.65 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

GX-7								
SAMPLE DATE	4/19/2018	7/26/2018	10/25/2018	9/26/2019	12/30/2019	4/15/2020	7/16/2020	10/14/2020
BENZENE	0.17 U	0.43 U	0.43 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ETHYLBENZENE	**144**	**49.8**	1.60	**76**	1.0 U	1.4	**12**	0.80 J
TOLUENE	**7.8**	0.53 U	0.53 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
XYLENES, TOTAL	**883**	**589**	**76.2**	**791**	0.36 J	**6.0**	**103.3**	2.54 J
METHYLENE CHLORIDE	1.0 U	1.0 U	1.0 U	2.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ISOPROPYLBENZENE	**14**	**18**	**7.7**	**22**	1.0 U	1.0 U	**6.5**	0.82 J

A11			
SAMPLE DATE	4/20/2018	7/27/2018	10/25/2018
BENZENE	0.17 U	0.43 U	0.43 U
ETHYLBENZENE	0.22 U	0.60 U	0.60 U
TOLUENE	0.25 U	0.53 U	0.53 U
XYLENES, TOTAL	0.22 U	0.59 U	0.59 U
METHYLENE CHLORIDE	1.0 U	1.0 U	1.0 U
ISOPROPYLBENZENE	0.25 U	0.65 U	0.65 U

KEY MAP NOT TO SCALE

LEGEND

- AIR SPARGE WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- VAPOR MONITORING POINT
- FENCE
- INVESTIGATION AREA

LABORATORY ANALYTICAL RESULTS LEGEND

GROUNDWATER RESULTS ARE IN MICROGRAMS PER LITER (µG/L).
BOLD AND HIGHLIGHTED RESULT EXCEEDS CLASS GA VALUE.

COMPOUND	CLASS GA VALUE
BENZENE	1 µG/L
ETHYLBENZENE	5 µG/L
TOLUENE	5 µG/L
TOTAL XYLENES	5 µG/L
METHYLENE CHLORIDE	5 µG/L
ISOPROPYLBENZENE	5 µG/L

NOTES

1. BASE MAP IMAGERY FROM NEARMAP DATED MARCH 18, 2019.
2. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES ARE APPROXIMATE, UNLESS STATED OTHERWISE.
3. J: ESTIMATED VALUE.
4. U: NON-DETECT.

0 10 20 Feet

SCALE: 1" = 10' (1:120)
SHEET SIZE: 11" BY 17"

N

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
REMEDIAL SYSTEM OPTIMIZATION REPORT
SHORE REALTY CORPORATION (AES) - SITE NO. 130006
1 SHORE ROAD
GLENWOOD LANDING, NEW YORK 11547

TITLE:
INVESTIGATION AREA 1
BENZENE, ETHYLBENZENE, TOLUENE, TOTAL XYLENES, METHYLENE CHLORIDE, AND ISOPROPYLBENZENE IN GROUNDWATER

DRAWN BY:	E. CORDERO	PROJ NO.:	386138.0000.0000
CHECKED BY:	H. DELGADO		
APPROVED BY:	D. WARREN		**FIGURE 5**
DATE:	NOVEMBER 2020		

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FILE NO.: 386138-004_REMEDIALSYSTEMOPTIMIZATION.APRX

HEMPSTEAD HARBOR

INVESTIGATION AREA 2

VMP2
A31
A13
A14
A82
WP-2A
WP-2B
A88
GX-6
A89
V31
DW-1
A81B
SW-2
GX-2
A15
A91
A80
A34
A90
GX-5
A16
A17
H11

GX-6

SAMPLE DATE	4/19/2018	7/26/2018	10/25/2018	9/26/2019	12/27/2019	4/15/2020	7/16/2020	10/13/2020
BENZENE	0.17 U	0.43 U	0.43 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ETHYLBENZENE	0.22 U	0.60 U	0.60 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TOLUENE	0.25 U	0.53 U	0.53 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
XYLENES, TOTAL	0.22 U	0.59 U	0.59 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
METHYLENE CHLORIDE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ISOPROPYLBENZENE	0.58 J	1.1	0.8 J	0.89 J	1.0 U	1.0 U	1.0 U	1.0 U

GX-2

SAMPLE DATE	4/19/2018	7/26/2018	10/25/2018	9/25/2019	12/27/2019	4/14/2020	7/16/2020	10/13/2020
BENZENE	**1.9**	**1.3**	0.8	1.0 U	**1.6**	1.0 U	1.0 U	1.0 U
ETHYLBENZENE	**53**	**27.8**	**14.7**	**6.8**	**41**	0.53 J	**5.1**	1.0 U
TOLUENE	**326**	**153**	**80**	1.3	**160**	1.0 U	**5.7**	1.0 U
XYLENES, TOTAL	**193**	**125**	**87**	**55.4**	**104**	1.0 U	**38.5**	1.0 U
METHYLENE CHLORIDE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ISOPROPYLBENZENE	**6.4**	**5.7**	3	**8.2**	**8.1 J+**	0.52 J	2.0	1.0 U

GX-5

SAMPLE DATE	4/19/2018	7/26/2018	10/25/2018	9/26/2019	12/27/2019	4/13/2020	7/16/2020	10/13/2020
BENZENE	0.17 U	0.43 U	0.43 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ETHYLBENZENE	1.6	0.60 U	0.60 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
TOLUENE	0.84 J	0.53 U	0.53 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
XYLENES, TOTAL	**15.5**	0.59 U	0.59 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
METHYLENE CHLORIDE	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
ISOPROPYLBENZENE	0.25 U	0.65 U	0.65 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

KEY MAP NOT TO SCALE

LEGEND

- AIR SPARGE WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- VAPOR MONITORING POINT
- FENCE
- INVESTIGATION AREA

LABORATORY ANALYTICAL RESULTS LEGEND

GROUNDWATER RESULTS ARE IN MICROGRAMS PER LITER (µG/L).
BOLD AND HIGHLIGHTED RESULT EXCEEDS CLASS GA VALUE.

COMPOUND	CLASS GA VALUE
BENZENE	1 µG/L
ETHYLBENZENE	5 µG/L
TOLUENE	5 µG/L
TOTAL XYLENES	5 µG/L
METHYLENE CHLORIDE	5 µG/L
ISOPROPYLBENZENE	5 µG/L

NOTES

1. BASE MAP IMAGERY FROM NEARMAP DATED MARCH 18, 2019.
2. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES ARE APPROXIMATE, UNLESS STATED OTHERWISE.
3. J/J+: ESTIMATED VALUE/ESTIMATED VALUE BIASED HIGH.
4. U: NON-DETECT.

0 10 20 Feet

SCALE: 1" = 10' (1:120)
SHEET SIZE: 11" BY 17"

N

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
REMEDIAL SYSTEM OPTIMIZATION REPORT
SHORE REALTY CORPORATION (AES) - SITE NO. 130006
1 SHORE ROAD
GLENWOOD LANDING, NEW YORK 11547

TITLE:
INVESTIGATION AREA 2
BENZENE, ETHYLBENZENE, TOLUENE, TOTAL XYLENES, METHYLENE CHLORIDE, AND ISOPROPYLBENZENE IN GROUNDWATER

DRAWN BY:	E. CORDERO	PROJ NO.:	386138.0000.0000
CHECKED BY:	H. DELGADO		
APPROVED BY:	D. WARREN		**FIGURE 6**
DATE:	NOVEMBER 2020		

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1430 BROADWAY, 10TH FLOOR
NEW YORK, NY 10018
PHONE: 212.221.7822
WWW.TRCCOMPANIES.COM

FILE NO.: 386138-004_REMEDIALSYSTEMOPTIMIZATION.APRX

PLOT DATE: 11/5/2020, 03:30:23 AM BY ECORDERO -- LAYOUT: ANSI B(11"X17")
PATH: S:\1-PROJECTS\NYSDEC\327138_SHORE_REALTY\7-APRX\386138-004_REMEDIALSYSTEMOPTIMIZATION.APRX
COORDINATE SYSTEM: NAD 1983 STATEPLANE NEW YORK LONG ISLAND FIPS 3104 FEET (FOOT US)
MAP ROTATION: 0
TRC - GIS

TABLES

Table 1
New York State Department of Environmental Conservation
Shore Realty Corporation (AES) Site
1 Shore Road, Glenwood Landing, New York
Remedial System Optimization Report
Soil Contaminants of Concern and Cleanup Goals

Soil Contaminants of Concern	Commercial Use Soil Cleanup Objective[1] (ppm)	Industrial Use Soil Cleanup Objective[1] (ppm)	Protection of Groundwater Soil Cleanup Objective[1] (ppm)
Volatile Organic Compounds			
Ethylbenzene	390	780	1
Toluene	500	1,000	0.7
Total Xylenes	500	1,000	1.6

Notes

ppm - parts per million (or milligrams per kilogram)

[1] - NYCRR Part 375 Subpart 375-6.8(b)

Soil Cleanup Objective for Xylene (mixed) presented.

Table 2
New York State Department of Environmental Conservation
Shore Realty Corporation (AES) Site
Remedial System Optimization Report
1 Shore Road, Glenwood Landing, New York
Groundwater Contaminants of Concern and Cleanup Goals

Groundwater Contaminants of Concern	Class GA Value[1] (ug/L)
Volatile Organic Compounds	
Benzene	1
Ethylbenzene	5
Isopropylbenzene	5
Methylene chloride	5
Toluene	5
Total xylenes[2]	5

Notes

ug/L - Micrograms per liter

[1] - NYSDEC Ambient Water Quality Standards and Guidance Values for Class GA Water.

[2] - The Class GA Value for total xylenes applies to each individual isomer.

APPENDIX A

Summary of Supplemental Investigation Activities – January 2020

DRAFT

TRC Engineers, Inc.
1430 Broadway, 10th Floor
New York, New York 10018

Main (212) 221-7822
Fax (212) 221-7840

Memorandum

To: Ms. Caroline Eigenbrodt, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation

From: Daniel Warren, Project Manager
TRC Engineers, Inc.

Subject: Standby Engineering Contract
Work Assignment No. D007620-47
Shore Realty Corporation (AES) – Site No. 130006
Summary of Supplemental Investigation Activities

Date: January 31, 2020

CC: D. Glass (TRC)
J. Magda (TRC)

TRC Project No.: 327138.0000.0000

This memorandum summarizes the results of the Supplemental Investigation (SI) activities completed at the Shore Realty Corporation (AES) Site located in Glenwood Landing, New York (the "Site", refer to **Figure 1**, Site Location Map). The field work, completed in July 2019 and December 2019, was performed in accordance with the New York State Department of Environmental Conservation (NYSDEC or the "Department") Division of Environmental Remediation (DER) Work Assignment No. D007620-47 Notice to Proceed dated April 30, 2019, the NYSDEC-approved Scope of Work (SOW) dated April 9, 2019, the NYSDEC-approved Supplemental Investigation Summary of Additional Scope of Services dated October 11, 2019, and NYSDEC DER-10, Technical Guidance for Site Investigation and Remediation (DER-10). The objective of the SI activities was to determine the extent of residual sources of petroleum-related volatile organic compounds (VOCs) in soil, primarily ethylbenzene, toluene, and xylenes (ETX), detected in groundwater samples collected from extraction wells GX-2 and GX-7 and monitoring well WP-5A.

Work activities performed as part of the SI are described below. The methods implemented during the investigation were in accordance with the NYSDEC-approved generic Health and Safety Plan, Field Activities Plan, and Quality Assurance Project Plan (QAPP). Quality control samples, including matrix spike and matrix spike duplicates, were collected in accordance with the generic QAPP. Approximate sample locations and Investigation Areas 1 and 2 are shown on **Figures 2 and 3**.

Field Activities Completed

Aztech Technologies, Inc. (Aztech) was retained by TRC to complete the direct-push drilling. Prior to advancement of soil borings, Nova Geophysical Services (Nova) performed a utility clearance survey to identify subsurface infrastructure and clear each proposed soil boring location. The geophysical survey report is presented in **Attachment A**. A total of 13 soil borings in Investigation Area 1 and seven soil borings in Investigation Area 2 were advanced by Aztech using direct-push drilling techniques (DPT) during the first mobilization between July 8, 2019 and July 11, 2019. A total of seven soil borings in Investigation Area 1 and five soil borings in Investigation Area 2 were advanced by Aztech using DPT during the second mobilization between December 2, 2019 and December 4, 2019. Each soil boring was hand-cleared to 5 feet below ground surface (bgs) and then sampled continuously in 5-foot increments using a direct-push drill rig (Geoprobe® Series 6600) and Macro-Core® samplers to a maximum depth of 20 feet bgs. The samples were inspected and screened for indications of contamination [e.g., elevated photoionization detector (PID) readings, staining, odors, etc.]. Soils generally consisted of heterogeneous mixtures of silty sands with clay and gravel. Groundwater was generally encountered between 2.5 and 4 feet bgs. Soil boring logs are included in **Attachment B**.

An aliquot of soil from the sample exhibiting the greatest indications of potential impacts from each soil boring was analyzed using an Oil-In-Soil™ dye test. At least one additional aliquot of soil collected from each of the soil borings SB-105, SB-106, SB-115, SB-119, SB-210, and SB-211 was analyzed using an Oil-In-Soil™ dye test. The Oil-In-Soil™ dye test provides qualitative visual indications of the presence of non-aqueous phase liquid (NAPL) in soil. Photographs of each Oil-In-Soil™ dye test are presented in **Attachment C**.

Generally, two soil samples from each boring (with the exception of SB-114 – one sample, SB-204 – three samples, SB-211 – four samples, and SB-212 – one sample) were submitted for laboratory analysis for Target Compound List (TCL) VOCs via USEPA Method 8260. Selected for analysis from each boring were the interval exhibiting the greatest evidence of impacts and the apparent underlying clean interval. At two locations, SB-114 and SB-212, no evidence of impacts was observed and one soil sample from the interval directly above the saturated zone was submitted for analysis. Three soil samples were submitted from SB-204 and four soil samples were submitted for analysis from SB-211. Soil samples were containerized, and the containers were labeled, sealed, and placed in a chilled cooler for shipment to Eurofins TestAmerica Laboratories, Inc. (Eurofins). Eurofins is an Environmental Laboratory Approval

Program (ELAP)-certified laboratory approved by the New York State Department of Health (NYSDOH) located in Edison, NJ. Standard chain-of-custody procedures were followed. Boring identification numbers, depth intervals of samples selected for analysis, and the maximum PID measurement for each soil sample selected for analysis are presented below. PID measurements are also presented in **Table 1**.

Soil Boring Program Summary		
Soil Boring Identification Number	**Analyzed Interval (ft. bgs)**	**Maximum PID Measurement (ppm)**
SB-101	4 – 5	198
	8 – 9	3.2
SB-102	4 – 5	155
	14 – 15	0.7
SB-103	4 – 5	27
	14 – 15	4.0
SB-104	4 – 5	42
	11 – 12	0.2
SB-105	6 – 6.5	81
	14 – 15	0.4
SB-106	3.5 – 4.5	57
	6 – 6.5	34
SB-107	4 – 5	23.5
	11 – 12	0
SB-108	3 – 4	52
	7 – 8	7.8
SB-109	3 – 4	55
	15 – 16	0
SB-110	4 – 5	54
	6.5 – 7	7.0
SB-111	4 – 5	68
	15 – 16	0
SB-112	4.5 – 5	38
	14.5 – 15	0
SB-113	6 – 7	52
	19 – 19.5	0
SB-114	2 – 2.5	0.6
	11 – 12[1]	0.1
SB-115	7 – 8	594
	14.5 – 15	0
SB-116	6.5 – 7.5	55
	15 – 16	0
SB-117	6.5 – 7.5	41
	11.5 – 12.5	1.2
SB-118	7 – 8	65
	10 – 11	1.1
SB-119	9 – 10	388
	16 – 17	0
SB-120	5 – 6	192

Soil Boring Program Summary		
Soil Boring Identification Number	**Analyzed Interval (ft. bgs)**	**Maximum PID Measurement (ppm)**
	13 – 14	0
SB-201	5 – 6	126
	14 – 15	0
SB-202	6 – 7	43.4
	9 – 10	0
SB-203	5 – 6	84
	13 – 14	4.0
SB-204	5 – 6	338
	10 – 11	6.7
	19 – 20	0
SB-205	5 – 6	19.7
	10 – 11	11.2
SB-206	5 – 6	71
	8 – 9	0
SB-207	7 – 8	51
	11 – 12	0
SB-208	5 – 7	120
	14 – 15	10
SB-209	5 – 7	855
	12 – 13	29
SB-210	7 – 9	1,185
	14 – 15	29
SB-211	10 – 11	> 2,000
	13 – 14	> 2,000
	14.5 – 15	170
	19 – 20	2.6
SB-212	1 – 3	0
	10[1]	0

ft. bgs – feet below ground surface
ppm – parts per million
[1] Soil sample was analyzed via Oil-In-Soil™ test but was not submitted for laboratory analysis.

Two drums of investigation-derived waste (IDW), limited to grossly contaminated soil, was staged on-Site. TRC will perform waste characterization sampling and schedule disposal of drums concurrent with a future waste pickup event at the Site, to be scheduled as part of Site operations, maintenance, and monitoring (OM+M) activities.

Data Summary

Validation of laboratory analytical data was performed in accordance with NYSDEC requirements, as well as the requirements for development of Data Usability Summary Reports (DUSRs) in DER-10. Soil analytical results were found to be valid and usable for decision-making purposes. Laboratory data packages are presented in **Attachment D**.

The analytical results were compared to 6 NYCRR 375-6.8 Unrestricted Use (UU), Commercial Use (CU), and Protection of Groundwater (PGW) Soil Cleanup Objectives (SCOs) and are presented in **Table 3.** Acetone, a common laboratory contaminant, was detected at concentrations greater than the UUSCO and PGWSCO in 19 of the 65 soil samples submitted for analysis. Methylene chloride was detected at a concentration slightly greater than the UUSCO and PGWSCO in one soil samples. While methylene chloride has been historically detected at concentrations above the NYSDEC Standard for Class GA Water ("Class GA Value") in Site groundwater, it has not been detected in groundwater for over two years and is not considered a contaminant of concern (COC) for the SI.

One or more ETX compounds were detected at concentrations greater than the PGWSCOs and/or UUSCOs in 18 of the 65 soil samples submitted for analysis. Total xylenes were detected at concentrations greater than the CUSCO in SB-204 (5-6) and SB-209 (5-7). **Table 2** presents a summary of field observations, Oil-In-Soil™ test results (and corresponding interpretations of the results) and the analytical laboratory results. Additionally, the results of the analyses of soil samples for ETX compounds are summarized on **Figures 2 and 3**. PID measurement and Oil-In-Soil™ results are also summarized on **Figures 2 and 3**. A geologic cross-section location map is shown on **Figure 4**. Geologic cross-sections, with PID screening results, ETX in soil concentrations and Oil-In-Soil™ test results, are shown on **Figures 5 through 8**. A summary of findings for each Investigation Area is presented below.

Investigation Area 1

Evidence of petroleum-related impacts to soil were generally limited to between 3 and 8 feet bgs. The highest PID measurements were recorded during screening of soil recovered from SB-101, SB-102, and SB-204 between 4 to 6 feet bgs, in the northern and eastern portions of Investigation Area 1. Oil-In-Soil™ test results indicate evidence of impacts throughout Investigation Area 1. Ethylbenzene and/or total xylenes were detected at concentrations above UUSCOs in samples collected from 10 borings in Investigation Area 1. Total xylenes were detected at a concentration of 709 mg/kg, greater than the CUSCO of 500 mg/kg, in the soil sample collected from 5 to 6 feet bgs at SB-204. The highest total ETX concentrations were detected in samples collected from SB-104 [(4-5), 34.7 mg/kg], SB-111 [(4-5), 472 mg/kg], SB-113 [(6-7), 9.4 mg/kg], SB-203 [(5-6), 227.23 mg/kg)], and SB-204 [(5-6), 755 mg/kg] located east of monitoring well WP-5A or south of extraction well GX-7, and representing the most likely residual sources of impacts to groundwater in Area 1.

Investigation Area 2

The greatest evidence of petroleum impacts to soil were generally encountered between 5 and 15 feet bgs in Area 2. The highest PID measurements were recorded during screening of soil recovered from SB-209, SB-210, and SB-211, between 5 and 15 feet bgs, in the southern and eastern portions of Investigation Area 2. Oil-In-Soil™ test results indicate evidence of impacts throughout Investigation Area 2. The soil sample

collected from 5 to 6 feet bgs at SB-120 was saturated with NAPL. However, ETX compounds were not detected at elevated concentrations in the soil sample collected 5 to 6 feet bgs from SB-120, suggesting the encountered NAPL may be weathered and not a significant source of ETX impacts to groundwater. Total xylenes were detected at a concentration of 641 mg/kg, greater than the CUSCO of 500 mg/kg, in the sample collected from 5 to 7 feet bgs at SB-209. The highest total ETX concentrations were detected in samples collected from SB-115 [(7-8), 349 mg/kg], SB-119 [(9-10), 480 mg/kg], SB-209 [(5-7), 819 mg/kg], SB-210 [(7-9), 113.1 mg/kg], and SB-211 [(10-11), 100.264 mg/kg] located south or east of extraction well GX-2, and representing the most likely residual sources of impacts to groundwater in Area 2.

Next Steps

TRC understands that the likely preference will be to remediate the residual sources of ETX in groundwater at extraction wells GX-2 and GX-7 and monitoring well WP-5A via excavation and off-Site disposal. Upon request, TRC is prepared to provide recommendations for completing delineation of related impacts in support of implementing this or other potential remedial approaches at the Site.

FIGURES

SCALE: 1:2400

1 0.5 0 KILOMETERS 1 2

1000 500 0 METERS 1000 2000

1 0.5 0 1

MILES

1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000

FEET

QUADRANGLE LOCATION

MAP INCLUDES INFORMATION FROM THE FOLLOWING MAP SHEET(S): TP, SEA CLIFF, NY, 7.5 MINUTE DATED 2016.

MAP OBTAINED THROUGH USE OF TOPOVIEW WITH THE INTERFACE CREATED BY THE NATIONAL GEOLOGIC MAP DATABASE PROJECT (NGMDB), IN SUPPORT OF THE TOPOGRAPHIC MAPPING PROGRAM, MANAGED BY THE USGS NATIONAL GEOSPATIAL PROGRAM (NGP).

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PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SUPPLEMENTAL INVESTIGATION REPORT
SHORE REALTY CORPORATION (AES) - SITE NO. 130006
1 SHORE ROAD
GLENWOOD LANDING, NEW YORK 11547

TITLE:

SITE LOCATION MAP

DRAWN BY:	H. DELGADO
CHECKED BY:	D. WARREN
APPROVED BY:	D. GLASS
DATE:	JANUARY 2020
PROJ. NO.:	327138
FILE:	Figure 1 - Site Location Map (1 Shore Rd.).dwg

FIGURE 1

8.5x11 --- ATTACHED XREF'S: --- ATTACHED IMAGES: NY_Sea Cliff_20160824_TM;
DRAWING NAME: I:\Projects\NYSDEC\Assignments\WA #47 - Shore Realty Corporation (AES)\Phase 3 - Supplemental Investigation\Supplemental Investigation Report\January 2020 Submission\Figures\TRC Working Drawings\ Figure 1 - Site Location Map (1 Shore Rd.).dwg --- PLOT DATE: January 13, 2020 - 12:36PM --- LAYOUT: 8.5x11F

LABORATORY ANALYTICAL RESULTS LEGEND
RESULTS ARE IN MILLIGRAMS PER KILOGRAM (MG/KG).
BOLD AND HIGHLIGHTED RESULT EXCEEDS UNRESTRICTED USE SOIL CLEANUP OBJECTIVE.
BOLD AND HIGHLIGHTED RESULT EXCEEDS COMMERCIAL USE SOIL CLEANUP OBJECTIVE.
NYSDEC UNRESTRICTED/COMMERCIAL USE SOIL CLEANUP OBJECTIVES:
ETHYLBENZENE - 1 MG/KG / 390 MG/KG
TOLUENE - 0.7 MG/KG / 500 MG/KG
TOTAL XYLENES - 0.26 MG/KG / 500 MG/KG
PID RESULTS LEGEND
PID MEASUREMENTS ARE IN PARTS PER MILLION (PPM).
GREEN SHADING INDICATES A PID RESPONSE OF 5 PPM OR LOWER.
YELLOW SHADING INDICATES A PID RESPONSE FROM GREATER THAN 5 TO 25 PPM.
ORANGE SHADING INDICATES A PID RESPONSE FROM GREATER THAN 25 PPM TO 100 PPM.
RED SHADING INDICATES A PID RESPONSE GREATER THAN 100 PPM.

GX-0

SB-201

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
5 TO 6	0.0011 J	<0.00030	0.00484	126	NEGATIVE
14 TO 15	0.0010	<0.00021	0.00894	0.0	NA

SB-202

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
6 TO 7	0.0010	0.0013	0.00629	43.4	NEGATIVE
9 TO 10	0.00079 J	<0.00024	0.00732	0.0	NA

SB-110

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
4 TO 4.5	<0.00090	<0.00090	0.0020 J+	54	PINK BEAD
6.5 TO 7	0.00019 J	<0.00096	0.0016 J	7.0	NA

SB-101

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
4 TO 5	0.23	0.053 J	**0.64**	198	PINK BEAD
8 TO 9	0.023	0.0018	0.0027	3.2	NA

SB-109

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
3 TO 4	0.11	0.095	**1.1**	55	SLIGHT PINK BEAD
15 TO 16	<0.0010	<0.0010	0.0051	0.0	NA

SB-102

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
4 TO 5	<0.0011	0.00095 J	0.0023 J+	155	NEGATIVE
14 TO 15	0.0011	<0.0011	0.0033	0.7	NA

SB-108

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
3 TO 4	<0.00094	0.0022	<0.0019	52	PINK BEAD
7 TO 8	<0.0011	<0.0011	0.0053	7.8	NA

SB-203

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
5 TO 6	**26 J+**	0.23 J	**201**	84	SLIGHT PINK BEAD
13 TO 14	0.0020	<0.00022	0.0165	0.0	NA

DW-2

WP-5A

WP-5B

SB-111

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
4 TO 5	**62**	<0.95	**410**	68	PINK BEAD
15 TO 16	0.0046	<0.00082	0.033	0.0	NA

SB-207

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
7 TO 8	0.00098	0.00027 J	0.0097	51	SLIGHT PINK BEAD
11 TO 12	0.00053 J	0.00034 J	0.00513	0.0	NA

VMP1

SB-107

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
4 TO 5	0.30	0.29	**1.7**	23.5	SLIGHT PINK BEAD
11 TO 12	0.0098	0.0023	**0.29**	0.0	NA

SB-103

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
4 TO 5	<0.0010	0.00098 J	0.0025	27	NEGATIVE
14 TO 15	0.0015	<0.0011	0.011	4.0	NA

SB-106

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
3.5 TO 4.5	<0.00090	0.0015 J+	0.0018 J+	57	SLIGHT PINK BEAD
6 TO 6.5	0.00045 J	0.00074 J	0.0053	34	NEGATIVE

GX-1

GX-7

SB-112

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
4.5 TO 5	0.038 J	<0.085	**2.1**	38	SLIGHT PINK BEAD
14.5 TO 15	<0.0011	<0.0011	0.0011 J	0.0	NA

SB-206

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
5 TO 6	0.00080 J	0.00081 J	0.02075	71	PINK BEAD
8 TO 9	0.00096	0.00021 J	0.00822	0.0	NA

SB-204

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
5 TO 6	**46**	<0.77	**709**	338	SLIGHT PINK BEAD
10 TO 11	0.2	<0.016	**3.05**	6.7	NA
19 TO 20	0.00039 J	<0.00020	0.00444	0.0	NA

SB-105

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
6 TO 6.5	<0.00093	<0.00093	0.0027 J+	69	SLIGHT PINK BEAD
14 TO 15	0.00025 J	<0.0011	0.0016 J	0.4	NEGATIVE

SB-104

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
4 TO 5	**2.7**	<0.080	**32**	42	PINK BEAD
11 TO 12	0.00032 J	0.00084 J	0.0033	0.2	NA

SB-113

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
6 TO 7	**1.2**	<0.11	**8.2**	52	NEGATIVE
19 TO 19.5	0.0031	0.00081 J	0.019	0.0	NA

SB-205

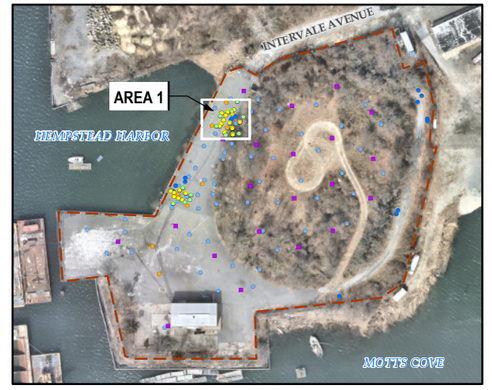
SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
5 TO 6	0.057	0.46	**0.344**	19.7	NEGATIVE
10 TO 11	<0.00020	<0.00023	0.00102	0.0	NA

LEGEND

- AIR SPARGE WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITORING WELL
- VAPOR MONITORING POINT
- SOIL BORING (JULY 2019)
- SOIL BORING (DECEMBER 2019)
- FENCE

NOTES

1. BASE MAP IMAGERY FROM NEARMAP DATED MARCH 18, 2019.
2. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES ARE APPROXIMATE, UNLESS STATED OTHERWISE.
3. SOIL BORINGS WERE SURVEYED ON JANUARY 10, 2020, THE LOCATION OF SB-103 IS APPROXIMATE.
4. FT BGS: FEET BELOW GROUND SURFACE.
5. PID: PHOTOIONIZATION DETECTOR.
6. J/J+: ESTIMATED VALUE/ESTIMATED VALUE BIASED HIGH.
7. REFER TO TABLE 2 FOR INTERPRETATIONS OF OIL-IN-SOIL TEST RESULTS.
8. NA: NOT ANALYZED.



KEY MAP NOT TO SCALE

0 5 10 Feet

1 " = 5 '

1:60

N

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SHORE REALTY CORPORATION (AES) - SITE NO. 130006
1 SHORE ROAD
GLENWOOD LANDING, NEW YORK 11547

TITLE:
INVESTIGATION AREA 1 ETHYLBENZENE, TOLUENE AND TOTAL XYLENES IN SOIL

DRAWN BY:	E. CORDERO	PROJ. NO.:	327138
CHECKED BY:	D. WARREN		
APPROVED BY:	D. GLASS		
DATE:	JANUARY 2020		

FIGURE 2

TRC
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New York , NY 10018
Phone: 212.221.7822
www.trccompanies.com

FILE NO.: 327138-001-Area1.mxd

Plot Date: 1/30/2020, 16:29:25 PM by ECORDERO -- LAYOUT: ANSI B (11"x17")
Path: S:\1-PROJECTS\NYSDEC\Shore_Realty\327138\327138-001-Area1.mxd
Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet (Foot US)
Map Rotation: 0

LABORATORY ANALYTICAL RESULTS LEGEND
RESULTS ARE IN MILLIGRAMS PER KILOGRAM (MG/KG).
BOLD AND HIGHLIGHTED RESULT EXCEEDS UNRESTRICTED USE SOIL CLEANUP OBJECTIVE.
BOLD AND HIGHLIGHTED RESULT EXCEEDS COMMERCIAL USE SOIL CLEANUP OBJECTIVE.
NYSDEC UNRESTRICTED/COMMERCIAL USE SOIL CLEANUP OBJECTIVES:
ETHYLBENZENE - 1 MG/KG / 390 MG/KG
TOLUENE - 0.7 MG/KG / 500 MG/KG
TOTAL XYLENES - 0.26 MG/KG / 500 MG/KG
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GREEN SHADING INDICATES A PID RESPONSE OF 5 PPM OR LOWER.
YELLOW SHADING INDICATES A PID RESPONSE FROM GREATER THAN 5 TO 25 PPM.
ORANGE SHADING INDICATES A PID RESPONSE FROM GREATER THAN 25 PPM TO 100 PPM.
RED SHADING INDICATES A PID RESPONSE GREATER THAN 100 PPM.

SB-114

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
2 TO 2.5	<0.00090	<0.00090	<0.0018	0.6	NA
11 TO 12	NA	NA	NA	0.1	NEGATIVE

SB-212

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
1 TO 3	0.00021 J	0.0010	0.0011	0.0	NA
10	NA	NA	NA	0.0	NEGATIVE

SB-117

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
6.5 TO 7.5	<0.096	<0.096	<0.19	41	SLIGHT PINK BEAD
11.5 TO 12.5	<0.0010	0.00066 J	0.00018 J	1.2	NA

SB-119

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
9 TO 10	**100**	**110**	**270**	388	PINK BEAD
16 TO 17	0.0021	0.0038	0.014	0.0	NEGATIVE

SB-118

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
7 TO 8	0.0013	0.0061	0.0068	65	SLIGHT PINK BEAD
10 TO 11	<0.00094	<0.00094	0.00045 J	1.1	NA

SB-211

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
10 TO 11	**32**	0.064 J	**68.2**	> 2000	PINK BEAD
13 TO 14	0.016	<0.00020	0.0828	> 2000	NEGATIVE
14.5 TO 15	0.67	<0.014	**3.26**	170	NEGATIVE
19 TO 20	0.00031 J	0.00091 J	0.00146	2.6	NA

SB-116

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
6.5 TO 7.5	0.0040	0.00079 J	0.0021	55	PINK BEAD
15 TO 16	0.0023	0.0014	0.010	0.0	NA

SB-210

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
7 TO 9	**25**	**3.1**	**85**	1185	SLIGHT PINK BEAD
14 TO 15	0.00052 J	0.00021 J	0.00304	29	NEGATIVE

SB-208

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
5 TO 7	<0.00017	<0.00019	<0.00016	120	NEGATIVE
14 TO 15	<0.00017	<0.00020	0.00024 J	10	NA

SB-209

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
5 TO 7	**150**	**28**	**641**	855	PINK BEAD
12 TO 13	0.00086	0.00026 J	0.0042	29	NA

SB-115

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
7 TO 8	**29**	**140**	**180**	594	PINK BEAD AND PINK STAINING ON JAR
14.5 TO 15	0.0020	0.0064	0.015	0.0	NEGATIVE

SB-120

SAMPLE DEPTH (FT BGS)	ETHYLBENZENE	TOLUENE	TOTAL XYLENES	PID	OIL-IN-SOIL TEST RESULT
5 TO 6	0.6	<0.074	0.18	192	PINK BEAD AND FLOATING PRODUCT
13 TO 14	0.00019 J	0.00055 J	0.0011 J	0.0	NA

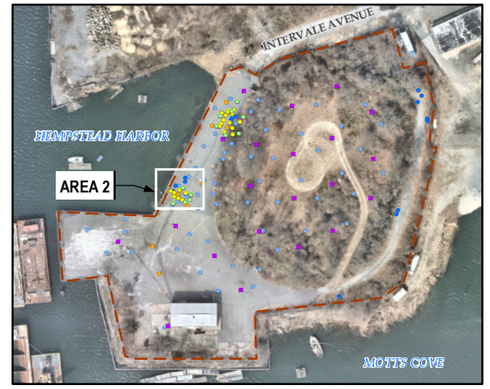
WP-2A
WP-2B
GX-6
DW-1
A81B
SW-2
GX-2
A91
A15
A80
A17

LEGEND

- AIR SPARGE WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITORING WELL
- SOIL BORING (JULY 2019)
- SOIL BORING (DECEMBER 2019)
- FENCE

NOTES

1. BASE MAP IMAGERY FROM NEARMAP DATED MARCH 18, 2019.
2. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES ARE APPROXIMATE, UNLESS STATED OTHERWISE.
3. SOIL BORINGS WERE SURVEYED ON JANUARY 10, 2020.
4. FT BGS: FEET BELOW GROUND SURFACE.
5. PID: PHOTOIONIZATION DETECTOR.
6. J: ESTIMATED VALUE.
7. REFER TO TABLE 2 FOR INTERPRETATIONS OF OIL-IN-SOIL TEST RESULTS.
8. NA: NOT ANALYZED.



KEY MAP NOT TO SCALE

0 5 10 Feet

1 " = 5 '

1:60

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SHORE REALTY CORPORATION (AES) - SITE NO. 130006
1 SHORE ROAD
GLENWOOD LANDING, NEW YORK 11547

TITLE:
INVESTIGATION AREA 2 ETHYLBENZENE, TOLUENE AND TOTAL XYLENES IN SOIL

DRAWN BY:	E. CORDERO	PROJ. NO.:	327138
CHECKED BY:	D. WARREN		
APPROVED BY:	D. GLASS		**FIGURE 3**
DATE:	JANUARY 2020		

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FILE NO.: 327138-001-Area2.mxd

Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet (Foot US)
Map Rotation: 0
Plot Date: 1/30/2020, 16:34:50 PM by ECORDERO -- LAYOUT: ANSI B(11"x17")
Path: S:\1-PROJECTS\NYSDEC\Shore_Realty\327138\327138-001-Area2.mxd
TRC - GIS

CROSS-SECTION LOCATION REFERENCE

- LOCATION SHOWN ON CROSS-SECTION A-A'
- LOCATION SHOWN ON CROSS-SECTION B-B'
- LOCATION SHOWN ON CROSS-SECTIONS A-A' AND B-B'
- LOCATION SHOWN ON CROSS-SECTION C-C'
- LOCATION SHOWN ON CROSS-SECTION D-D'
- LOCATION SHOWN ON CROSS-SECTIONS C-C' AND D-D'

LEGEND

- FENCE
- CROSS SECTION LOCATION
- AIR SPARGE WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- VAPOR MONITORING POINT
- SOIL BORING (JULY 2019)
- SOIL BORING (DECEMBER 2019)

NOTES

1. BASE MAP IMAGERY FROM NEARMAP DATED MARCH 18, 2019.
2. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES ARE APPROXIMATE, UNLESS STATED OTHERWISE.
3. SOIL BORINGS WERE SURVEYED ON JANUARY 13, 2020; THE LOCATION OF SB-103 IS APPROXIMATE.
4. FIGURE IS NOT TO SCALE.

N

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PROJECT:

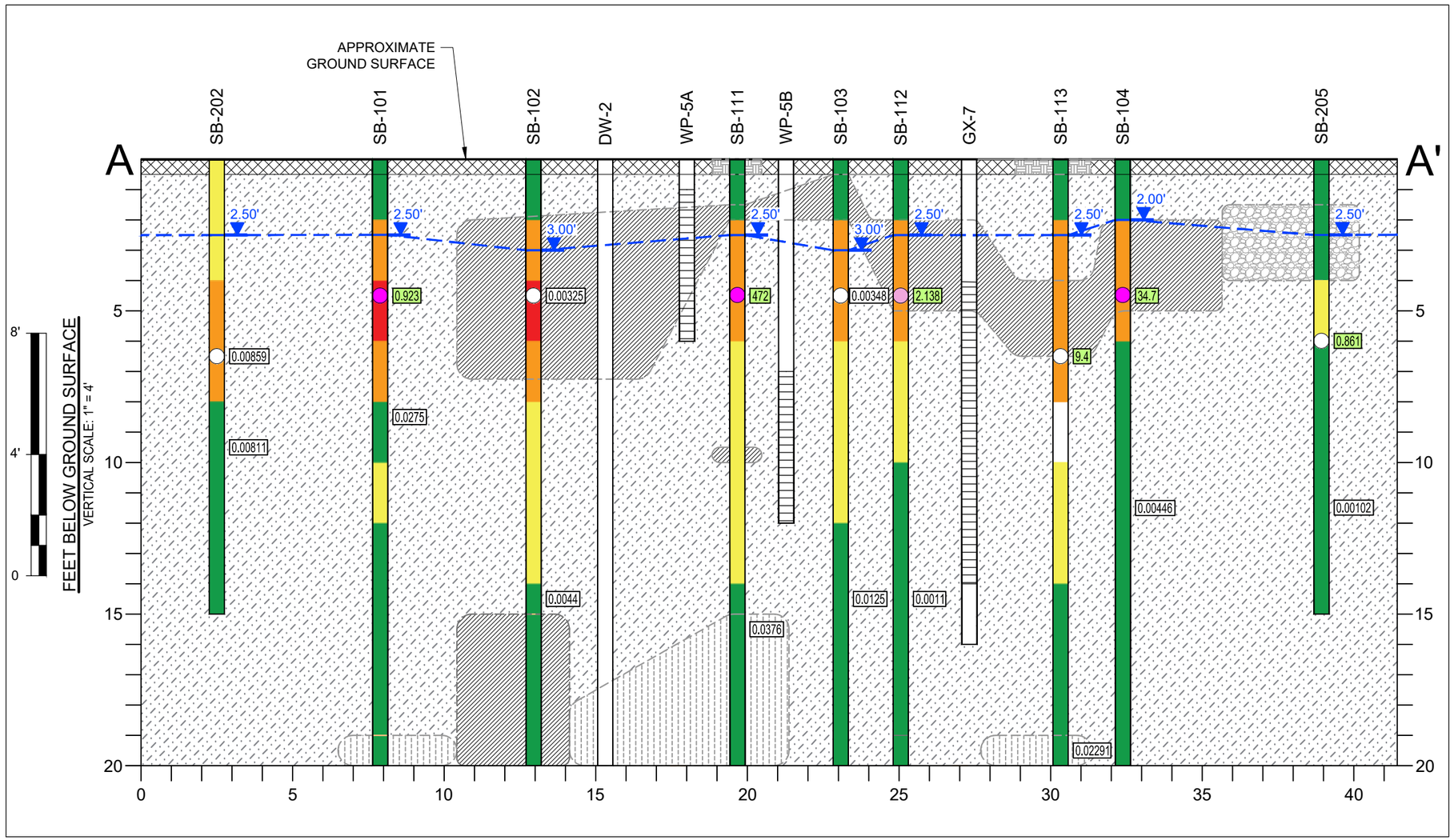
CROSS-SECTION LOCATION MAP

TITLE: **NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**
SHORE REALTY CORPORATION (AES) - SITE NO. 130006
1 SHORE ROAD
GLENWOOD LANDING, NEW YORK 11547

DRAWN BY:	E. CORDERO
CHECKED BY:	D. WARREN
APPROVED BY:	D. GLASS
DATE:	JANUARY 2020
PROJ. NO.:	327138
FILE:	327138-003.mxd

FIGURE 4

Plot Date: 1/30/2020, 16:41:57 PM by ECORDERO -- LAYOUT: ANSI B (11"x17")
Path: S:\1-PROJECTS\NYSDEC\Shore_Realty\327138\327138-003.mxd
Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet (Foot US)
Map Rotation: 0



GEOLOGICAL CROSS-SECTION A-A'

HORIZONTAL SCALE: 1" = 4'

0 4' 8'

NOTES:

1. TO AID WITH VISUALIZATION AND SINCE CERTAIN BORINGS AND WELLS ARE OFFSET AND HAVE BEEN PROJECTED ONTO CROSS-SECTIONS, SPACING BETWEEN DATA POINTS DOES NOT MATCH ACTUAL FIELD CONDITIONS EXACTLY.
2. SOIL BORING LOCATIONS AND ELEVATIONS WERE SURVEYED ON JANUARY 10, 2020, EXCEPT SB-103. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES AND SB-103 ARE APPROXIMATE.
3. BOUNDARIES BETWEEN SOIL TYPES ARE INFERRED.
4. ETX - ETHYLBENZENE, TOLUENE, AND XYLENES.
5. MG/KG - MILLIGRAMS PER KILOGRAM
6. PID - PHOTOIONIZATION DETECTOR. THE MAXIMUM PID MEASUREMENT AT EACH DEPTH IS SHOWN.
7. PPM - PARTS PER MILLION
8. NO COLOR WITHIN SOIL BORING INDICATES NO PID MEASUREMENT DUE TO INSUFFICIENT RECOVERY.
9. NAPL - NON-AQUEOUS PHASE LIQUID

LEGEND (SYMBOLS NOT TO SCALE):

- 0.002 - TOTAL ETX CONCENTRATION (MG/KG) DETECTED IN SOIL. LIGHT GREEN HIGHLIGHT INDICATES ETX CONCENTRATION EXCEEDS THE UNRESTRICTED USE SOIL CLEANUP OBJECTIVE.
- PID RESPONSE OF 5 PPM OR LOWER
- PID RESPONSE FROM GREATER THAN 5 PPM TO 25 PPM
- PID RESPONSE FROM GREATER THAN 25 PPM TO 100 PPM
- PID RESPONSE GREATER THAN 100 PPM
- ASPHALT
- TOPSOIL
- SAND
- SAND WITH SILT AND CLAY
- CLAY LUMPS / BANDS WITH SAND
- CLAY
- GRAVEL
- 2.50' APPROXIMATE GROUNDWATER TABLE SURFACE
- WELL SCREEN

OIL-IN-SOIL RESULTS LEGEND:

- SATURATED WITH NAPL
- POSITIVE INDICATION OF NAPL
- SLIGHT INDICATION OF NAPL
- NO INDICATION OF NAPL

SHEET SIZE: 11" BY 17"

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SUPPLEMENTAL INVESTIGATION REPORT
SHORE REALTY CORPORATION (AES) - SITE NO. 130006
1 SHORE ROAD
GLENWOOD LANDING, NEW YORK 11547

TITLE:
GEOLOGICAL CROSS-SECTION A-A'

DRAWN BY:	H. DELGADO	PROJ NO.:	327138
CHECKED BY:	D. WARREN		
APPROVED BY:	D. GLASS		**FIGURE 5**
DATE:	JANUARY 2020		

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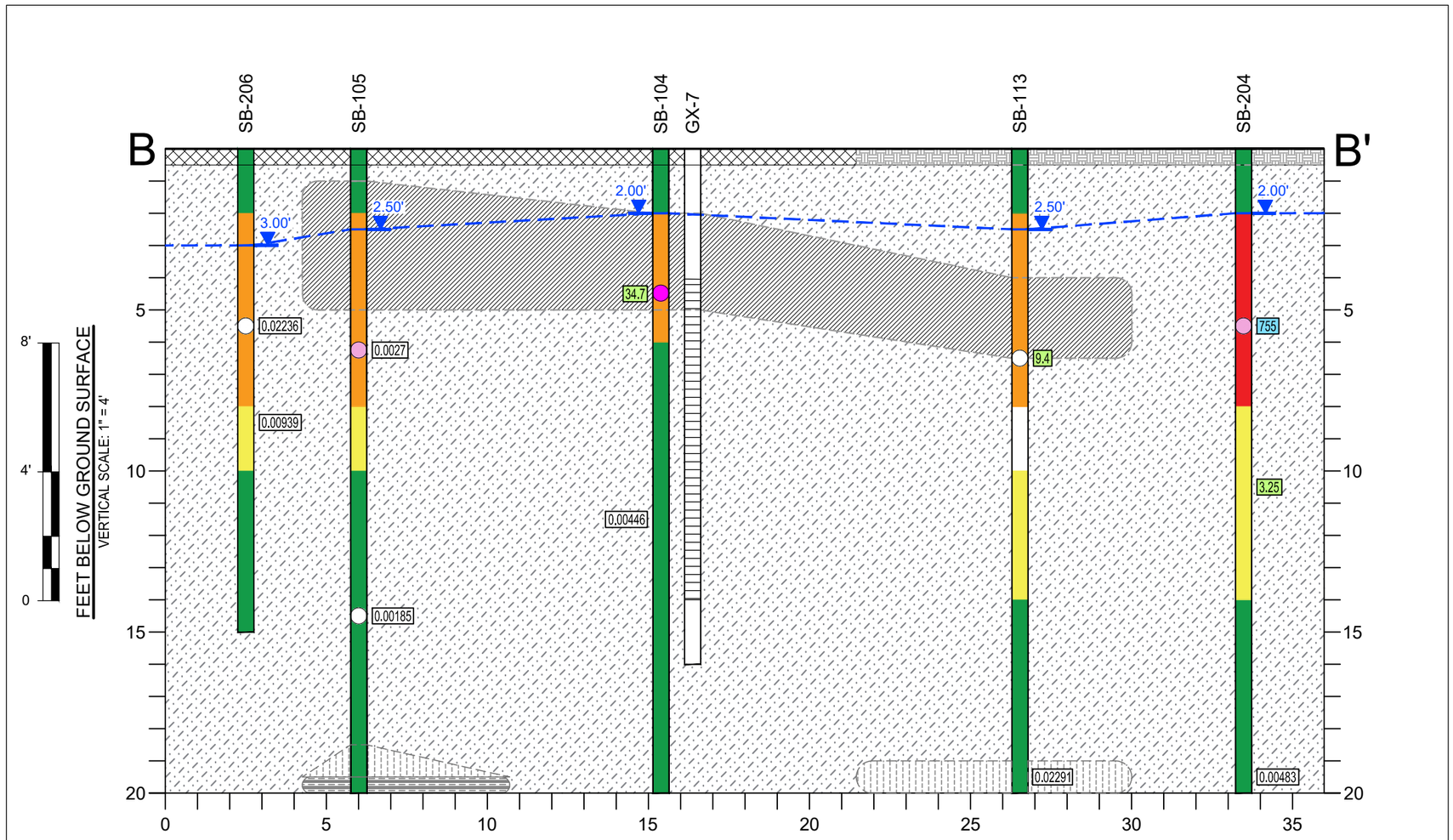
FILE NO.: Figure 5-8 - Geo. Cross-Sections.dwg



8' 4' 0

FEET BELOW GROUND SURFACE
VERTICAL SCALE: 1" = 4'

GEOLOGICAL CROSS-SECTION B-B'
HORIZONTAL SCALE: 1" = 4'

0 4' 8'

LEGEND (SYMBOLS NOT TO SCALE):

- 0.002 - TOTAL ETX CONCENTRATION (MG/KG) DETECTED IN SOIL. LIGHT GREEN HIGHLIGHT INDICATES ETX CONCENTRATION EXCEEDS THE UNRESTRICTED USE SOIL CLEANUP OBJECTIVE. LIGHT BLUE HIGHLIGHT INDICATES ETX CONCENTRATION EXCEEDS THE COMMERCIAL USE SOIL CLEANUP OBJECTIVE.
- PID RESPONSE OF 5 PPM OR LOWER
- PID RESPONSE FROM GREATER THAN 5 PPM TO 25 PPM
- PID RESPONSE FROM GREATER THAN 25 PPM TO 100 PPM
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- ASPHALT
- TOPSOIL
- SAND
- SAND WITH SILT AND CLAY
- CLAY LUMPS / BANDS WITH SAND
- CLAY
- GRAVEL
- 2.50' APPROXIMATE GROUNDWATER TABLE SURFACE
- WELL SCREEN

OIL-IN-SOIL RESULTS LEGEND:

- SATURATED WITH NAPL
- POSITIVE INDICATION OF NAPL
- SLIGHT INDICATION OF NAPL
- NO INDICATION OF NAPL

NOTES:

1. TO AID WITH VISUALIZATION AND SINCE CERTAIN BORINGS AND WELLS ARE OFFSET AND HAVE BEEN PROJECTED ONTO CROSS-SECTIONS, SPACING BETWEEN DATA POINTS DOES NOT MATCH ACTUAL FIELD CONDITIONS EXACTLY.
2. SOIL BORING LOCATIONS AND ELEVATIONS WERE SURVEYED ON JANUARY 10, 2020. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES ARE APPROXIMATE.
3. BOUNDARIES BETWEEN SOIL TYPES ARE INFERRED.
4. ETX - ETHYLBENZENE, TOLUENE, AND XYLENES.
5. MG/KG - MILLIGRAMS PER KILOGRAM
6. PID - PHOTOIONIZATION DETECTOR. THE MAXIMUM PID MEASUREMENT AT EACH DEPTH IS SHOWN.
7. PPM - PARTS PER MILLION
8. NO COLOR WITHIN SOIL BORING INDICATES NO PID MEASUREMENT DUE TO INSUFFICIENT RECOVERY.
9. NAPL - NON-AQUEOUS PHASE LIQUID

SHEET SIZE: 11" BY 17"

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SUPPLEMENTAL INVESTIGATION REPORT
SHORE REALTY CORPORATION (AES) - SITE NO. 130006
1 SHORE ROAD
GLENWOOD LANDING, NEW YORK 11547

TITLE:
GEOLOGICAL CROSS-SECTION B-B'

DRAWN BY:	H. DELGADO	PROJ NO.:	327138
CHECKED BY:	D. WARREN		
APPROVED BY:	D. GLASS		
DATE:	JANUARY 2020		

FIGURE 6

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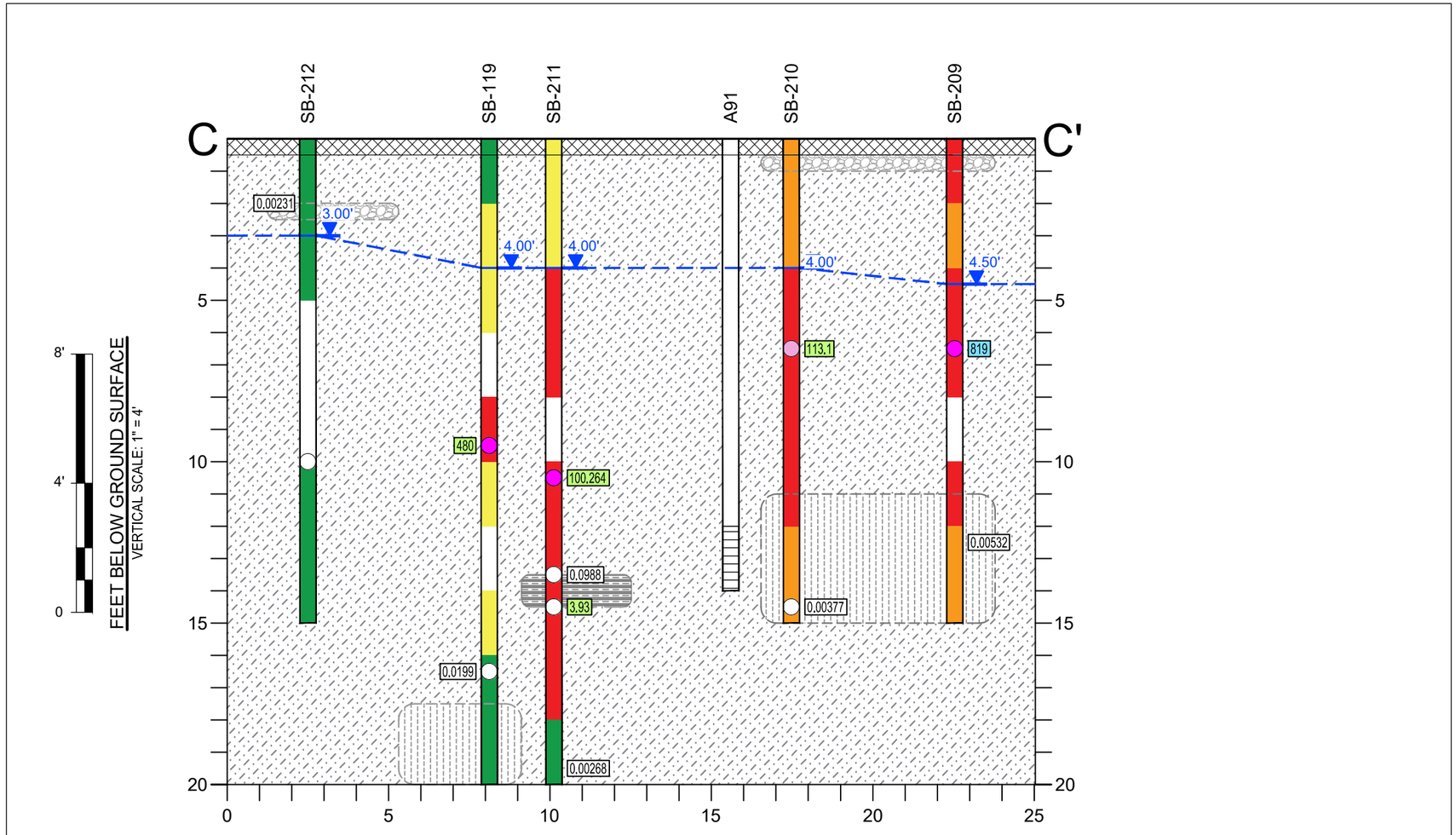

GEOLOGICAL CROSS-SECTION C-C'

HORIZONTAL SCALE: 1" = 4'

0 4' 8'

LEGEND (SYMBOLS NOT TO SCALE):

- 0.002 - TOTAL ETX CONCENTRATION (MG/KG) DETECTED IN SOIL. LIGHT GREEN HIGHLIGHT INDICATES ETX CONCENTRATION EXCEEDS THE UNRESTRICTED USE SOIL CLEANUP OBJECTIVE. LIGHT BLUE HIGHLIGHT INDICATES ETX CONCENTRATION EXCEEDS THE COMMERCIAL USE SOIL CLEANUP OBJECTIVE.
- - PID RESPONSE OF 5 PPM OR LOWER
- - PID RESPONSE FROM GREATER THAN 5 PPM TO 25 PPM
- - PID RESPONSE FROM GREATER THAN 25 PPM TO 100 PPM
- - PID RESPONSE GREATER THAN 100 PPM
- ASPHALT
- SAND
- SAND WITH SILT AND CLAY
- CLAY LUMPS / BANDS WITH SAND
- CLAY
- GRAVEL
- 2.50' APPROXIMATE GROUNDWATER TABLE SURFACE
- WELL SCREEN

OIL-IN-SOIL RESULTS LEGEND:

- SATURATED WITH NAPL
- POSITIVE INDICATION OF NAPL
- SLIGHT INDICATION OF NAPL
- NO INDICATION OF NAPL

NOTES:

1. TO AID WITH VISUALIZATION AND SINCE CERTAIN BORINGS AND WELLS ARE OFFSET AND HAVE BEEN PROJECTED ONTO CROSS-SECTIONS, SPACING BETWEEN DATA POINTS DOES NOT MATCH ACTUAL FIELD CONDITIONS EXACTLY.
2. SOIL BORING LOCATIONS AND ELEVATIONS WERE SURVEYED ON JANUARY 10, 2020. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES ARE APPROXIMATE.
3. BOUNDARIES BETWEEN SOIL TYPES ARE INFERRED.
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5. MG/KG - MILLIGRAMS PER KILOGRAM
6. PID - PHOTOIONIZATION DETECTOR. THE MAXIMUM PID MEASUREMENT AT EACH DEPTH IS SHOWN.
7. PPM - PARTS PER MILLION
8. ND - NOT DETECTED
9. NO COLOR WITHIN SOIL BORING INDICATES NO PID MEASUREMENT DUE TO INSUFFICIENT RECOVERY.
10. NAPL - NON-AQUEOUS PHASE LIQUID

SHEET SIZE: 11" BY 17"

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SUPPLEMENTAL INVESTIGATION REPORT
SHORE REALTY CORPORATION (AES) - SITE NO. 130006
1 SHORE ROAD
GLENWOOD LANDING, NEW YORK 11547

TITLE:
GEOLOGICAL CROSS-SECTION C-C'

DRAWN BY:	H. DELGADO	PROJ NO.:	327138
CHECKED BY:	D. WARREN		
APPROVED BY:	D. GLASS		**FIGURE 7**
DATE:	JANUARY 2020		

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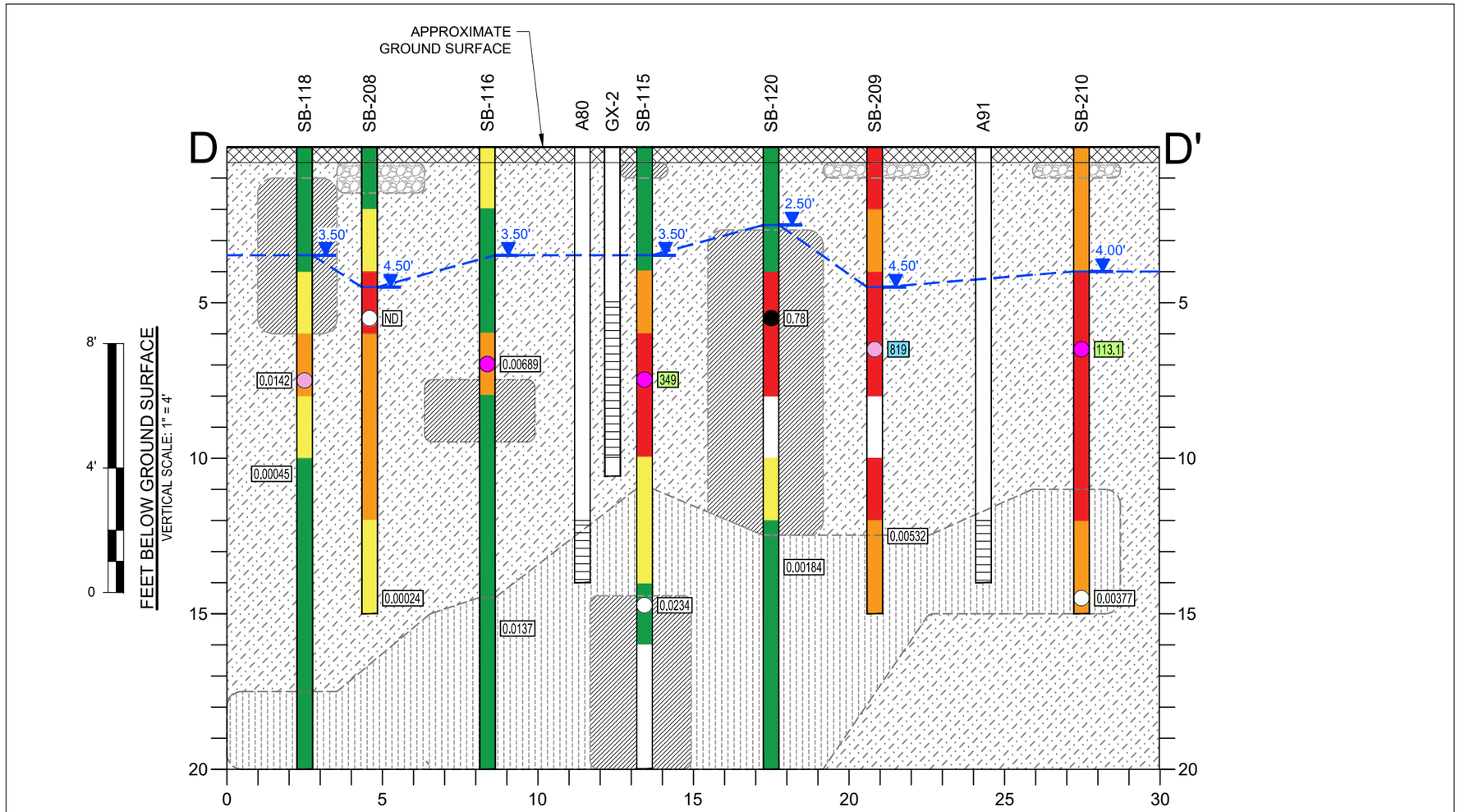

FEET BELOW GROUND SURFACE
VERTICAL SCALE: 1" = 4'

8'
4'
0

GEOLOGICAL CROSS-SECTION D-D'

HORIZONTAL SCALE: 1" = 4'

0 4' 8'

LEGEND (SYMBOLS NOT TO SCALE):

0.0142 - TOTAL ETX CONCENTRATION (MG/KG) DETECTED IN SOIL.
LIGHT GREEN HIGHLIGHT INDICATES ETX CONCENTRATION EXCEEDS THE UNRESTRICTED USE SOIL CLEANUP OBJECTIVE.
LIGHT BLUE HIGHLIGHT INDICATES ETX CONCENTRATION EXCEEDS THE COMMERCIAL USE SOIL CLEANUP OBJECTIVE.

- PID RESPONSE OF 5 PPM OR LOWER
- PID RESPONSE FROM GREATER THAN 5 PPM TO 25 PPM
- PID RESPONSE FROM GREATER THAN 25 PPM TO 100 PPM
- PID RESPONSE GREATER THAN 100 PPM
- ASPHALT
- SAND
- SAND WITH SILT AND CLAY
- CLAY LUMPS / BANDS WITH SAND
- CLAY
- GRAVEL
- 2.50' APPROXIMATE GROUNDWATER TABLE SURFACE
- WELL SCREEN

OIL-IN-SOIL RESULTS LEGEND:

- SATURATED WITH NAPL
- POSITIVE INDICATION OF NAPL
- SLIGHT INDICATION OF NAPL
- NO INDICATION OF NAPL

SHEET SIZE: 11" BY 17"

NOTES:

1. TO AID WITH VISUALIZATION AND SINCE CERTAIN BORINGS AND WELLS ARE OFFSET AND HAVE BEEN PROJECTED ONTO CROSS-SECTIONS, SPACING BETWEEN DATA POINTS DOES NOT MATCH ACTUAL FIELD CONDITIONS EXACTLY.
2. SOIL BORING LOCATIONS AND ELEVATIONS WERE SURVEYED ON JANUARY 10, 2020. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES ARE APPROXIMATE.
3. BOUNDARIES BETWEEN SOIL TYPES ARE INFERRED.
4. ETX - ETHYLBENZENE, TOLUENE, AND XYLENES.
5. MG/KG - MILLIGRAMS PER KILOGRAM
6. PID - PHOTOIONIZATION DETECTOR. THE MAXIMUM PID MEASUREMENT AT EACH DEPTH IS SHOWN.
7. PPM - PARTS PER MILLION.
8. NO COLOR WITHIN SOIL BORING INDICATES NO PID MEASUREMENT DUE TO INSUFFICIENT RECOVERY.
9. NAPL - NON-AQUEOUS PHASE LIQUID.
10. ND - NOT DETECTED.

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SUPPLEMENTAL INVESTIGATION REPORT
SHORE REALTY CORPORATION (AES) - SITE NO. 130006
1 SHORE ROAD
GLENWOOD LANDING, NEW YORK 11547

TITLE:
GEOLOGICAL CROSS-SECTION D-D'

DRAWN BY:	H. DELGADO	PROJ NO.:	327138
CHECKED BY:	D. WARREN		
APPROVED BY:	D. GLASS		**FIGURE 8**
DATE:	JANUARY 2020		

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TABLES

Table 1
NYSDEC
Shore Realty Corporation (AES) - Site No. 130006
1 Shore Road, Glenwood Landing, New York 11547
Summary of PID Measurements from Soil Borings

PID Measurements from Borings in Investigation Area 1										
Sample Location:	**SB-101**	**SB-102**	**SB-103**	**SB-104**	**SB-105**	**SB-106**	**SB-107**	**SB-108**	**SB-109**	**SB-110**
Screening Depth (ft bgs)	**PID Measurement (ppm)**									
0 - 2	2.2	0.1	0.0	0.6	0.6	0.3	0.0	1.8	11.6	1.2
2 - 4	70	75	25	42	69	41	0.4	52	55	54
4 - 6	198	155	27	42	81	57	23.5	20	47	54
6 - 8	31	65	17	3.2	81	34	4.2	7.8	34	7.0
8 - 10	3.2	20.6	22	3.2	18	23	NM	7.8	NM	7.0
10 - 12	7	5.3	7.2	0.2	1.8	7.8	0.0	0.0	24	4.9
12 - 14	4.4	5.3	4.0	0.0	1.8	11.3	0.0	0.0	NM	4.5
14 - 16	0.0	0.7	4.0	0.0	0.4	0.0	0.0	0.0	0.0	2.3
16 - 18	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	1.2
18 - 20	4.1	0.0	0.7	0.0	0.0	3.9	0.0	3.6	0.0	3.5

Notes:
The maximum PID measurement from each screening depth is presented in this table.
ft bgs - Feet below ground surface.
ppm - parts per million.
NM - No measurement due to insufficient recovery.
Shading indicates a PID response of 5 ppm or lower.
Shading indicates a PID response from greater than 5 to 25 ppm.
Shading indicates a PID response from greater than 25 to 100 ppm.
Shading indicates a PID response greater than 100 ppm.

Table 1
NYSDEC
Shore Realty Corporation (AES) - Site No. 130006
1 Shore Road, Glenwood Landing, New York 11547
Summary of PID Measurements from Soil Borings

PID Measurements from Borings in Investigation Area 1										
Sample Location:	**SB-111**	**SB-112**	**SB-113**	**SB-201**	**SB-202**	**SB-203**	**SB-204**	**SB-205**	**SB-206**	**SB-207**
Screening Depth (ft bgs)	**PID Measurement (ppm)**									
0 - 2	0.1	1.0	0.0	11.3	6.0	35	0.0	0.0	4.8	5.3
2 - 4	50	38	38	75	18	76	119	0.0	49	38
4 - 6	68	38	44	126	37.5	84	338	19.7	71	21
6 - 8	11.3	11	52	126	43.4	11.3	338	1.2	71	51
8 - 10	6.8	8.0	NM	8.0	0.0	11.3	16	1.2	0.0	NM
10 - 12	5.2	2.8	7.6	3.6	0.0	3.6	6.7	0.0	0.0	0.0
12 - 14	5.2	2.8	7.6	0.0	0.0	0.0	6.7	0.0	0.0	0.0
14 - 16	0.0	0.0	4.0	0.0	0.0	0.0	3.1	0.0	0.0	0.0
16 - 18	0.0	0.1	4.0				3.1			
18 - 20	0.0	0.0	0.0				0.0			

Notes:
The maximum PID measurement from each screening depth is presented in this table.
ft bgs - Feet below ground surface.
ppm - parts per million.
NM - No measurement due to insufficient recovery.
Shading indicates a PID response of 5 ppm or lower.
Shading indicates a PID response from greater than 5 to 25 ppm.
Shading indicates a PID response from greater than 25 to 100 ppm.
Shading indicates a PID response greater than 100 ppm.

Table 1
NYSDEC
Shore Realty Corporation (AES) - Site No. 130006
1 Shore Road, Glenwood Landing, New York 11547
Summary of PID Measurements from Soil Borings

PID Readings from Borings in Investigation Area 2						
Sample Location:	**SB-114**	**SB-115**	**SB-116**	**SB-117**	**SB-118**	**SB-119**
Screening Depth (ft bgs)	**PID Measurement (ppm)**					
0 - 2	0.3	0.3	6.1	0.0	0.1	0.8
2 - 4	0.6	1.2	0.3	0.0	0.6	22.5
4 - 6	0.4	38	1.2	6.5	11.5	22.5
6 - 8	0.0	594	55	41	65	NM
8 - 10	NM	111	2.4	14.9	11.6	338
10 - 12	0.1	22	0.8	1.2	1.1	14.6
12 - 14	0.4	11.5	2.7	0.0	0.0	NM
14 - 16	0.0	0.0	0.0	0.0	0.0	13
16 - 18	0.0	NM	0.0	0.0	0.0	0.0
18 - 20	0.0	NM	0.0	0.0	0.0	0.0

Notes:
The maximum PID measurement from each screening depth is presented in this table.
ft bgs - Feet below ground surface.
ppm - parts per million.
NM - No measurement due to insufficient recovery.
Shading indicates a PID response of 5 ppm or lower.
Shading indicates a PID response from greater than 5 to 25 ppm.
Shading indicates a PID response from greater than 25 to 100 ppm.
Shading indicates a PID response greater than 100 ppm.

Table 1
NYSDEC
Shore Realty Corporation (AES) - Site No. 130006
1 Shore Road, Glenwood Landing, New York 11547
Summary of PID Measurements from Soil Borings

PID Readings from Borings in Investigation Area 2						
Sample Location:	**SB-120**	**SB-208**	**SB-209**	**SB-210**	**SB-211**	**SB-212**
Screening Depth (ft bgs)	**PID Measurement (ppm)**					
0 - 2	0.0	2.0	120	38	11	0.0
2 - 4	0.6	6.5	38	38	7.0	0.0
4 - 6	192	120	180	1,185	388	0.0
6 - 8	116	85	855	1,185	388	NM
8 - 10	NM	71	NM	1,185	NM	NM
10 - 12	14.6	35	168	175	> 2,000	0.0
12 - 14	0.0	10	29	29	> 2,000	0.0
14 - 16	0.0	10	45	29	170	0.0
16 - 18	0.0				129	
18 - 20	0.0				2.6	

Notes:
The maximum PID measurement from each screening depth is presented in this table.
ft bgs - Feet below ground surface.
ppm - parts per million.
NM - No measurement due to insufficient recovery.
Shading indicates a PID response of 5 ppm or lower.
Shading indicates a PID response from greater than 5 to 25 ppm.
Shading indicates a PID response from greater than 25 to 100 ppm.
Shading indicates a PID response greater than 100 ppm.

Table 2
NYSDEC
Shore Realty Corporation (AES) - Site No. 130006
1 Shore Road, Glenwood Landing, New York 11547
Summary of Laboratory Data, Oil-In-Soil Test Results, and Field Observations

Soil Boring ID	DTW (ft bgs)	Sample Depth Interval (ft bgs)	Soil Color and Type	Total ETX Concentration (mg/kg)	PID (ppm)	Oil-In-Soil Result	Interpretation of Oil-In-Soil Results
INVESTIGATION AREA 1							
SB-101	2.5	4 to 5	Dark gray fine to medium sand, trace silt and gravel, stained	**0.923**	198	Pink bead	Positive indication of NAPL
SB-102	3	4 to 5	Gray fine sand and silt with clay, stained	0.00325	155	Negative	No indication of NAPL
SB-103	3	4 to 5	Gray to brown fine to medium sand and gravel	0.00348	27	Negative	No indication of NAPL
SB-104	2	4 to 5	Dark gray to brown sand, clay and silt, trace gravel	**34.7**	42	Pink bead	Positive indication of NAPL
SB-105	2.5	6 to 6.5	Dark brown fine to medium sand, trace silt, stained	0.0027	81	Slight pink bead	Slight indication of NAPL
		14 to 15	Dark gray fine to medium sand with clay and silt	0.00185	0.4	Negative	No indication of NAPL
SB-106	2.5	3.5 to 4.5	Dark gray fine sand, clay and silt and fine gravel, stained	0.0033	57	Slight pink bead	Slight indication of NAPL
		6-6.5	Dark gray medium to coarse sand, fine gravel, stained	0.00649	34	Negative	No indication of NAPL
SB-107	2	4 to 5	Dark gray fine sand	**2.3**	23.5	Slight pink bead	Slight indication of NAPL
SB-108	2.5	3 to 4	Gray fine sand, clay and silt stained	0.0022	52	Pink bead	Positive indication of NAPL
SB-109	2.5	3 to 4	Dark gray fine to medium sand, clay and silt, stained	**1.3**	55	Slight pink bead	Slight indication of NAPL
SB-110	2.5	4 to 4.5	Dark gray fine sand, clay and silt, stained	0.002	54	Pink bead	Positive indication of NAPL
SB-111	2.5	4 to 5	Dark brown/gray fine to medium sand, trace silt, stained	**472**	68	Pink bead	Positive indication of NAPL
SB-112	2.5	4.5 to 5	Dark gray/brown fine to medium sand with clay and silt, trace coarse gravel, stained	**2.14**	38	Slight pink bead	Slight indication of NAPL
SB-113	2.5	6 to 7	Light to dark gray fine to medium sand with clay and silt	**9.4**	52	Negative	No indication of NAPL
SB-201	3	5 to 6	Brown to gray coarse to medium sand, sea shells, trace fine gravel	0.00594	126	Negative	No indication of NAPL
SB-202	2.5	6 to 7	Grayish brown fine to medium sand, trace fine gravel, sea shells	0.00859	43.4	Negative	No indication of NAPL
SB-203	3	5 to 6	Brown fine to medium sand, little fine gravel, organic material	**227.23**	84	Slight pink bead	Slight indication of NAPL
SB-204	2	5 to 6	Dark gray to black fine sand	**755**	338	Slight pink bead	Slight indication of NAPL
SB-205	2.5	5 to 6	Dark gray, fine sand	**0.861**	19.7	Negative	No indication of NAPL
SB-206	3	5 to 6	Dark gray fine to medium sand, little silt, sea shells	0.02236	71	Negative	No indication of NAPL
SB-207	2.5	7 to 8	Gray fine sand	0.01095	51	Slight pink bead	Slight indication of NAPL

Notes

DTW - Depth to water

ETX - Ethylbenzene, toluene, and xylenes

mg/kg - Milligrams per kilogram

PID - Photoionization detector. The maximum PID measurement from each screening depth is presented in this table.

ft bgs - Feet below ground surface

ppm - Parts per million

NM - No measurement due to insufficient recovery

SCO - Soil Cleanup Objective

Bold text and green shading indicates result above Unrestricted Use SCO

Bold text and orange shading indicates result above Protection of Groundwater SCO

Bold text and blue shading indicates result above Commercial Use SCO

Shading indicated a PID response of 5 ppm or lower.

Shading indicates a PID response from greater than 5 to 25 ppm.

Shading indicates a PID response from greater than 25 to 100 ppm.

Shading indicates a PID response greater than 100 ppm.

Table 2
NYSDEC
Shore Realty Corporation (AES) - Site No. 130006
1 Shore Road, Glenwood Landing, New York 11547
Summary of Laboratory Data, Oil-In-Soil Test Results, and Field Observations

Soil Boring ID	DTW (ft bgs)	Sample Depth Interval (ft bgs)	Soil Color and Type	Total ETX Concentration (mg/kg)	PID (ppm)	Oil-In-Soil Result	Interpretation of Oil-In-Soil Results
INVESTIGATION AREA 2							
SB-114	3	11 to 12	Dark gray medium sand, trace silt and gravel	NA	0.1	Negative	No indication of NAPL
SB-115	3.5	7 to 8	Dark gray medium to coarse sand, clay and gavel	**349**	594	Pink bead and pink staining on jar	Positive indication of NAPL
		14.5 to 15	Yellow coarse to very coarse sand.	0.0234	0.0	Negative	No indication of NAPL
SB-116	3.5	6.5 to 7.5	Dark gray medium to coarse sand, trace silt and gravel, stained	0.00689	55	Pink bead	Positive indication of NAPL
SB-117	3.5	6.5 to 7.5	Dark gray medium sand with clay an fine to medium gravel, stained	ND	41	Slight pink bead	Slight indication of NAPL
SB-118	3.5	7 to 8	Dark brown medium to coarse sand, trace fine gravel	0.0142	65	Slight pink bead	Slight indication of NAPL
SB-119	4	9 to 10	Gray fine to medium sand, trace silt and gravel	**480**	338	Pink bead	Positive indication of NAPL
		16 to 17	Yellow fine to medium Sand	0.0199	0.0	Negative	No indication of NAPL
SB-120	2.5	5 to 6	Gray - fine to medium sand, trace gravel, stained, saturated with NAPL	0.78	192	Pink bead and floating product	Saturated with NAPL
SB-208	4.5	5 to 7	Gray medium to coarse sand	ND	120	Negative	No indication of NAPL
SB-209	4.5	5 to 7	Light brown to gray fine to medium sand, little fine gravel	**819**	855	Pink bead	Positive indication of NAPL
SB-210	4	7 to 9	Dark gray fine to medium sand, trace fine gravel and few seashells	**113.1**	1,185	Slight pink bead	Slight indication of NAPL
		14 to 15	Red brown to gray fine sand, clayey patches	0.00377	29	Negative	No indication of NAPL
SB-211	4	10 to 11	Dark gray fine to medium sand	**100.2640**	>2,000	Pink bead	Positive indication of NAPL
		13 to 14	Yellow-brown to gray fine to medium sand, little clayey patches	0.0988	>2,000	Negative	No indication of NAPL
		14.5 to 15	Gray clay, medium silt	**3.93**	170	Negative	No indication of NAPL
SB-212	3	1 to 3	Grayish brown fine sand	0.00231	0.0	Negative	No indication of NAPL

Notes

DTW - Depth to water

ETX - Ethylbenzene, toluene, and xylenes

mg/kg - Milligrams per kilogram

PID - Photoionization detector. The maximum PID measurement from each screening depth is presented in this table.

ft bgs - Feet below ground surface

ppm - Parts per million

NM - No measurement due to insufficient recovery

SCO - Soil Cleanup Objective

Bold text and green shading indicates result above Unrestricted Use SCO

Bold text and orange shading indicates result above Protection of Groundwater SCO

Bold text and blue shading indicates result above Commercial Use SCO

Shading indicated a PID response of 5 ppm or lower.

Shading indicates a PID response from greater than 5 to 25 ppm.

Shading indicates a PID response from greater than 25 to 100 ppm.

Shading indicates a PID response greater than 100 ppm.

Table 3
NYSDEC
Shore Realty Corporation (AES) - Site No. 130006
1 Shore Road, Glenwood Landing, New York 11547
Summary of Results of Analysis of Soil for Volatile Organic Compounds

				INVESTIGATION AREA 1																			
SAMPLE NAME				**SR-SO-SB-101(4-5)**		**SR-SO-SB-101(8-9)**		**SR-SO-SB-102(4-5)**		**SR-SO-SB-102(14-15)**		**SR-SO-SB-103(4-5)**		**SR-SO-SB-103(14-15)**		**SR-SO-SB-104(4-5)**		**SR-SO-SB-104(11-12)**		**SR-SO-SB-105 (6-6.5)**		**SR-SO-SB-105 (14-15)**	
LABORATORY SAMPLE ID				460-186425-7		460-186425-8		460-186425-9		460-186425-10		460-186425-13		460-186425-14		460-186195-12		460-186195-13		460-186298-7		460-186298-8	
SAMPLE DEPTH (FT BGS)				4-5 FT BGS		8-9 FT BGS		4-5 FT BGS		14-15 FT BGS		4-5 FT BGS		14-15 FT BGS		4-5 FT BGS		11-12 FT BGS		6-6.5 FT BGS		14-15 FT BGS	
SAMPLING DATE				7/11/2019		7/11/2019		7/11/2019		7/11/2019		7/11/2019		7/11/2019		7/9/2019		7/9/2019		7/10/2019		7/10/2019	
UNITS				mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
VOLATILE ORGANIC COMPOUNDS (VOCs)	**NYSDEC Unrestricted Use SCO**	**NYSDEC Commercial Use SCO**	**NYSDEC Protection of Groundwater SCO**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	0.68	500	0.68	0.096	U	0.0010	U	0.0011	U *	0.0011	U	0.0010	U *	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U *
1,1,2,2-Tetrachloroethane	NC	NC	NC	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NC	NC	NC	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
1,1,2-Trichloroethane	NC	NC	NC	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
1,1-Dichloroethane	0.27	240	0.27	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U *	0.0011	U
1,1-Dichloroethene	0.33	500	0.33	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
1,2,3-Trichlorobenzene	NC	NC	NC	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
1,2,4-Trichlorobenzene	NC	NC	NC	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
1,2-Dibromo-3-Chloropropane	NC	NC	NC	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
1,2-Dichlorobenzene	1.1	500	1.1	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
1,2-Dichloroethane	0.02	30	0.02	0.096	U	0.0010	U	0.0011	U *	0.0011	U	0.0010	U *	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
1,2-Dichloropropane	NC	NC	NC	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
1,3-Dichlorobenzene	2.4	280	2.4	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
1,4-Dichlorobenzene	1.8	130	1.8	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
1,4-Dioxane	0.1	130	0.1	4.8	U	0.021	U	0.022	U	0.022	U	0.021	U	0.021	U	4.0	U	0.021	U	0.019	U	0.021	U
2-Butanone (MEK)	0.12	NC	0.12	0.48	U	0.0051	U	0.0056	U	0.0054	U	0.0051	U	0.0053	U	0.40	U	0.0035	J	0.0047	U	0.0053	U
2-Hexanone	NC	NC	NC	0.48	U	0.0051	U	0.0056	U	0.0054	U	0.0051	U	0.0053	U	0.40	U	0.0053	U	0.0047	U	0.0053	U
4-Methyl-2-pentanone (MIBK)	NC	NC	NC	0.48	U	0.0051	U	0.0056	U	0.0054	U	0.0051	U	0.0053	U	0.40	U	0.0053	U	0.0047	U	0.0053	U
Acetone	0.05	500	0.05	0.48	U	0.036		**0.093**	J+	**0.059**		**0.054**		0.028		0.40	U	**0.12**		0.033	J+	0.021	
Benzene	0.06	44	0.06	0.096	U	0.00045	J	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
Bromoform	NC	NC	NC	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
Bromomethane	NC	NC	NC	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
Carbon disulfide	NC	NC	NC	0.096	U	0.0015		0.0026	J+	0.00060	J	0.0010	U	0.0012		0.080	U	0.0018		0.0017	J+	0.0011	U
Carbon tetrachloride	0.76	22	0.76	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
Chlorobenzene	1.1	500	1.1	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
Chlorobromomethane	NC	NC	NC	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
Chlorodibromomethane	NC	NC	NC	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
Chloroethane	NC	NC	NC	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
Chloroform	0.37	350	0.37	0.096	U	0.0010	U *	0.0011	U *	0.0011	U *	0.0010	U *	0.0011	U *	0.080	U	0.0011	U	0.00093	U	0.0011	U
Chloromethane	NC	NC	NC	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
cis-1,2-Dichloroethene	0.25	500	0.25	0.096	U	0.0010	U	0.0011	U *	0.0011	U	0.0010	U *	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
cis-1,3-Dichloropropene	NC	NC	NC	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
Cyclohexane	NC	NC	NC	0.069	J	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.15		0.0011	U	0.00093	U	0.0011	U
Dichlorobromomethane	NC	NC	NC	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
Dichlorodifluoromethane	NC	NC	NC	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
Ethylbenzene	1	390	1	0.23		0.023		0.0011	U	0.0011		0.0010	U	0.0015		**2.7**		0.00032	J	0.00093	U	0.00025	J
Ethylene Dibromide	NC	NC	NC	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
Isopropylbenzene	NC	NC	NC	1.5		0.0059		0.036	J+	0.00032	J	0.019		0.0011	U	0.45		0.00026	J	0.046	J+	0.00069	J
Methyl acetate	NC	NC	NC	0.15	J	0.0051	U *	0.0056	U *	0.0054	U *	0.0051	U *	0.0053	U *	0.40	U	0.0053	U	0.0047	U	0.0053	U
Methyl tert-butyl ether	0.93	500	0.93	0.096	U	0.0010	U	0.0011	U *	0.0011	U	0.0010	U *	0.0011	U	0.080	U	0.0011	U	0.00093	U *	0.0011	U *
Methylcyclohexane	NC	NC	NC	1.7		0.0040		0.093	J+	0.00088	J	0.040		0.0011		0.63		0.0011	U	0.077	J+	0.0011	U
Methylene Chloride	0.05	500	0.05	0.096	U	0.0012		0.0014	J+	0.00096	J	0.0016		0.0029		0.080	U	0.0014		0.0026	J+	0.0028	
m-Xylene & p-Xylene[(1)]	NC	NC	NC	0.60		0.0024		0.0023	J+	0.0031		0.0020		0.010		32		0.0027		0.0023	J+	0.0014	
o-Xylene[(1)]	NC	NC	NC	0.042	J	0.00037	J	0.0011	U	0.0011	U	0.00051	J	0.00094	J	0.076	J	0.00062	J	0.00036	J	0.00020	J
Styrene	NC	NC	NC	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
Tetrachloroethene	1.3	150	1.3	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
Toluene	0.7	500	0.7	0.053	J	0.0018		0.00095	J	0.0011	U	0.00098	J	0.0011	U	0.080	U	0.00084	J	0.00093	U	0.0011	U
trans-1,2-Dichloroethene	0.19	500	0.19	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
trans-1,3-Dichloropropene	NC	NC	NC	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
Trichloroethene	0.47	200	0.47	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
Trichlorofluoromethane	NC	NC	NC	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
Vinyl chloride	0.02	13	0.02	0.096	U	0.0010	U	0.0011	U	0.0011	U	0.0010	U	0.0011	U	0.080	U	0.0011	U	0.00093	U	0.0011	U
Xylenes, Total	0.26	500	1.6	**0.64**		0.0027		0.0023	J+	0.0033		0.0025		0.011		**32**		0.0033		0.0027	J+	0.0016	J

Notes:

Bold text and green shading indicates result above Unrestricted Use SCO

Bold text and orange shading indicates result above Protection of Groundwater SCO

Bold text and blue shading indicates result above Commercial Use SCO

mg/kg - milligrams per kilogram (dry weight).

FT BGS - Feet below ground surface

F1 - MS and/or MSD Recovery is outside acceptance limits

F2 - MS/MSD RPD exceeds control limits

U - Compound was not detected at specified quantitation limit

* - LCS or LCSD is outside acceptance limits

UJ - Non-detect with a potential low bias

J - Estimated value

J+ - Estimated value with a potential high bias

J- - Estimated value with a potential low bias

NC - No criterion

ND - Not detected

NYSDEC - New York State Department of Environmental Conservation

Q - Qualifier

SCO - Soil Cleanup Objective

(1) - There are no SCOs for m/p xylene or o-xylene. The SCOs for total xylenes are shown.

Table 3
NYSDEC
Shore Realty Corporation (AES) - Site No. 130006
1 Shore Road, Glenwood Landing, New York 11547
Summary of Results of Analysis of Soil for Volatile Organic Compounds

				INVESTIGATION AREA 1																			
SAMPLE NAME				**SR-SO-SB-106 (3.5-4.5)**		**SR-SO-SB-106 (6-6.5)**		**SR-SO-SB-107(4-5)**		**SR-SO-SB-107(11-12)**		**SR-SO-SB-108(3-4)**		**SR-SO-SB-108(7-8)**		**SR-SO-SB-109(3-4)**		**SR-SO-SB-109(15-16)**		**SR-SO-SB-110(4-4.5)**		**SR-SO-SB-110(6.5-7.0)**	
LABORATORY SAMPLE ID				460-186298-9		460-186298-10		460-186425-1		460-186425-2		460-186425-3		460-186425-4		460-186425-11		460-186425-12		460-186425-5		460-186425-6	
SAMPLE DEPTH (FT BGS)				3.5-4.5 FT BGS		6-6.5 FT BGS		4-5 FT BGS		11-12 FT BGS		3-4 FT BGS		7-8 FT BGS		3-4 FT BGS		15-16 FT BGS		4-4.5 FT BGS		6.5-7 FT BGS	
SAMPLING DATE				7/10/2019		7/10/2019		7/10/2019		7/10/2019		7/10/2019		7/10/2019		7/11/2019		7/11/2019		7/11/2019		7/11/2019	
UNITS				mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
VOLATILE ORGANIC COMPOUNDS (VOCs)	**NYSDEC Unrestricted Use SCO**	**NYSDEC Commercial Use SCO**	**NYSDEC Protection of Groundwater SCO**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	0.68	500	0.68	0.00090	U	0.0010	U *	0.11	U	0.00090	U	0.00094	U *	0.0011	U	0.074	U	0.0010	U	0.00090	U *	0.00096	U *
1,1,2,2-Tetrachloroethane	NC	NC	NC	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NC	NC	NC	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
1,1,2-Trichloroethane	NC	NC	NC	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
1,1-Dichloroethane	0.27	240	0.27	0.00090	U *	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
1,1-Dichloroethene	0.33	500	0.33	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
1,2,3-Trichlorobenzene	NC	NC	NC	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
1,2,4-Trichlorobenzene	NC	NC	NC	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
1,2-Dibromo-3-Chloropropane	NC	NC	NC	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
1,2-Dichlorobenzene	1.1	500	1.1	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
1,2-Dichloroethane	0.02	30	0.02	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U *	0.0011	U	0.074	U	0.0010	U	0.00090	U *	0.00096	U *
1,2-Dichloropropane	NC	NC	NC	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
1,3-Dichlorobenzene	2.4	280	2.4	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
1,4-Dichlorobenzene	1.8	130	1.8	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
1,4-Dioxane	0.1	130	0.1	0.018	U	0.02	U	5.5	U	0.018	U	0.019	U	0.022	U	3.7	U	0.02	U	0.018	U	0.019	U
2-Butanone (MEK)	0.12	NC	0.12	0.0045	U	0.014		0.55	U	0.0045	U	0.0047	U	0.0056	U	0.37	U	0.0045	J	0.0045	U	0.0048	U
2-Hexanone	NC	NC	NC	0.0045	U	0.0050	U	0.55	U	0.0045	U	0.0047	U	0.0056	U	0.37	U	0.0050	U	0.0045	U	0.0048	U
4-Methyl-2-pentanone (MIBK)	NC	NC	NC	0.0045	U	0.0050	U	0.55	U	0.0045	U	0.0047	U	0.0056	U	0.37	U	0.0050	U	0.0045	U	0.0048	U
Acetone	0.05	500	0.05	**0.065**	J+	**0.070**		0.55	U	**0.071**		**0.074**		**0.053**		0.37	U	0.028	J+	**0.070**	J+	**0.054**	
Benzene	0.06	44	0.06	0.00090	U	0.00062	J	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
Bromoform	NC	NC	NC	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
Bromomethane	NC	NC	NC	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
Carbon disulfide	NC	NC	NC	0.0022	J+	0.0041		0.11	U	0.0044		0.0047		0.014		0.074	U	0.0091		0.0012	J+	0.0036	
Carbon tetrachloride	0.76	22	0.76	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
Chlorobenzene	1.1	500	1.1	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
Chlorobromomethane	NC	NC	NC	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
Chlorodibromomethane	NC	NC	NC	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
Chloroethane	NC	NC	NC	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
Chloroform	0.37	350	0.37	0.00090	U	0.0010	U	0.11	U	0.00090	U *	0.00094	U *	0.0011	U *	0.074	U	0.0010	U *	0.00090	U *	0.00096	U *
Chloromethane	NC	NC	NC	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
cis-1,2-Dichloroethene	0.25	500	0.25	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U *	0.0011	U	0.074	U	0.0010	U	0.00090	U *	0.00096	U *
cis-1,3-Dichloropropene	NC	NC	NC	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
Cyclohexane	NC	NC	NC	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
Dichlorobromomethane	NC	NC	NC	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
Dichlorodifluoromethane	NC	NC	NC	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
Ethylbenzene	1	390	1	0.00090	U	0.00045	J	0.30		0.0098		0.00094	U	0.0011	U	0.11		0.0010	U	0.00090	U	0.00019	J
Ethylene Dibromide	NC	NC	NC	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
Isopropylbenzene	NC	NC	NC	0.017	J+	0.0018		0.094	J	0.0060		0.0055		0.00084	J	1.1		0.00049	J	0.092	J+	0.0027	
Methyl acetate	NC	NC	NC	0.0045	U	0.0050	U	0.18	J	0.0045	U *	0.0047	U *	0.0056	U *	0.20	J	0.0050	U *	0.0045	U *	0.0048	U *
Methyl tert-butyl ether	0.93	500	0.93	0.00090	U *	0.0010	U *	0.11	U	0.00090	U	0.00094	U *	0.0011	U	0.074	U	0.0010	U	0.00090	U *	0.00096	U *
Methylcyclohexane	NC	NC	NC	0.14	J+	0.0028		0.11	U	0.0081		0.00094	U	0.0016		1.8		0.0010	U	0.10	J+	0.0056	
Methylene Chloride	0.05	500	0.05	0.0010	J+	0.0024		0.11	U	0.00090	U	0.0017		0.0013		0.074	U	0.0031		0.00090	U	0.0012	
m-Xylene & p-Xylene[(1)]	NC	NC	NC	0.0018	J+	0.0049		1.5		0.29		0.00094	U	0.0052		1.0		0.0049		0.0020	J+	0.0013	
o-Xylene[(1)]	NC	NC	NC	0.00090	U	0.00039	J	0.21		0.0045		0.00094	U	0.0011	U	0.11		0.00021	J	0.00090	U	0.00025	J
Styrene	NC	NC	NC	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
Tetrachloroethene	1.3	150	1.3	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
Toluene	0.7	500	0.7	0.0015	J+	0.00074	J	0.29		0.0023		0.0022		0.0011	U	0.095		0.0010	U	0.00090	U	0.00096	U
trans-1,2-Dichloroethene	0.19	500	0.19	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
trans-1,3-Dichloropropene	NC	NC	NC	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
Trichloroethene	0.47	200	0.47	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
Trichlorofluoromethane	NC	NC	NC	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
Vinyl chloride	0.02	13	0.02	0.00090	U	0.0010	U	0.11	U	0.00090	U	0.00094	U	0.0011	U	0.074	U	0.0010	U	0.00090	U	0.00096	U
Xylenes, Total	0.26	500	1.6	0.0018	J+	0.0053		**1.7**		**0.29**		0.0019	U	0.0053		**1.1**		0.0051		0.002	J+	0.0016	J

Notes:

Bold text and green shading indicates result above Unrestricted Use SCO

Bold text and orange shading indicates result above Protection of Groundwater SCO

Bold text and blue shading indicates result above Commercial Use SCO

mg/kg - milligrams per kilogram (dry weight).

FT BGS - Feet below ground surface

F1 - MS and/or MSD Recovery is outside acceptance limits

F2 - MS/MSD RPD exceeds control limits

U - Compound was not detected at specified quantitation limit

* - LCS or LCSD is outside acceptance limits

UJ - Non-detect with a potential low bias

J - Estimated value

J+ - Estimated value with a potential high bias

J- - Estimated value with a potential low bias

NC - No criterion

ND - Not detected

NYSDEC - New York State Department of Environmental Conservation

Q - Qualifier

SCO - Soil Cleanup Objective

(1) - There are no SCOs for m/p xylene or o-xylene. The SCOs for total xylenes are shown.

Table 3
NYSDEC
Shore Realty Corporation (AES) - Site No. 130006
1 Shore Road, Glenwood Landing, New York 11547
Summary of Results of Analysis of Soil for Volatile Organic Compounds

				INVESTIGATION AREA 1																			
SAMPLE NAME				SR-SO-SB-111 (4-5)		SR-SO-SB-111 (15-16)		SR-SO-SB-112 (4.5-5)		SR-SO-SB-112 (14.5-15)		SR-SO-SB-113 (6-7)		SR-SO-SB-113 (19-19.5)		SR-SO-SB-201(5-6)		SR-SO-SB-201(14-15)		SR-SO-SB-202(6-7)		SR-SO-SB-202(9-10)	
LABORATORY SAMPLE ID				460-186298-3		460-186298-4		460-186298-5		460-186298-6		460-186298-1		460-186298-2		460-198061-7		460-198061-8		460-198061-9		460-198061-10	
SAMPLE DEPTH (FT BGS)				4-5 FT BGS		15-16 FT BGS		4.5-5 FT BGS		14.5-15 FT BGS		6-7 FT BGS		19-19.5 FT BGS		5-6 FT BGS		14-15 FT BGS		6-7 FT BGS		9-10 FT BGS	
SAMPLING DATE				7/10/2019		7/10/2019		7/10/2019		7/10/2019		7/9/2019		7/9/2019		12/4/2019		12/4/2019		12/4/2019		12/4/2019	
UNITS				mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
VOLATILE ORGANIC COMPOUNDS (VOCs)	**NYSDEC Unrestricted Use SCO**	**NYSDEC Commercial Use SCO**	**NYSDEC Protection of Groundwater SCO**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	0.68	500	0.68	0.95	U	0.00082	U *	0.085	U	0.0011	U	0.11	U	0.00097	U *	0.00030	U	0.00021	U	0.00022	U	0.00024	U
1,1,2,2-Tetrachloroethane	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00027	U	0.00020	U	0.00020	U	0.00022	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00039	U	0.00028	U	0.00028	U	0.00031	U
1,1,2-Trichloroethane	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00023	U	0.00016	U	0.00017	U	0.00019	U
1,1-Dichloroethane	0.27	240	0.27	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00026	U	0.00019	U	0.00019	U	0.00021	U
1,1-Dichloroethene	0.33	500	0.33	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00029	U	0.00021	U	0.00021	U	0.00023	U
1,2,3-Trichlorobenzene	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	UJ	0.11	U	0.00097	U	0.00023	U	0.00017	U	0.00017	U	0.00019	U
1,2,4-Trichlorobenzene	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	UJ	0.11	U	0.00097	U	0.00046	U	0.00033	U	0.00033	U	0.00037	U
1,2-Dibromo-3-Chloropropane	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00059	U	0.00042	UJ	0.00043	U	0.00048	UJ
1,2-Dichlorobenzene	1.1	500	1.1	0.95	U	0.00082	U	0.085	U	0.0011	UJ	0.11	U	0.00097	U	0.00018	U	0.00013	U	0.00013	U	0.00015	U
1,2-Dichloroethane	0.02	30	0.02	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00038	U	0.00027	U	0.00027	U	0.00031	U
1,2-Dichloropropane	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00054	U	0.00039	U	0.00039	U	0.00044	U
1,3-Dichlorobenzene	2.4	280	2.4	0.95	U	0.00082	U	0.085	U	0.0011	UJ	0.11	U	0.00097	U	0.00020	U	0.00015	U	0.00015	U	0.00017	U
1,4-Dichlorobenzene	1.8	130	1.8	0.95	U	0.00082	U	0.085	U	0.0011	UJ	0.11	U	0.00097	U	0.00029	U	0.00021	U	0.00021	U	0.00023	U
1,4-Dioxane	0.1	130	0.1	47	U	0.016	U	4.2	U	0.021	U	5.5	U	0.019	U	0.012	U	0.0084	U	0.0085	U	0.0096	U
2-Butanone (MEK)	0.12	NC	0.12	4.7	U	0.0041	U	0.42	U	0.0053	U	0.55	U	0.010		0.024		0.0025	U	0.017		0.0028	U
2-Hexanone	NC	NC	NC	4.7	U	0.0041	U	0.42	U	0.0053	U	0.55	U	0.0049	U	0.0022	U	0.0016	U	0.0016	U	0.0018	U
4-Methyl-2-pentanone (MIBK)	NC	NC	NC	4.7	U	0.0041	U	0.42	U	0.0053	U	0.55	U	0.0049	U	0.0020	U	0.0014	U	0.0014	U	0.0016	U
Acetone	0.05	500	0.05	4.7	U	0.023		0.42	U	0.022	J-	0.55	U	**0.25**		**0.096**		0.015		**0.074**		0.047	
Benzene	0.06	44	0.06	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00033	U	0.00024	U	0.00024	U	0.00027	U
Bromoform	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00054	U	0.00039	UJ	0.00039	U	0.00044	UJ
Bromomethane	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00061	U	0.00043	U	0.00044	U	0.00049	U
Carbon disulfide	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.0030		0.0014		0.00024	UJ	0.0017		0.00028	UJ
Carbon tetrachloride	0.76	22	0.76	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00050	U	0.00035	U	0.00036	U	0.00040	U
Chlorobenzene	1.1	500	1.1	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00023	U	0.00016	U	0.00016	U	0.00018	U
Chlorobromomethane	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00036	U	0.00026	U	0.00026	U	0.00029	U
Chlorodibromomethane	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00025	U	0.00018	UJ	0.00018	U	0.00020	UJ
Chloroethane	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00067	U	0.00048	U	0.00048	U	0.00054	U
Chloroform	0.37	350	0.37	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00041	U	0.00029	U	0.00030	U	0.00033	U
Chloromethane	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00056	U	0.00040	UJ	0.00040	U	0.00045	UJ
cis-1,2-Dichloroethene	0.25	500	0.25	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00019	U	0.00014	U	0.00014	U	0.00016	U
cis-1,3-Dichloropropene	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00035	U	0.00025	U	0.00025	U	0.00028	U
Cyclohexane	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	U	0.054	J	0.00097	U	0.00028	U	0.00020	U	0.00021	U	0.00023	U
Dichlorobromomethane	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00033	U	0.00024	U	0.00024	U	0.00027	U
Dichlorodifluoromethane	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00043	U	0.00031	UJ	0.00031	U	0.00035	UJ
Ethylbenzene	1	390	1	**62**		0.0046		0.038	J	0.0011	U	**1.2**		0.0031		0.0011	J	0.0010		0.0010		0.00079	J
Ethylene Dibromide	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00023	U	0.00016	U	0.00017	U	0.00019	U
Isopropylbenzene	NC	NC	NC	0.78	J	0.00025	J	0.063	J	0.0011	U	0.048	J	0.00097	U	0.090		0.00012	U	0.011		0.00013	U
Methyl acetate	NC	NC	NC	4.7	U	0.0041	U	0.42	U	0.0053	U	0.55	U	0.0043	J	0.0055	U	0.0039	U	0.0040	U	0.0045	U
Methyl tert-butyl ether	0.93	500	0.93	0.95	U	0.00082	U *	0.085	U	0.0011	U	0.11	U	0.00097	U *	0.00016	U	0.00011	U	0.00012	U	0.00013	U
Methylcyclohexane	NC	NC	NC	0.54	J	0.00082	U	0.085	U	0.0011	U	0.093	J	0.00097	U	0.17		0.00046	U	0.00046	U	0.00052	U
Methylene Chloride	0.05	500	0.05	0.95	U	0.0019		0.085	U	0.0021		**0.061**	J	0.00064	J	0.00059	U	0.0014		0.00043	U	0.00062	J
m-Xylene & p-Xylene[(1)]	NC	NC	NC	380		0.030		2.0		0.00088	J	7.7		0.018		0.0041		0.0084		0.0057		0.0068	
o-Xylene[(1)]	NC	NC	NC	26		0.0036		0.036	J	0.0011	U	0.56		0.0017		0.00074	J	0.00054	J	0.00059	J	0.00052	J
Styrene	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00036	U	0.00025	U	0.00026	U	0.00029	U
Tetrachloroethene	1.3	150	1.3	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00018	U	0.00013	U	0.00013	U	0.00015	U
Toluene	0.7	500	0.7	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00081	J	0.00030	U	0.00021	U	0.0013		0.00024	U
trans-1,2-Dichloroethene	0.19	500	0.19	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00031	U	0.00023	U	0.00023	U	0.00026	U
trans-1,3-Dichloropropene	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00034	U	0.00024	UJ	0.00025	U	0.00028	UJ
Trichloroethene	0.47	200	0.47	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00018	U	0.00013	U	0.00013	U	0.00015	U
Trichlorofluoromethane	NC	NC	NC	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00052	U	0.00037	UJ	0.00038	U	0.00042	UJ
Vinyl chloride	0.02	13	0.02	0.95	U	0.00082	U	0.085	U	0.0011	U	0.11	U	0.00097	U	0.00070	U	0.00050	U	0.00051	U	0.00057	U
Xylenes, Total	0.26	500	1.6	**410**		0.033		**2.1**		0.0011	J	**8.2**		0.019		0.00484		0.00894		0.00629		0.00732	

Notes:

Bold text and green shading indicates result above Unrestricted Use SCO

Bold text and orange shading indicates result above Protection of Groundwater SCO

Bold text and blue shading indicates result above Commercial Use SCO

mg/kg - milligrams per kilogram (dry weight).
FT BGS - Feet below ground surface
F1 - MS and/or MSD Recovery is outside acceptance limits
F2 - MS/MSD RPD exceeds control limits
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* - LCS or LCSD is outside acceptance limits
UJ - Non-detect with a potential low bias
J - Estimated value
J+ - Estimated value with a potential high bias
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NC - No criterion
ND - Not detected
NYSDEC - New York State Department of Environmental Conservation
Q - Qualifier
SCO - Soil Cleanup Objective
(1) - There are no SCOs for m/p xylene or o-xylene. The SCOs for total xylenes are shown.

Table 3
NYSDEC
Shore Realty Corporation (AES) - Site No. 130006
1 Shore Road, Glenwood Landing, New York 11547
Summary of Results of Analysis of Soil for Volatile Organic Compounds

				INVESTIGATION AREA 1																			
SAMPLE NAME				**SR-SO-SB-203(5-6)**		**SR-SO-SB-203(13-14)**		**SR-SO-SB-204(5-6)**		**SR-SO-SB-204(10-11)**		**SR-SO-SB-204(19-20)**		**SR-SO-SB-205(5-6)**		**SR-SO-SB-205(10-11)**		**SR-SO-SB-206(5-6)**		**SR-SO-SB-206(8-9)**		**SR-SO-SB-207(7-8)**		**SR-SO-SB-207(11-12)**	
LABORATORY SAMPLE ID				460-198061-11		460-198061-12		460-198061-13		460-198061-14		460-198061-15		460-198061-5		460-198061-6		460-198061-1		460-198061-2		460-198061-3		460-198061-4	
SAMPLE DEPTH (FT BGS)				5-6 FT BGS		13-14 FT BGS		5-6 FT BGS		10-11 FT BGS		19-20 FT BGS		5-6 FT BGS		10-11 FT BGS		5-6 FT BGS		8-9 FT BGS		7-8 FT BGS		11-12 FT BGS	
SAMPLING DATE				12/4/2019		12/4/2019		12/4/2019		12/4/2019		12/4/2019		12/4/2019		12/4/2019		12/4/2019		12/4/2019		12/4/2019		12/4/2019	
UNITS				mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
VOLATILE ORGANIC COMPOUNDS (VOCs)	**NYSDEC Unrestricted Use SCO**	**NYSDEC Commercial Use SCO**	**NYSDEC Protection of Groundwater SCO**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	0.68	500	0.68	0.16	U	0.00022	U	0.86	U	0.018	U	0.00020	U	0.014	U	0.00023	U	0.00022	U	0.00020	U	0.00022	U	0.00022	U
1,1,2,2-Tetrachloroethane	NC	NC	NC	0.11	U	0.00020	U	0.59	U	0.012	U	0.00018	U	0.0097	U	0.00021	UJ	0.00020	U	0.00019	U	0.00021	U	0.00020	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NC	NC	NC	0.19	U	0.00028	U	1.0	U	0.022	U	0.00026	U	0.017	U	0.00030	U	0.00029	U	0.00026	U	0.00029	U	0.00028	U
1,1,2-Trichloroethane	NC	NC	NC	0.045	U	0.00017	U	0.25	U	0.0051	U	0.00015	U	0.0041	U	0.00018	U	0.00017	U	0.00016	U	0.00017	U	0.00016	U
1,1-Dichloroethane	0.27	240	0.27	0.13	U	0.00019	U	0.74	U	0.015	U	0.00018	U	0.012	U	0.00021	U	0.00020	U	0.00018	U	0.00020	U	0.00019	U
1,1-Dichloroethene	0.33	500	0.33	0.15	U	0.00021	U	0.81	U	0.017	U	0.00019	U	0.013	U	0.00022	U	0.00022	U	0.00020	U	0.00022	U	0.00021	U
1,2,3-Trichlorobenzene	NC	NC	NC	0.2	U	0.00017	U	1.1	U	0.022	U	0.00016	U	0.018	U	0.00018	UJ	0.00017	U	0.00016	U	0.00017	U	0.00017	U
1,2,4-Trichlorobenzene	NC	NC	NC	0.15	U	0.00033	U	0.83	U	0.017	U	0.00031	U	0.014	U	0.00036	U	0.00034	U	0.00031	U	0.00034	U	0.00033	U
1,2-Dibromo-3-Chloropropane	NC	NC	NC	0.13	U	0.00043	UJ	0.71	U	0.015	U	0.00039	UJ	0.012	U	0.00046	UJ	0.00044	UJ	0.00040	UJ	0.00044	UJ	0.00042	U
1,2-Dichlorobenzene	1.1	500	1.1	0.12	U	0.00013	U	0.68	U	0.014	U	0.00012	U	0.011	U	0.00014	U	0.00014	U	0.00013	U	0.00014	U	0.00013	U
1,2-Dichloroethane	0.02	30	0.02	0.14	U	0.00028	U	0.77	U	0.016	U	0.00025	U	0.013	U	0.00030	U	0.00028	U	0.00026	U	0.00028	U	0.00027	U
1,2-Dichloropropane	NC	NC	NC	0.1	U F1	0.00039	U	0.56	U	0.011	U	0.00036	U	0.0091	U	0.00042	U	0.00040	U	0.00037	U	0.00041	U	0.00039	U
1,3-Dichlorobenzene	2.4	280	2.4	0.18	U	0.00015	U	1.0	U	0.021	U	0.00014	U	0.017	U	0.00016	U	0.00015	U	0.00014	U	0.00015	U	0.00015	U
1,4-Dichlorobenzene	1.8	130	1.8	0.19	U	0.00021	U	1.0	U	0.021	U	0.00019	U	0.017	U	0.00022	U	0.00022	U	0.00020	U	0.00022	U	0.00021	U
1,4-Dioxane	0.1	130	0.1	4.8	U	0.0085	U	27	U	0.55	U	0.0079	U	0.44	U	0.0092	U	0.0088	U	0.008	U	0.0088	U	0.0085	U
2-Butanone (MEK)	0.12	NC	0.12	1.2	U	0.0025	U	6.8	U	0.14	U	0.0023	U	0.11	U	0.0027	U	0.0099		0.0024	U	0.0026	U	0.0025	U
2-Hexanone	NC	NC	NC	0.63	U	0.0016	U	3.5	U	0.072	U	0.0015	U	0.058	U	0.0017	U	0.0016	U	0.0015	U	0.0016	U	0.0016	U
4-Methyl-2-pentanone (MIBK)	NC	NC	NC	0.73	U	0.0014	U	4.0	U	0.083	U	0.0013	U	0.066	U	0.0016	U	0.0015	U	0.0014	U	0.0015	U	0.0014	U
Acetone	0.05	500	0.05	2.5	UJ	0.041		14	UJ	0.28	UJ	0.010		0.22	U	0.0087	J	0.044		0.010		0.022		**0.059**	
Benzene	0.06	44	0.06	0.11	U	0.00024	U	0.62	U	0.013	U	0.00022	U	0.01	U	0.00026	U	0.0010		0.00023	U	0.00025	U	0.00024	U
Bromoform	NC	NC	NC	0.1	U	0.00040	UJ	0.56	U	0.011	U	0.00036	UJ	0.0091	U	0.00042	UJ	0.00041	UJ	0.00037	UJ	0.00041	UJ	0.00039	U
Bromomethane	NC	NC	NC	0.31	UJ	0.00044	U	1.7	UJ	0.035	UJ	0.00041	U	0.028	U	0.00047	U	0.00045	U	0.00041	U	0.00046	U	0.00044	U
Carbon disulfide	NC	NC	NC	0.38	U	0.00025	UJ	2.1	U	0.043	U	0.00023	UJ	0.034	U	0.00027	UJ	0.0017	J	0.00023	UJ	0.00026	U	0.00051	J
Carbon tetrachloride	0.76	22	0.76	0.18	U	0.00036	U	1.0	U	0.021	U	0.00033	U	0.017	U	0.00039	U	0.00037	U	0.00034	U	0.00037	U	0.00036	U
Chlorobenzene	1.1	500	1.1	0.13	U	0.00016	U	0.74	U	0.015	U	0.00015	U	0.012	U	0.00018	U	0.00017	U	0.00015	U	0.00017	U	0.00016	U
Chlorobromomethane	NC	NC	NC	0.17	U	0.00026	U	0.93	U	0.019	U	0.00024	U	0.015	U	0.00028	UJ	0.00027	U	0.00025	U	0.00027	U	0.00026	U
Chlorodibromomethane	NC	NC	NC	0.12	U	0.00018	UJ	0.68	U	0.014	U	0.00017	UJ	0.011	U	0.00019	UJ	0.00019	UJ	0.00017	UJ	0.00019	UJ	0.00018	U
Chloroethane	NC	NC	NC	0.21	U	0.00049	U	1.1	U	0.023	U	0.00045	U	0.019	U	0.00052	U	0.00050	U	0.00046	U	0.00050	U	0.00048	U
Chloroform	0.37	350	0.37	0.12	U	0.00030	U	0.68	U	0.014	UJ	0.00027	U	0.011	U	0.00032	U	0.00031	U	0.00028	U	0.00031	U	0.00029	U
Chloromethane	NC	NC	NC	0.22	UJ	0.00040	UJ	1.2	UJ	0.026	U	0.00037	UJ	0.02	U	0.00043	UJ	0.00042	UJ	0.00038	UJ	0.00042	UJ	0.00040	U
cis-1,2-Dichloroethene	0.25	500	0.25	0.14	U	0.00014	U	0.8	U	0.017	U	0.00013	U	0.013	U	0.00015	U	0.00015	U	0.00013	U	0.00015	U	0.00014	U
cis-1,3-Dichloropropene	NC	NC	NC	0.12	U F1	0.00025	U	0.68	UJ	0.014	UJ	0.00023	U	0.011	U	0.00027	UJ	0.00026	U	0.00024	U	0.00026	U	0.00025	U
Cyclohexane	NC	NC	NC	0.14	U	0.00021	U	0.8	U	0.017	U	0.00019	U	0.013	U	0.00022	U	0.0020		0.00019	U	0.00021	U	0.00020	U
Dichlorobromomethane	NC	NC	NC	0.084	U	0.00024	U	0.46	U	0.0095	U	0.00022	U	0.0076	U	0.00026	UJ	0.00025	U	0.00022	U	0.00025	U	0.00024	U
Dichlorodifluoromethane	NC	NC	NC	0.17	UJ	0.00031	UJ	0.96	UJ	0.02	UJ	0.00029	UJ	0.016	U	0.00034	UJ	0.00032	UJ	0.00030	UJ	0.00032	UJ	0.00031	U *
Ethylbenzene	1	390	1	**26**	J+	0.0020		**46**		0.2		0.00039	J	0.057		0.00020	U	0.00080	J	0.00096		0.00098		0.00053	J
Ethylene Dibromide	NC	NC	NC	0.18	U	0.00017	U	0.59	U	0.012	U	0.00015	U	0.0097	U	0.00018	UJ	0.00017	U	0.00016	U	0.00017	U	0.00017	U
Isopropylbenzene	NC	NC	NC	1.0		0.00012	U	4.7		0.037	J	0.00011	U	0.086		0.00035	J	0.0065		0.00011	U	0.015		0.00012	U
Methyl acetate	NC	NC	NC	0.44	U	0.0040	U	2.4	U	0.05	U	0.0037	U	0.04	U	0.0043	U	0.0041	U	0.0038	U	0.0041	U	0.0040	U
Methyl tert-butyl ether	0.93	500	0.93	0.072	U	0.00013	J	0.4	U	0.0083	U	0.00011	U	0.0066	U	0.00012	U	0.00012	U	0.00011	U	0.00012	U	0.00012	U
Methylcyclohexane	NC	NC	NC	0.59		0.00046	U	0.68		0.014	J	0.00043	U	0.011	U	0.0012		0.0085		0.00044	J	0.0021		0.00046	U
Methylene Chloride	0.05	500	0.05	0.12	U	0.00069	J	0.65	U	0.013	U	0.00058	J	0.011	U	0.00068	J	0.00044	U	0.00092		0.00098		0.00067	J
m-Xylene & p-Xylene[(1)]	NC	NC	NC	160		0.014		680		2.8		0.0041		0.3		0.00083	J	0.020		0.0077		0.0085		0.0047	
o-Xylene[(1)]	NC	NC	NC	41	J+	0.0025		29		0.25		0.00034	J	0.044	J	0.00019	U	0.00075	J	0.00052	J	0.0012		0.00043	J
Styrene	NC	NC	NC	0.095	U F1	0.00026	U	0.52	U	0.011	U	0.00024	U	0.0086	U	0.00028	U	0.00027	U	0.00024	U	0.00027	U	0.00026	U
Tetrachloroethene	1.3	150	1.3	0.2	U	0.00027	J	1.1	U	0.023	U	0.00012	U	0.018	U	0.00014	U	0.00014	U	0.00013	U	0.00014	U	0.00013	U
Toluene	0.7	500	0.7	0.23	J	0.00022	U	0.77	U	0.016	U	0.00020	U	0.46		0.00023	U	0.00081	J	0.00021	J	0.00027	J	0.00034	J
trans-1,2-Dichloroethene	0.19	500	0.19	0.1	U	0.00023	U	0.56	U	0.011	U	0.00021	U	0.0091	U	0.00025	U	0.00024	U	0.00022	U	0.00024	U	0.00023	U
trans-1,3-Dichloropropene	NC	NC	NC	0.11	U	0.00025	UJ	0.59	J	0.012	UJ	0.00023	UJ	0.0097	U	0.00027	UJ	0.00025	UJ	0.00023	UJ	0.00026	UJ	0.00025	U
Trichloroethene	0.47	200	0.47	0.12	U	0.00013	U	0.68	U	0.014	U	0.00012	U	0.011	U	0.00014	U	0.00014	U	0.00013	U	0.00014	U	0.00013	U
Trichlorofluoromethane	NC	NC	NC	0.18	U	0.00038	UJ	0.99	U	0.02	U	0.00035	UJ	0.016	U	0.00041	UJ	0.00039	UJ	0.00036	UJ	0.00039	UJ	0.00037	U *
Vinyl chloride	0.02	13	0.02	0.11	U	0.00051	U	0.62	UJ	0.013	UJ	0.00047	U	0.01	U	0.00055	U	0.00052	U	0.00048	U	0.00052	U	0.00050	U
Xylenes, Total	0.26	500	1.6	**201**		0.0165		**709**		**3.05**		0.00444		**0.344**		0.00102		0.02075		0.00822		0.0097		0.00513	

Notes:

Bold text and green shading indicates result above Unrestricted Use SCO

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mg/kg - milligrams per kilogram (dry weight).
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SCO - Soil Cleanup Objective
(1) - There are no SCOs for m/p xylene or o-xylene. The SCOs for total xylenes are shown.

Table 3
NYSDEC
Shore Realty Corporation (AES) - Site No. 130006
1 Shore Road, Glenwood Landing, New York 11547
Summary of Results of Analysis of Soil for Volatile Organic Compounds

				INVESTIGATION AREA 2																			
SAMPLE NAME				SR-SO-SB-114(2-2.5)		SR-SO-SB-115(7-8)		SR-SO-SB-115(14.5-15)		SR-SO-SB-116(6.5-7.5)		SR-SO-SB-116(15-16)		SR-SO-SB-117(6.5-7.5)		SR-SO-SB-117(11.5-12.5)		SR-SO-SB-118 (7-8)		SR-SO-SB-118 (10-11)		SR-SO-SB-119(9-10)	
LABORATORY SAMPLE ID				460-186195-9		460-186195-5		460-186195-6		460-186195-1		460-186195-2		460-186195-10		460-186195-11		460-186523-1		460-186523-2		460-186195-7	
SAMPLE DEPTH (FT BGS)				2-2.5 FT BGS		7-8 FT BGS		14.5-15 FT BGS		6.5-7.5 FT BGS		15-16 FT BGS		6.5-7.5 FT BGS		11.5-12.5 FT BGS		7-8 FT BGS		10-11 FT BGS		9-10 FT BGS	
SAMPLING DATE				7/9/2019		7/8/2019		7/8/2019		7/8/2019		7/8/2019		7/9/2019		7/9/2019		7/11/2019		7/11/2019		7/9/2019	
UNITS				mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
VOLATILE ORGANIC COMPOUNDS (VOCs)	**NYSDEC Unrestricted Use SCO**	**NYSDEC Commercial Use SCO**	**NYSDEC Protection of Groundwater SCO**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	0.68	500	0.68	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U *	0.79	U
1,1,2,2-Tetrachloroethane	NC	NC	NC	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NC	NC	NC	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
1,1,2-Trichloroethane	NC	NC	NC	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
1,1-Dichloroethane	0.27	240	0.27	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
1,1-Dichloroethene	0.33	500	0.33	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
1,2,3-Trichlorobenzene	NC	NC	NC	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
1,2,4-Trichlorobenzene	NC	NC	NC	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
1,2-Dibromo-3-Chloropropane	NC	NC	NC	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
1,2-Dichlorobenzene	1.1	500	1.1	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
1,2-Dichloroethane	0.02	30	0.02	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U *	0.79	U
1,2-Dichloropropane	NC	NC	NC	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
1,3-Dichlorobenzene	2.4	280	2.4	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
1,4-Dichlorobenzene	1.8	130	1.8	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
1,4-Dioxane	0.1	130	0.1	0.018	U	22	U	0.02	U	0.02	U	0.018	U	4.8	U	0.02	U	0.018	U	0.019	U	39	U
2-Butanone (MEK)	0.12	NC	0.12	0.0045	U	2.2	U	0.0053		0.0088		0.0045	U	0.48	U	0.0051	U	0.019		0.0047	U	3.9	U
2-Hexanone	NC	NC	NC	0.0045	U	2.2	U	0.0051	U	0.0049	U	0.0045	U	0.48	U	0.0051	U	0.0044	U	0.0047	U	3.9	U
4-Methyl-2-pentanone (MIBK)	NC	NC	NC	0.0045	U	2.2	U	0.0051	U	0.0049	U	0.0045	U	0.48	U	0.0051	U	0.0044	U	0.0047	U	3.9	U
Acetone	0.05	500	0.05	0.014		2.2	U	**0.15**		**0.11**		**0.086**		0.48	U	0.015		**0.089**		0.015	J+	3.9	U
Benzene	0.06	44	0.06	0.00090	U	0.43	U	0.0010	U	0.00038	J	0.00090	U	0.096	U	0.0010	U	0.00034	J	0.00094	U	0.79	U
Bromoform	NC	NC	NC	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
Bromomethane	NC	NC	NC	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
Carbon disulfide	NC	NC	NC	0.00090	U	0.43	U	0.0010	U	0.0079		0.00090	U	0.096	U	0.0010	U	0.0082		0.00094	U	0.79	U
Carbon tetrachloride	0.76	22	0.76	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
Chlorobenzene	1.1	500	1.1	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
Chlorobromomethane	NC	NC	NC	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
Chlorodibromomethane	NC	NC	NC	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
Chloroethane	NC	NC	NC	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
Chloroform	0.37	350	0.37	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U *	0.79	U
Chloromethane	NC	NC	NC	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
cis-1,2-Dichloroethene	0.25	500	0.25	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U *	0.79	U
cis-1,3-Dichloropropene	NC	NC	NC	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
Cyclohexane	NC	NC	NC	0.00090	U	0.79		0.0010	U	0.00098	U	0.00090	U	0.19		0.0010	U	0.00089	U	0.00094	U	2.4	
Dichlorobromomethane	NC	NC	NC	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
Dichlorodifluoromethane	NC	NC	NC	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
Ethylbenzene	1	390	1	0.00090	U	**29**		0.0020		0.0040		0.0023		0.096	U	0.0010	U	0.0013		0.00094	U	**100**	
Ethylene Dibromide	NC	NC	NC	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
Isopropylbenzene	NC	NC	NC	0.00090	U	0.94		0.00016	J	0.053		0.00094		1.1		0.0010	U	0.11		0.00025	J	4.5	
Methyl acetate	NC	NC	NC	0.0045	U	2.2	U	0.0051	U	0.0049	U	0.0045	U	0.10	J	0.0051	U	0.0044	U	0.0047	U *	3.9	U
Methyl tert-butyl ether	0.93	500	0.93	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U *	0.79	U
Methylcyclohexane	NC	NC	NC	0.0016		2.4		0.00072	J	0.00098	U	0.00090	U	0.51		0.0010	U	0.025		0.00094	U	8.6	
Methylene Chloride	0.05	500	0.05	0.0016		0.43	U	0.00075	J	0.00098	U	0.00090	U	0.096	U	0.0014		0.0021		0.0024	J+	0.79	U
m-Xylene & p-Xylene[(1)]	NC	NC	NC	0.00090	U	140		0.012		0.00048	J	0.0092		0.096	U	0.00018	J	0.0058		0.00045	J	220	
o-Xylene[(1)]	NC	NC	NC	0.00090	U	40		0.0033		0.0017		0.00088	J	0.096	U	0.0010	U	0.0010		0.00094	U	55	
Styrene	NC	NC	NC	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
Tetrachloroethene	1.3	150	1.3	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
Toluene	0.7	500	0.7	0.00090	U	**140**		0.0064		0.00079	J	0.0014		0.096	U	0.00066	J	0.0061		0.00094	U	**110**	
trans-1,2-Dichloroethene	0.19	500	0.19	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
trans-1,3-Dichloropropene	NC	NC	NC	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
Trichloroethene	0.47	200	0.47	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
Trichlorofluoromethane	NC	NC	NC	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
Vinyl chloride	0.02	13	0.02	0.00090	U	0.43	U	0.0010	U	0.00098	U	0.00090	U	0.096	U	0.0010	U	0.00089	U	0.00094	U	0.79	U
Xylenes, Total	0.26	500	1.6	0.0018	U	**180**		0.015		0.0021		0.01		0.19	U	0.00018	J	0.0068		0.00045	J	**270**	

Notes:

Bold text and green shading indicates result above Unrestricted Use SCO

Bold text and orange shading indicates result above Protection of Groundwater SCO

Bold text and blue shading indicates result above Commercial Use SCO

mg/kg - milligrams per kilogram (dry weight).
FT BGS - Feet below ground surface
F1 - MS and/or MSD Recovery is outside acceptance limits
F2 - MS/MSD RPD exceeds control limits
U - Compound was not detected at specified quantitation limit
* - LCS or LCSD is outside acceptance limits
UJ - Non-detect with a potential low bias
J - Estimated value
J+ - Estimated value with a potential high bias
J- - Estimated value with a potential low bias
NC - No criterion
ND - Not detected
NYSDEC - New York State Department of Environmental Conservation
Q - Qualifier
SCO - Soil Cleanup Objective
(1) - There are no SCOs for m/p xylene or o-xylene. The SCOs for total xylenes are shown.

Table 3
NYSDEC
Shore Realty Corporation (AES) - Site No. 130006
1 Shore Road, Glenwood Landing, New York 11547
Summary of Results of Analysis of Soil for Volatile Organic Compounds

				INVESTIGATION AREA 2																			
SAMPLE NAME				SR-SO-SB-119(16-17)		SR-SO-SB-120(5-6)		SR-SO-SB-120(13-14)		SR-SO-SB-208 (5-7)		SR-SO-SB-208 (14-15)		SR-SO-SB-209 (5-7)		SR-SO-SB-209 (12-13)		SR-SO-SB-210 (7-9)		SR-SO-SB-210 (14-15)		SR-SO-SB-211 (10-11)	
LABORATORY SAMPLE ID				460-186195-8		460-186195-3		460-186195-4		460-197892-2		460-197892-3		460-197892-4		460-197892-5		460-197892-6		460-197892-7		460-197892-8	
SAMPLE DEPTH (FT BGS)				16-17 FT BGS		5-6 FT BGS		13-14 FT BGS		5-7 FT BGS		14-15 FT BGS		5-7 FT BGS		12-13 FT BGS		7-9 FT BGS		14-15 FT BGS		10-11 FT BGS	
SAMPLING DATE				7/9/2019		7/8/2019		7/8/2019		12/3/2019		12/3/2019		12/3/2019		12/3/2019		12/3/2019		12/3/2019		12/3/2019	
UNITS				mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
VOLATILE ORGANIC COMPOUNDS (VOCs)	**NYSDEC Unrestricted Use SCO**	**NYSDEC Commercial Use SCO**	**NYSDEC Protection of Groundwater SCO**	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	0.68	500	0.68	0.00077	U	0.074	U	0.00085	U	0.00019	U	0.00020	U	0.63	U	0.00020	U	0.066	U	0.00019	U	0.072	U
1,1,2,2-Tetrachloroethane	NC	NC	NC	0.00077	U	0.074	U	0.00085	U	0.00018	U	0.00018	U	0.42	U	0.00018	U	0.043	U	0.00017	U	0.049	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NC	NC	NC	0.00077	U	0.074	U	0.00085	U	0.00025	U	0.00026	U	0.76	U	0.00026	U	0.08	U	0.00024	U	0.087	U
1,1,2-Trichloroethane	NC	NC	NC	0.00077	U	0.074	U	0.00085	U	0.00015	U	0.00015	U	0.18	U	0.00015	U	0.019	U	0.00014	U	0.02	U
1,1-Dichloroethane	0.27	240	0.27	0.00077	U	0.074	U	0.00085	U	0.00017	U	0.00017	U	0.54	U	0.00018	U	0.056	U	0.00016	U	0.061	U
1,1-Dichloroethene	0.33	500	0.33	0.00077	U	0.074	U	0.00085	U	0.00019	U	0.00019	U	0.59	U	0.00019	U	0.062	U	0.00018	U	0.067	U
1,2,3-Trichlorobenzene	NC	NC	NC	0.00077	U	0.074	U	0.00085	U	0.00015	U	0.00015	U	0.78	U	0.00015	U	0.082	U	0.00014	U	0.089	U
1,2,4-Trichlorobenzene	NC	NC	NC	0.00077	U	0.074	U	0.00085	U	0.00030	U	0.00030	U	0.6	U	0.00031	U	0.063	U	0.00029	U	0.069	U
1,2-Dibromo-3-Chloropropane	NC	NC	NC	0.00077	U	0.074	U	0.00085	U	0.00038	U	0.00039	U	0.51	U	0.00039	U	0.054	U	0.00037	U	0.059	U
1,2-Dichlorobenzene	1.1	500	1.1	0.00077	U	0.074	U	0.00085	U	0.00012	U	0.00012	U	0.49	U	0.00012	U	0.052	U	0.00012	U	0.056	U
1,2-Dichloroethane	0.02	30	0.02	0.00077	U	0.074	U	0.00085	U	0.00025	U	0.00025	U	0.56	U	0.00025	U	0.059	U	0.00024	U	0.064	U
1,2-Dichloropropane	NC	NC	NC	0.00077	U	0.074	U	0.00085	U	0.00035	U	0.00036	U	0.4	U	0.00036	U	0.042	U	0.00034	U	0.046	U
1,3-Dichlorobenzene	2.4	280	2.4	0.00077	U	0.074	U	0.00085	U	0.00013	U	0.00013	U	0.74	U	0.00014	U	0.077	U	0.00013	U	0.084	U
1,4-Dichlorobenzene	1.8	130	1.8	0.00077	U	0.074	U	0.00085	U	0.00019	U	0.00019	U	0.75	U	0.00019	U	0.078	U	0.00018	U	0.085	U
1,4-Dioxane	0.1	130	0.1	0.015	U	3.7	U	0.017	U	0.0076	U	0.0078	U	19	U	0.0078	U	2.0	U	0.0073	U	2.2	U
2-Butanone (MEK)	0.12	NC	0.12	0.0038	U	0.37	U	0.0043	U	0.0023	U	0.0023	U	4.9	U	0.0023	U	0.52	U	0.0022	U	0.56	U
2-Hexanone	NC	NC	NC	0.0038	U	0.37	U	0.0043	U	0.0014	U	0.0015	U	2.5	U	0.0015	U	0.27	U	0.0014	U	0.29	U
4-Methyl-2-pentanone (MIBK)	NC	NC	NC	0.0038	U	0.37	U	0.0043	U	0.0013	U	0.0013	U	2.9	U	0.0013	U	0.31	U	0.0012	U	0.33	U
Acetone	0.05	500	0.05	0.023		0.37	U	0.027		0.0055		0.0076		9.9	U	0.0049	U	1.0	U	0.0046	U	1.1	U
Benzene	0.06	44	0.06	0.00077	U	0.074	U	0.00085	U	0.00021	U	0.00022	U	0.45	U	0.00022	U	0.047	U	0.00021	U	0.052	U
Bromoform	NC	NC	NC	0.00077	U	0.074	U	0.00085	U	0.00035	U	0.00036	U	0.4	U	0.00036	U	0.047	U	0.00034	U	0.046	U
Bromomethane	NC	NC	NC	0.00077	U	0.074	U	0.00085	U	0.00039	U	0.00040	U	1.2	U	0.00040	U	0.13	U	0.00038	U	0.14	U
Carbon disulfide	NC	NC	NC	0.00077	U	0.074	U	0.00085	U	0.00066	J	0.00023	U	1.5	U	0.00023	U	0.16	U	0.00021	U	0.17	U
Carbon tetrachloride	0.76	22	0.76	0.00077	U	0.074	U	0.00085	U	0.00032	U	0.00033	U	0.74	U	0.00033	U	0.077	U	0.00031	U	0.084	U
Chlorobenzene	1.1	500	1.1	0.00077	U	0.074	U	0.00085	U	0.00015	U	0.00015	U	0.54	U	0.00015	U	0.056	U	0.00014	U	0.061	U
Chlorobromomethane	NC	NC	NC	0.00077	U	0.074	U	0.00085	U	0.00023	U	0.00024	U	0.67	U	0.00024	U	0.07	U	0.00022	U	0.077	U
Chlorodibromomethane	NC	NC	NC	0.00077	U	0.074	U	0.00085	U	0.00016	U	0.00016	U	0.49	U	0.00017	U	0.052	U	0.00015	U	0.056	U
Chloroethane	NC	NC	NC	0.00077	U	0.074	U	0.00085	U	0.00043	U	0.00044	U	0.83	U	0.00045	U	0.087	U	0.00042	U	0.095	U
Chloroform	0.37	350	0.37	0.00077	U	0.074	U	0.00085	U	0.00027	U	0.00027	U	0.49	U	0.00027	U	0.052	U	0.00025	U	0.056	U
Chloromethane	NC	NC	NC	0.00077	U	0.074	U	0.00085	U	0.00036	U	0.00037	U	0.9	U	0.00037	U	0.094	U	0.00035	U	0.1	U
cis-1,2-Dichloroethene	0.25	500	0.25	0.00077	U	0.074	U	0.00085	U	0.00013	U	0.00013	U	0.58	U	0.00013	U	0.061	U	0.00012	U	0.066	U
cis-1,3-Dichloropropene	NC	NC	NC	0.00077	U	0.074	U	0.00085	U	0.00023	U	0.00023	U	0.5	U	0.00023	U	0.052	U	0.00022	U	0.057	U
Cyclohexane	NC	NC	NC	0.00077	U	0.82		0.00085	U	0.00018	U	0.00019	U	2.3		0.00019	U	1.0		0.00018	U	0.066	
Dichlorobromomethane	NC	NC	NC	0.00077	U	0.074	U	0.00085	U	0.00021	U	0.00022	U	0.33	U	0.00022	U	0.035	U	0.00021	U	0.038	U
Dichlorodifluoromethane	NC	NC	NC	0.00077	U	0.074	U	0.00085	U	0.00028	U	0.00029	U	0.69	U	0.00029	U	0.073	U	0.00027	U	0.079	U
Ethylbenzene	1	390	1	0.0021		0.60		0.00019	J	0.00017	U	0.00017	U	**150**		0.00086		**25**		0.00052	J	**32**	
Ethylene Dibromide	NC	NC	NC	0.00077	U	0.074	U	0.00085	U	0.00015	U	0.00015	U	0.42	U	0.00015	U	0.045	U	0.00014	U	0.049	U
Isopropylbenzene	NC	NC	NC	0.00014	J	2.0		0.00015	J	0.00010	U	0.00011	U	4.6		0.00011	U	2.6		0.00010	U	3.0	
Methyl acetate	NC	NC	NC	0.0038	U	0.37	U	0.0043	U	0.0036	U	0.0036	U	1.8	UJ	0.0037	U	0.18	UJ	0.0034	U	0.20	UJ
Methyl tert-butyl ether	0.93	500	0.93	0.00077	U	0.074	U	0.00085	U	0.00010	U	0.00011	U	0.29	U	0.00011	U	0.031	U	0.00010	U	0.033	U
Methylcyclohexane	NC	NC	NC	0.00077	U	4.5		0.00085	U	0.00042	U	0.00042	U	6.9		0.00043	U	3.9		0.00040	U	3.5	
Methylene Chloride	0.05	500	0.05	0.0011		0.074	U	0.00095		0.00039	U	0.00046	J	0.47	U	0.00040	U	0.049	U	0.00037	U *	0.054	U
m-Xylene & p-Xylene[(1)]	NC	NC	NC	0.011		0.18		0.00081	J	0.00014	U	0.00024	J	570		0.0036		75		0.0026		64	
o-Xylene[(1)]	NC	NC	NC	0.0035		0.074	U	0.00027	J	0.00016	U	0.00016	U	71		0.00060	J	10		0.00044	J	4.2	
Styrene	NC	NC	NC	0.00077	U	0.074	U	0.00085	U	0.00023	U	0.00024	U	0.38	U	0.00024	U	0.04	U	0.00022	U	0.043	U
Tetrachloroethene	1.3	150	1.3	0.00077	U	0.074	U	0.00085	U	0.00012	U	0.00012	U	0.8	U	0.00012	U	0.085	U	0.00011	U	0.092	U
Toluene	0.7	500	0.7	0.0038		0.074	U	0.00055	J	0.00019	U	0.00020	U	**28**		0.00026	J	**3.1**		0.00021	J	0.064	J
trans-1,2-Dichloroethene	0.19	500	0.19	0.00077	U	0.074	U	0.00085	U	0.00020	U	0.00021	U	0.4	U	0.00021	U	0.042	U	0.00020	U	0.046	U
trans-1,3-Dichloropropene	NC	NC	NC	0.00077	U	0.074	U	0.00085	U	0.00022	U	0.00023	U	0.42	U	0.00023	U	0.045	U	0.00021	U	0.049	U
Trichloroethene	0.47	200	0.47	0.00077	U	0.074	U	0.00085	U	0.00012	U	0.00012	U	0.49	U	0.00012	U	0.052	U	0.00012	U	0.056	U
Trichlorofluoromethane	NC	NC	NC	0.00077	U	0.074	U	0.00085	U	0.00034	U	0.00034	U	0.71	U	0.00035	U	0.075	U	0.00032	U	0.082	U
Vinyl chloride	0.02	13	0.02	0.00077	U	0.074	U	0.00085	U	0.00045	U	0.00046	U	0.45	U	0.00047	U	0.047	U	0.00044	U	0.051	U
Xylenes, Total	0.26	500	1.6	0.014		0.18		0.0011	J	0.00016	U	0.00024	J	**641**		0.0042		**85**		0.00304		**68.2**	

Notes:

Bold text and green shading indicates result above Unrestricted Use SCO

Bold text and orange shading indicates result above Protection of Groundwater SCO

Bold text and blue shading indicates result above Commercial Use SCO

mg/kg - milligrams per kilogram (dry weight).

FT BGS - Feet below ground surface

F1 - MS and/or MSD Recovery is outside acceptance limits

F2 - MS/MSD RPD exceeds control limits

U - Compound was not detected at specified quantitation limit

* - LCS or LCSD is outside acceptance limits

UJ - Non-detect with a potential low bias

J - Estimated value

J+ - Estimated value with a potential high bias

J- - Estimated value with a potential low bias

NC - No criterion

ND - Not detected

NYSDEC - New York State Department of Environmental Conservation

Q - Qualifier

SCO - Soil Cleanup Objective

(1) - There are no SCOs for m/p xylene or o-xylene. The SCOs for total xylenes are shown.

Table 3
NYSDEC
Shore Realty Corporation (AES) - Site No. 130006
1 Shore Road, Glenwood Landing, New York 11547
Summary of Results of Analysis of Soil for Volatile Organic Compounds

				INVESTIGATION AREA 2							
			SAMPLE NAME	SR-SO-SB-211 (13-14)		SR-SO-SB-211 (14.5-15)		SR-SO-SB-211 (19-20)		SR-SO-SB-212 (1-3)	
			LABORATORY SAMPLE ID	460-197892-9		460-197892-10		460-197892-11		460-197892-1	
			SAMPLE DEPTH (FT BGS)	13-14 FT BGS		14.5-15 FT BGS		19-20 FT BGS		1-3 FT BGS	
			SAMPLING DATE	12/3/2019		12/3/2019		12/3/2019		12/2/2019	
			UNITS	mg/kg		mg/kg		mg/kg		mg/kg	
VOLATILE ORGANIC COMPOUNDS (VOCs)	**NYSDEC Unrestricted Use SCO**	**NYSDEC Commercial Use SCO**	**NYSDEC Protection of Groundwater SCO**	Result	Q	Result	Q	Result	Q	Result	Q
1,1,1-Trichloroethane	0.68	500	0.68	0.00020	U	0.016	U	0.00023	U	0.00018	U
1,1,2,2-Tetrachloroethane	NC	NC	NC	0.00018	U	0.011	U	0.00021	U	0.00016	U
1,1,2-Trichloro-1,2,2-trifluoroethane	NC	NC	NC	0.00025	U	0.019	U	0.00029	U	0.00023	U
1,1,2-Trichloroethane	NC	NC	NC	0.00015	U	0.0045	U	0.00017	U	0.00014	U
1,1-Dichloroethane	0.27	240	0.27	0.00017	U	0.013	U	0.00020	U	0.00016	U
1,1-Dichloroethene	0.33	500	0.33	0.00019	U	0.015	U	0.00022	U	0.00017	U
1,2,3-Trichlorobenzene	NC	NC	NC	0.00015	U	0.02	U	0.00018	UJ	0.00014	U
1,2,4-Trichlorobenzene	NC	NC	NC	0.00030	U	0.015	U	0.00035	UJ	0.00027	U
1,2-Dibromo-3-Chloropropane	NC	NC	NC	0.00039	U	0.013	U	0.00045	U	0.00035	U
1,2-Dichlorobenzene	1.1	500	1.1	0.00012	U	0.012	U	0.00014	U	0.00011	U
1,2-Dichloroethane	0.02	30	0.02	0.00025	U	0.014	U	0.00029	U	0.00023	U
1,2-Dichloropropane	NC	NC	NC	0.00036	U	0.01	U	0.00041	U	0.00032	U
1,3-Dichlorobenzene	2.4	280	2.4	0.00013	U	0.018	U	0.00015	U	0.00012	U
1,4-Dichlorobenzene	1.8	130	1.8	0.00019	U	0.019	U	0.00022	U	0.00017	U
1,4-Dioxane	0.1	130	0.1	0.0077	U	0.49	U	0.0089	U	0.007	U
2-Butanone (MEK)	0.12	NC	0.12	0.0023	U	0.12	U	0.0026	U	0.0021	U
2-Hexanone	NC	NC	NC	0.0014	U	0.063	U	0.0017	U	0.0013	U
4-Methyl-2-pentanone (MIBK)	NC	NC	NC	0.0013	U	0.073	U	0.0015	U	0.0012	U
Acetone	0.05	500	0.05	0.0048	U	0.25	UJ	0.0055	U F1	0.0052	
Benzene	0.06	44	0.06	0.00022	U	0.011	U	0.00025	U	0.00020	U
Bromoform	NC	NC	NC	0.00036	U	0.01	U	0.00041	U	0.00032	U
Bromomethane	NC	NC	NC	0.00040	U	0.031	UJ	0.00046	U	0.00036	U
Carbon disulfide	NC	NC	NC	0.00022	U	0.038	U	0.00026	U	0.00020	U
Carbon tetrachloride	0.76	22	0.76	0.00033	U	0.018	U	0.00038	U	0.00030	U
Chlorobenzene	1.1	500	1.1	0.00015	U	0.013	U	0.00017	U	0.00014	U
Chlorobromomethane	NC	NC	NC	0.00024	U	0.017	U	0.00027	U	0.00021	U
Chlorodibromomethane	NC	NC	NC	0.00016	U	0.012	U	0.00019	U	0.00015	U
Chloroethane	NC	NC	NC	0.00044	U	0.021	U	0.00051	U	0.00040	U
Chloroform	0.37	350	0.37	0.00027	U	0.012	U	0.00031	U	0.00024	U
Chloromethane	NC	NC	NC	0.00037	U	0.022	U	0.00042	U	0.00033	U
cis-1,2-Dichloroethene	0.25	500	0.25	0.00013	U	0.015	U	0.00015	U	0.00012	U
cis-1,3-Dichloropropene	NC	NC	NC	0.00023	U	0.012	U	0.00026	U	0.00021	U
Cyclohexane	NC	NC	NC	0.00019	U	0.015	U	0.00021	U	0.00017	U
Dichlorobromomethane	NC	NC	NC	0.00022	U	0.0084	U	0.00025	U	0.00020	U
Dichlorodifluoromethane	NC	NC	NC	0.00028	U	0.017	U	0.00033	U	0.00026	U
Ethylbenzene	1	390	1	0.016		0.67		0.00031	J	0.00021	J
Ethylene Dibromide	NC	NC	NC	0.00015	U	0.011	U	0.00017	U	0.00014	U
Isopropylbenzene	NC	NC	NC	0.0010		0.044	J	0.00012	U	0.000096	U
Methyl acetate	NC	NC	NC	0.0036	U	0.044	UJ	0.0042	U	0.0033	U
Methyl tert-butyl ether	0.93	500	0.93	0.00011	U	0.0073	U	0.00012	U	0.000096	U
Methylcyclohexane	NC	NC	NC	0.0025		0.055	J	0.00048	U	0.00038	U
Methylene Chloride	0.05	500	0.05	0.00039	U	0.012	U	0.00045	U	0.00035	U
m-Xylene & p-Xylene(1)	NC	NC	NC	0.079		3.1		0.0012		0.00090	
o-Xylene(1)	NC	NC	NC	0.0038		0.16		0.00026	J	0.00020	J
Styrene	NC	NC	NC	0.00023	U	0.0095	U	0.00027	U	0.00021	U
Tetrachloroethene	1.3	150	1.3	0.00012	U	0.02	U	0.00014	U	0.00011	U
Toluene	0.7	500	0.7	0.00020	U	0.014	U	0.00091	J	0.0010	
trans-1,2-Dichloroethene	0.19	500	0.19	0.00021	U	0.01	U	0.00024	U	0.00019	U
trans-1,3-Dichloropropene	NC	NC	NC	0.00022	U	0.011	U	0.00026	U	0.00020	U
Trichloroethene	0.47	200	0.47	0.00012	U	0.012	U	0.00014	U	0.00011	U
Trichlorofluoromethane	NC	NC	NC	0.00034	U	0.018	U	0.00039	U	0.00031	U
Vinyl chloride	0.02	13	0.02	0.00046	U	0.011	U	0.00053	U	0.00042	U
Xylenes, Total	0.26	500	1.6	0.0828		**3.26**		0.00146		0.0011	

Notes:

Bold text and green shading indicates result above Unrestricted Use SCO

Bold text and orange shading indicates result above Protection of Groundwater SCO

Bold text and blue shading indicates result above Commercial Use SCO

mg/kg - milligrams per kilogram (dry weight).
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F1 - MS and/or MSD Recovery is outside acceptance limits
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ND - Not detected
NYSDEC - New York State Department of Environmental Conservation
Q - Qualifier
SCO - Soil Cleanup Objective
(1) - There are no SCOs for m/p xylene or o-xylene. The SCOs for total xylenes are shown.

ATTACHMENT A – GEOPHYSICAL SURVEY REPORT

GEOPHYSICAL ENGINEERING SURVEY REPORT

Industrial Property
1 Shore Road,
Glenwood Landing, New York 11547

NOVA PROJECT NUMBER:

19-1332

DATED:

July 12, 2019

PREPARED FOR:

1430 Broadway, 10th Floor
New York, New York 10018

PREPARED BY:

NOVA
GEOPHYSICAL
ENGINEERING
Subsurface Mapping Solutions
56-01 Marathon Parkway # 765
Douglaston, New York 11362
347-556-7787 (PHONE)
718-261-1527(FAX)
www.nova-gsi.com

NOVA GEOPHYSICAL SERVICES

SUBSURFACE MAPPING SOLUTIONS
56-01 Marathon Parkway #765, Douglaston, New York 11362
Ph. 347-556-7787 Fax. 718-261-1527
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July 12, 2019

Dan Warren
Senior Project Manager
TRC
21 Griffin Road North
Windsor, CT 06095
T: 860.298.6378 | F: 860.298.6399 | C: 917.232.9837
E: Dwarren@trccompanies.com

Re: Geophysical Engineering Survey (GES) Report
Industrial Property
1 Shore Road,
Glenwood Landing, New York 11547

Dear Mr. Warren,

Nova Geophysical Services (NOVA) is pleased to provide the findings of the geophysical engineering survey (GES) at the above referenced project site: 1 Shore Road, Glenwood Landing, New York 11547 (the "Site").

INTRODUCTION TO GEOPHYSICAL ENGINEERING SURVEY (GES)

NOVA performed a geophysical engineering survey (GES) consisting of a Ground Penetrating Radar (GPR) and Electromagnetic (EM) survey at the site. The purpose of this survey is to locate and identify utilities, underground storage tanks and other substructures as well as to clear and mark proposed boring locations on July 3rd, 2019.

The equipment selected for this investigation was a Sensors and Software Noggin 250 MHz ground penetrating radar (GPR) with a shielded antenna and a Radio Detection RD7100 Electromagnetic utility locator.

A GPR system consists of a radar control unit, control cable, and transducer (antenna). The control unit transmits a trigger pulse at a normal repetition rate of 250 MHz. The trigger pulse is sent to the transmitter electronics in the transduce via the control cable. The transmitter electronics amplify the trigger pulse into bipolar pulses that are radiated to the surface. The transformed pulses vary in shape and frequency according to the transducer used. In the

subsurface, variations of the signal occur at boundaries where there is a dielectric contrast (void, steel, soil type, etc.). Signal reflections travel back to the control unit and are represented as color graphic images for interpolation.

A typical electromagnetic (EM) utility locating system consists of a transmitter unit and a receiver unit. The receiver unit can be used independently of the transmitter unit in order to detect utility lines with an inherent EM signature (electric utility lines, water lines, etc.). If needed a current at a specific frequency can also be placed on a utility that is being located. This can be done via the transmitter unit by either direct connection or induction via an EM field varying at specific frequency. The receiver unit is then set to the selected frequency and the electromagnetic field created by the current running through the utility can be located allowing the utility to be marked.

GEOPHYSICAL METHODS

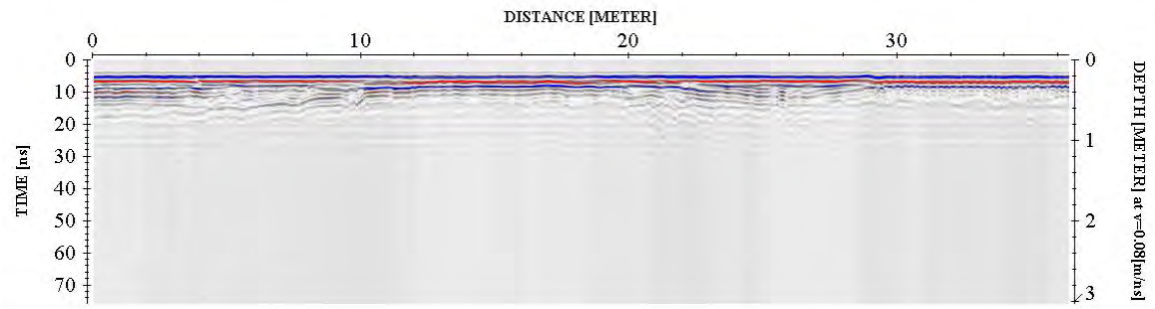
The project site was screened using GPR to search the specified area and inspected for reflections, which could be indicative of substructures and utilities within the subsurface. An EM utility locator was used to help determine the locations of utilities within the survey area.

EM data was collected and interpreted on site and suspected utilities marked as needed. GPR data profiles were collected for the areas of the Site specified by the client and processed as specified below.

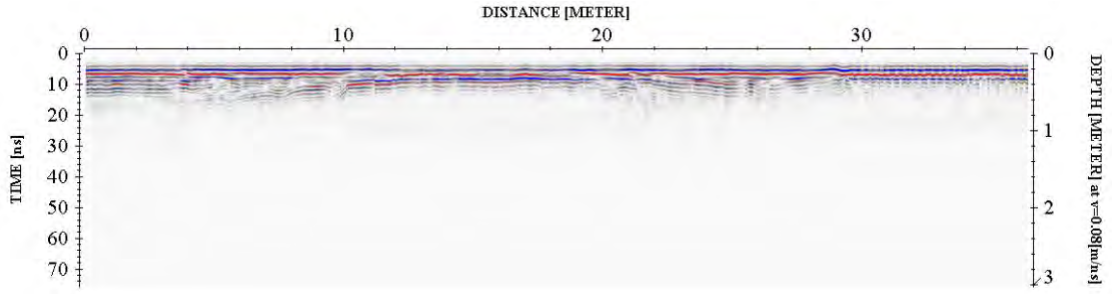
DATA PROCESSING

In order to improve the quality of the results and to better identify anomalies NOVA processed the collected data. The processing work flow is briefly described in this section.

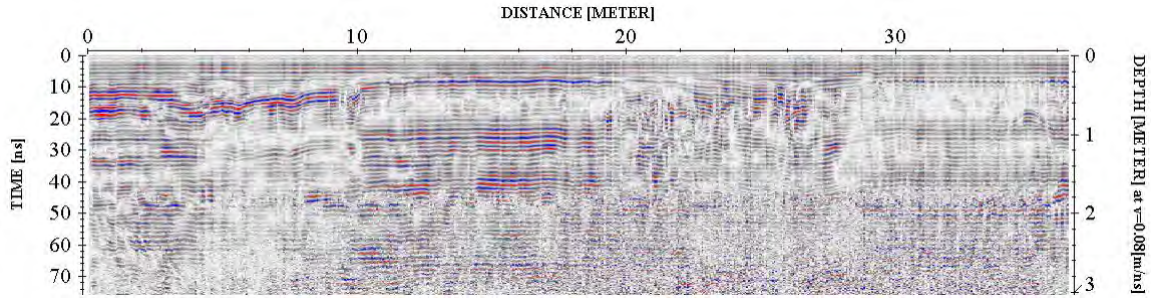
Step 1. Import Raw RAMAC data to standard processing format



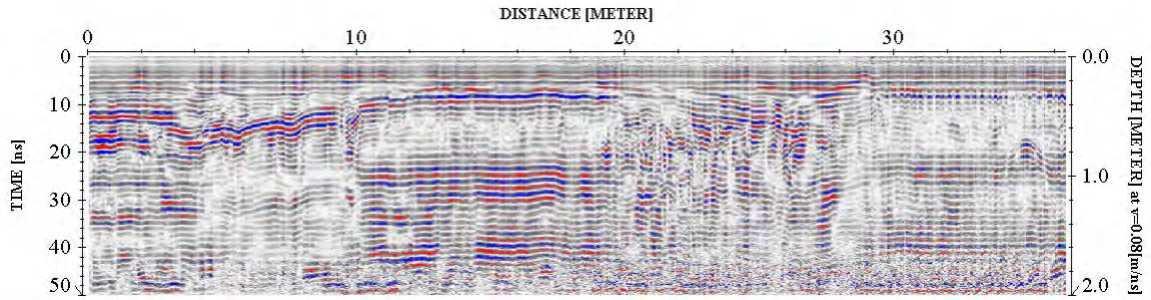
Step 2. Remove instrument noise *(dewow)*



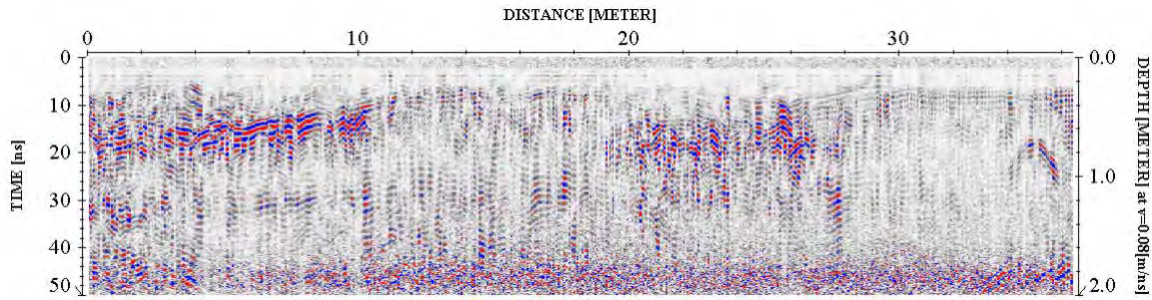
Step 3. Correct for attenuation losses *(energy decay function)*



Step 4. Remove static from bottom of profile *(time cut)*



Step 5. Mute horizontal ringing/noise *(subtracting average)*



The above example shows the significance of data processing. The last image (step 5) has higher resolution than the starting image (raw data – step 1) and represents the subsurface anomalies much more accurately.

PHYSICAL SETTINGS

NOVA observed the following physical conditions at the time of the survey.

Weather: Partly Cloudy

Temperature: 85° F

Surface: Concrete, Asphalt, Vegetation

Geophysical Noise Level (GNL): The GNL was moderate at the site. The noise was a result of the site being located in a semi-urban environment.

RESULTS

The results of the geophysical engineering survey (GES) identified the following at the project site:

- Anomalies resembling potential subsurface utilities (such as drainage, water, remediation and gas) were identified during the GES. The approximate locations are shown in the survey plan.
- No large geophysical anomalies resembling an underground storage tank (UST) were identified within the Survey Area.
- All detected subsurface anomalies were marked in the onsite mark out.
- All cleared boring locations were marked in the onsite mark out.

If you have any questions, please do not hesitate to contact the undersigned.

Sincerely,

NOVA Geophysical Services

Levent Eskicakit, P.G., E.P.

Project Engineer

Attachments:

Location Map

Survey Plan

Geophysical Images

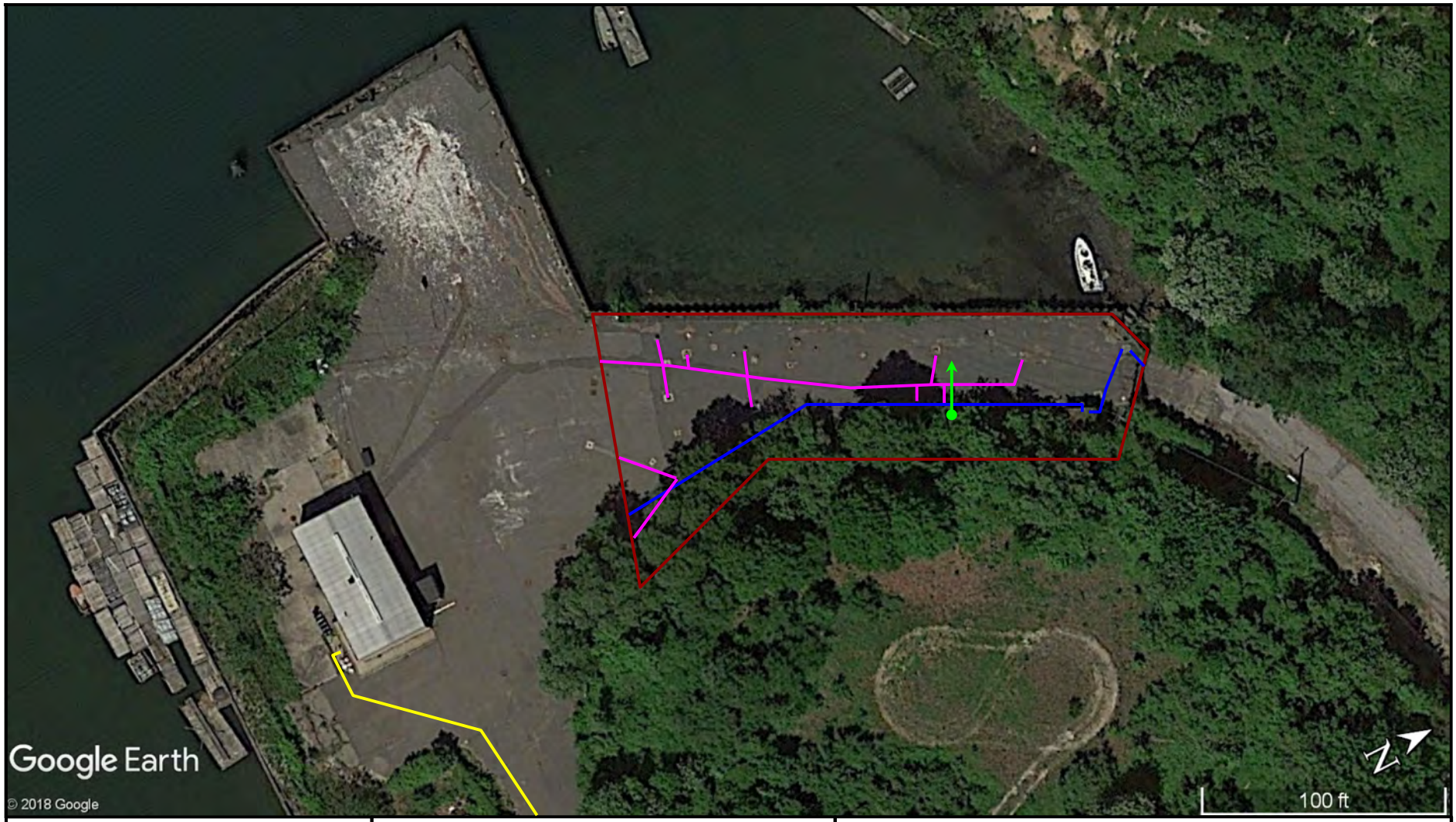
NOVA Geophysical Services

Subsurface Mapping Solutions
56-01 Marathon Parkway, # 765
Douglaston, New York 11362
Phone (347) 556-7787 * Fax (718) 261-1527
www.novagsi.com

Location Map

SITE:	**Industrial Site** 1 Shore Road, Glenwood Landing, New York 11547
CLIENT:	TRC
DATE:	July 3rd, 2019
AUTH:	Chris Steinley

LEGEND



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SURVEY PLAN

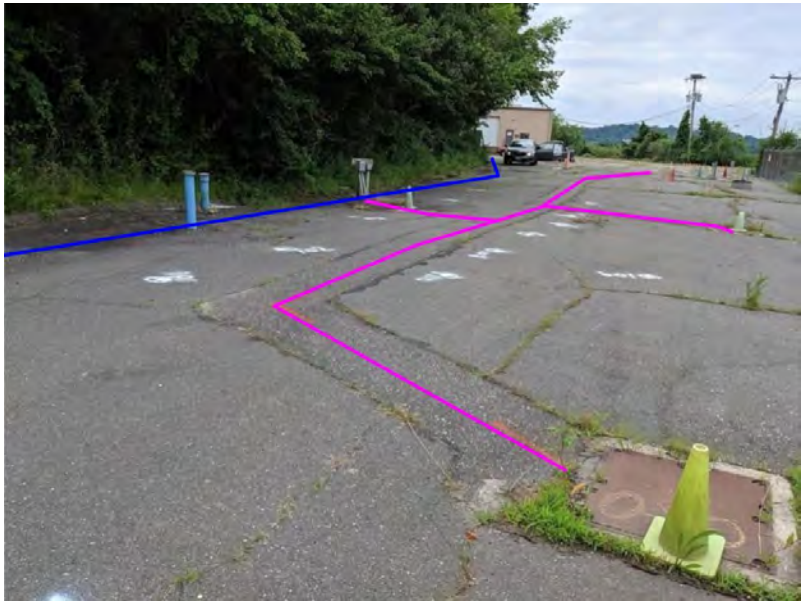
SITE:	**Industrial Site** 1 Shore Road, Glenwood Landing, New York 11547
CLIENT:	TRC
DATE:	July 3rd, 2019
AUTH:	Chris Steinley

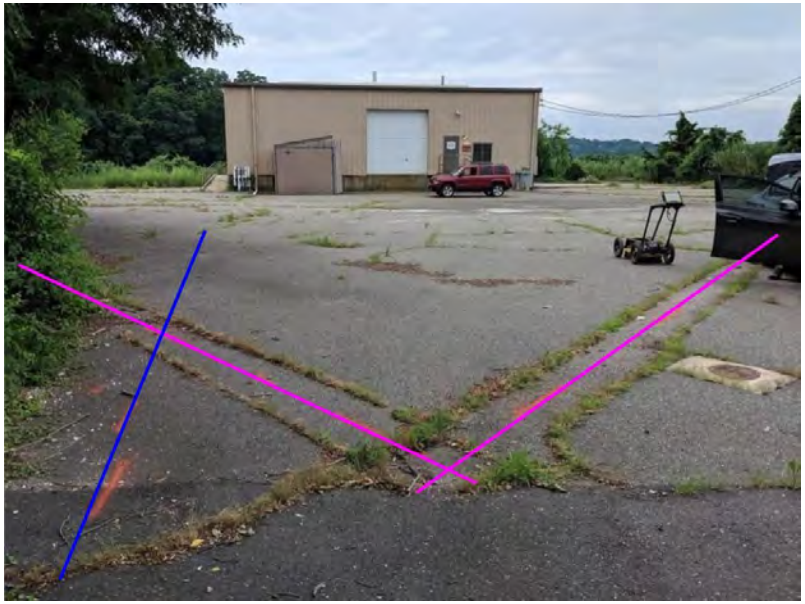
LEGEND

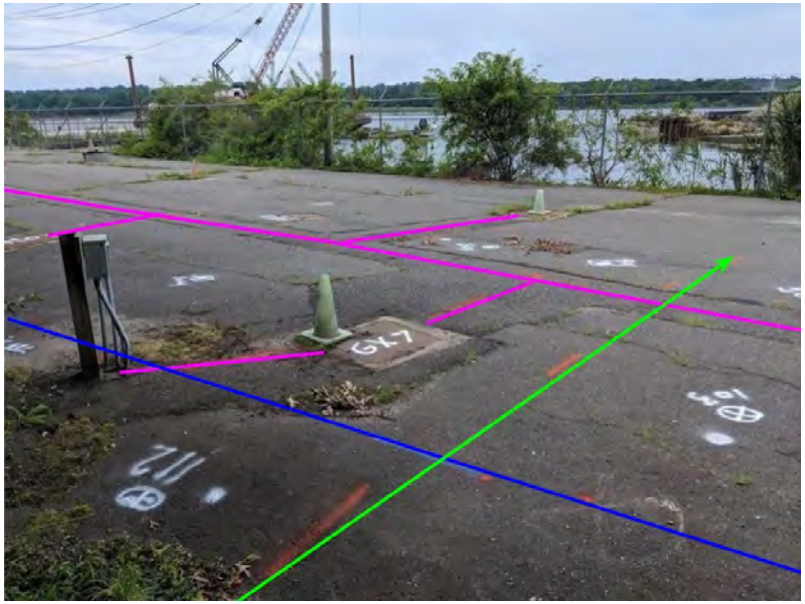
- Survey Area
- Gas
- Water
- Remediation
- Drainage

GEOPHYSICAL IMAGES

Industrial Site
1 Shore Road,
Glenwood Landing, New York 11547
July 3rd, 2019

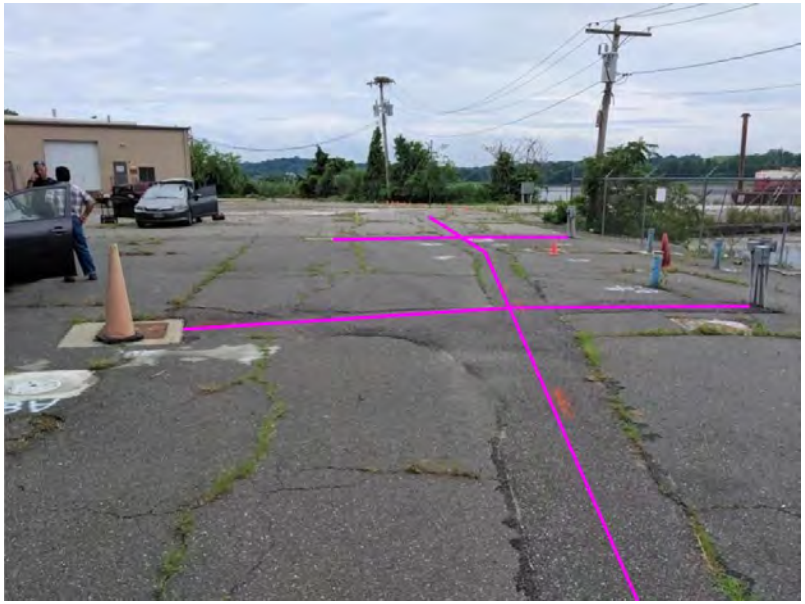






GEOPHYSICAL IMAGES

Industrial Site
1 Shore Road,
Glenwood Landing, New York 11547
July 3rd, 2019



GEOPHYSICAL IMAGES

Industrial Site
1 Shore Road,
Glenwood Landing, New York 11547
July 3rd, 2019

GEOPHYSICAL IMAGES

Industrial Site
1 Shore Road,
Glenwood Landing, New York 11547
July 3rd, 2019

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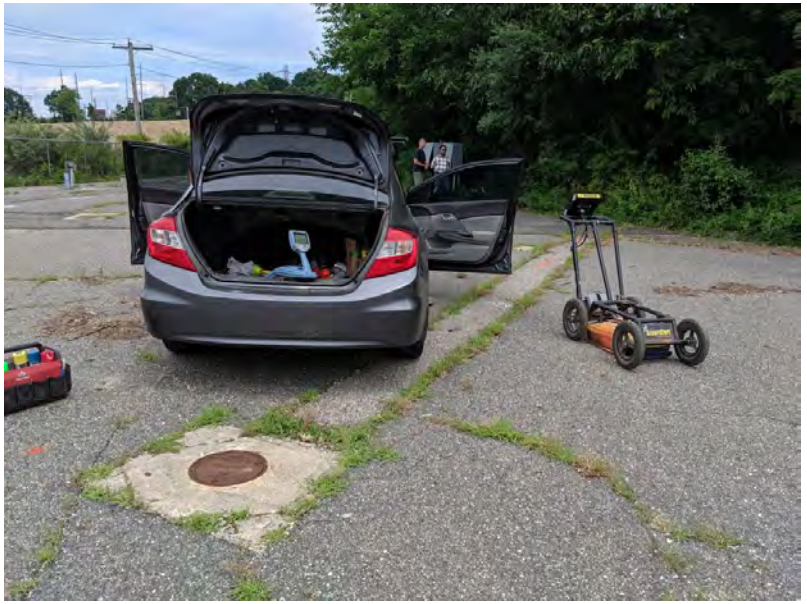
July 3rd, 2019



GEOPHYSICAL IMAGES

Industrial Site

1 Shore Road,

Glenwood Landing, New York 11547

July 3rd, 2019

ATTACHMENT B – SOIL BORING LOGS

TRC
1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-101**

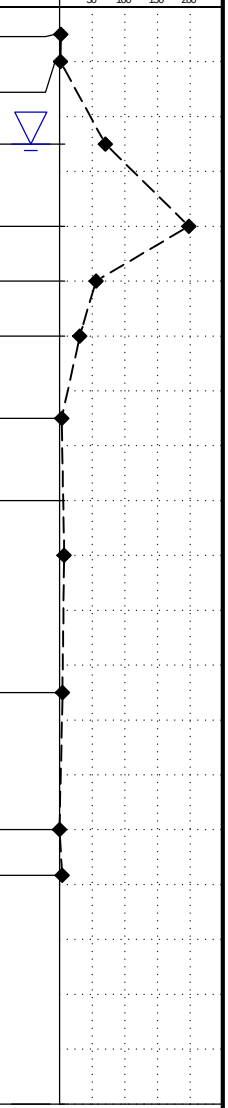
PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	20 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	7/11/19	Date Completed:	7/11/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239437.2345	East:	1082002.139
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	6.96
Checked By:	Dan Warren				

DRILLING INFORMATION	
Drilling Contractor:	Aztech Technologies, Inc.
Driller(s):	Jeff Morgan and Jon Grazione
Drilling Method:	Direct push
Equipment/Model:	GeoProbe - 6610DT
Sampler:	Sanjay Sharma

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	7/11/2019		
DEPTH (ft.bgs.)	2.5		
REFERENCE	Ground Surface		
STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.5 ' Asphalt (2 layers)..
						0.5 ' - 1 ' Dark brown, fine to medium SAND, few shells, medium gravel. No odor, no staining..
	1	MAC	5.0	5.0		1 ' - 2.5 ' Gray to brown, fine to medium SAND, trace silt and fine gravel, wet at 2.5" bgs..
						2.5 ' - 4 ' Same as above (sample 1-2.5), with crushed shell bed. Strong odor..
						4 ' - 5 ' Dark gray, fine to medium SAND, trace silt and gravel. Strong odor, stains..
5						
						5 ' - 6 ' Same as above (sample 4-5), wet..
	2	MAC	5.0	4.0		6 ' - 7.5 ' Dark gray, fine SAND, dense, wet. Mild odor, no staining..
						7.5 ' - 9 ' Light gray, fine SAND, medium dense, wet. Mild odor, no staining..
10						
						10 ' - 12.5 ' Dark gray, fine SAND, medium dense, wet. No odor, no staining..
	3	MAC	5.0	5.0		12.5 ' - 15 ' Whitish gray, fine SAND, medium dense, wet..
15						
						15 ' - 15.83 ' Same as above (sample 12.5-15), wet. No odor, no staining..
						15.83 ' - 20 ' Yellow brown, fine to medium SAND, clay lumps from 19.17-20 ft bgs..
	4	MAC	5.0	5.0		
20						
						Bottom of borehole at 20.0 feet.

VOC SCREENING RESULTS (ppm)
50 100 150 200



Notes:

1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-102**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	20 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	7/11/19	Date Completed:	7/11/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239431.4378	East:	1081999.5628
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	7.03
Checked By:	Dan Warren				

DRILLING INFORMATION		GROUND WATER OBSERVATIONS			
Drilling Contractor:	Aztech Technologies, Inc.	MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
Driller(s):	Jeff Morgan and Jon Grazione	DATE	7/11/2019		
Drilling Method:	Direct push	DEPTH (ft.bgs.)	3		
Equipment/Model:	GeoProbe - 6610DT	REFERENCE	Ground Surface		
Sampler:	Sanjay Sharma	STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.5 ' Asphalt (2 layers)..
						0.5 ' - 2 ' Dark brown, fine to medium SAND, clay and large gravel/rocks, dry. No odor, no staining..
	1	MAC	5.0	5.0		2 ' - 2.5 ' Gray to dark brown, fine to medium SAND, moist, clay and fine to medium gravel and silt. Strong odor, no staining..
						2.5 ' - 3 ' Gray, fine SAND, clay and silt, shell bed (crushed shells), heavy, moist. Strong odor, stains..
						3 ' - 4 ' Same as above (sample 2.5-3), wet..
5						4 ' - 5 ' Gray, fine SAND, wet, clay and silt, shells. Strong odor, stains..
						5 ' - 7.33 ' Dark gray/black, fine to medium SAND, clay and silt and fine to medium gravel, wet. Strong odor, stains..
	2	MAC	5.0	4.0		7.33 ' - 9 ' Light gray, fine SAND, wet, medium dense. Mild odor..
10						10 ' - 13.5 ' Dark gray, fine SAND, medium dense, wet. No odor, no staining..
	3	MAC	5.0	5.0		13.5 ' - 15 ' Light gray, fine SAND, medium dense, wet. No odor, no staining..
15						15 ' - 18 ' Same as above (sample 13.5-15), clay and silt, wet. No odor, no staining..
	4	MAC	5.0	5.0		18 ' - 20 ' Yellow brown, fine to medium SAND, clay and silt, dense, wet..
20						Bottom of borehole at 20.0 feet.

VOC SCREENING RESULTS (ppm)
40 80 120 160

Notes:

1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-103**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	20 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	7/11/19	Date Completed:	7/11/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	Not Surveyed		
Client:	New York State Department of Environmental Conservation	North:	Not Surveyed	East:	Not Surveyed
Logged By:	Sanjay Sharma	Vertical Datum:	Not Surveyed	Ground Elevation:	Not Surveyed
Checked By:	Dan Warren				

DRILLING INFORMATION		GROUND WATER OBSERVATIONS			
Drilling Contractor:	Aztech Technologies, Inc.	MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
Driller(s):	Jeff Morgan and Jon Grazione	DATE	7/11/2019		
Drilling Method:	Direct push	DEPTH (ft.bgs.)	3		
Equipment/Model:	GeoProbe - 6610DT	REFERENCE	Ground Surface		
Sampler:	Sanjay Sharma	STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.5 ' Asphalt (2 layers)..
						0.5 ' - 2 ' Dark brown, fine to medium SAND, clay and silt, medium gravel, rocks, dry. No odor, no staining..
	1	MAC	5.0	5.0		2 ' - 3 ' Greenish gray, silty SAND, fine gravel, moist. Mild odor, no staining..
						3 ' - 5 ' Gray to brown, fine to medium SAND and gravel, wet. Mild odor..
5						
						5 ' - 7 ' Dark brown/gray, fine to medium SAND and gravel, medium dense, wet. Mild odor, no staining..
	2	MAC	5.0	5.0		7 ' - 10 ' Light gray, fine SAND, dense, wet..
10						
						10 ' - 12.33 ' Dark gray to black, fine to medium SAND, trace silt, wet, dense. No odor, no staining..
	3	MAC	5.0	5.0		12.33 ' - 15 ' Light gray, fine SAND, medium dense, wet. No odor, no staining..
15						
						15 ' - 17 ' Light gray, fine SAND. No odor, no staining..
	4	MAC	5.0	5.0		17 ' - 20 ' Light gray (whitish), fine sand, medium dense, wet..
20						
						Bottom of borehole at 20.0 feet.

VOC SCREENING RESULTS (ppm)
8 16 24 32

Notes:

TRC
1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-104**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	20 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	7/9/19	Date Completed:	7/9/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239407.5508	East:	1081989.7579
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	7.1
Checked By:	Dan Warren				

DRILLING INFORMATION		GROUND WATER OBSERVATIONS			
Drilling Contractor:	Aztech Technologies, Inc.	MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
Driller(s):	Jeff Morgan and Jon Grazione	DATE	7/9/2019		
Drilling Method:	Direct push	DEPTH (ft.bgs.)	2		
Equipment/Model:	GeoProbe - 6610DT	REFERENCE	Ground Surface		
Sampler:	Sanjay Sharma	STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.5 ' Asphalt (2 layers).
						0.5 ' - 2 ' Dark brown, fine to medium SAND, trace silt and large gravel/rocks. No odor, no staining..
	1	MAC	5.0	5.0		2 ' - 3 ' Dark gray to brown, fine SAND, clay and silt and trace fine gravel, few large gravel/rocks, wet. No odor, no staining..
						3 ' - 5 ' Same as above (sample 2-3), wet. No odor, no staining..
5						
						5 ' - 5.83 ' Dark brown/gray, fine to medium SAND, with medium gravel, wet. Mild solvents odor..
	2	MAC	5.0	5.0		5.83 ' - 10 ' Whitish gray, fine SAND, trace silt, wet, dense. Mild solvents odor..
10						
						10 ' - 12 ' Gray, fine SAND, clay and silt, wet, dense. No odor, no staining..
	3	MAC	5.0	5.0		12 ' - 15 ' Dark gray, fine SAND, dense, wet. No odor, no staining..
15						
						15 ' - 17.5 ' Same as above (sample 12-15), wet. No odor, no staining..
	4	MAC	5.0	5.0		17.5 ' - 20 ' Light brown (whitish), fine SAND, dense, wet. No odor, no staining..
20						
						Bottom of borehole at 20.0 feet.

VOC SCREENING RESULTS (ppm)
10 20 30 40

Notes:

SOIL BORING/WELL COMPLETION WITH NOTES_2 - TRC_WINDSOR_STD.GDT - 1/14/20
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TRC
1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-105**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	20 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	7/10/19	Date Completed:	7/10/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239415.5354	East:	1081982.9187
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	6.98
Checked By:	Dan Warren				

DRILLING INFORMATION	
Drilling Contractor:	Aztech Technologies, Inc.
Driller(s):	Jeff Morgan and Jon Grazione
Drilling Method:	Direct push
Equipment/Model:	GeoProbe - 6620DT
Sampler:	Sanjay Sharma

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	7/10/2019		
DEPTH (ft.bgs.)	2.5		
REFERENCE	Ground Surface		
STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.5 ' Asphalt (2 layers)..
						0.5 ' - 1 ' Brown, fine to medium SAND, few large gravel, dry. No odor, no staining..
						1 ' - 2.5 ' Gray, fine to medium SAND, medium gravel, wood, clay and silt, wet. No odor, no staining..
	1	MAC	5.0	5.0		2.5 ' - 5 ' Dark gray, fine to medium SAND, clay and silt, sea shells, wet, sheen. Strong petroleum odor and stains..
5						
						5 ' - 6 ' Dark gray to black, medium to coarse SAND, trace silt, wet, lots of shells. Strong petroleum odor and stains..
	2	MAC	5.0	4.0		6 ' - 7.83 ' Dark brown, fine to medium SAND, trace silt, medium dense, wet. Moderate odor and stains at places..
						7.83 ' - 9 ' Dark gray/black, medium to coarse SAND, trace silt and fine gravel, wet. Moderate odor..
10						
						10 ' - 11.5 ' Same as above (sample 7.83-9), wet. Moderate to no odor, stains at places..
	3	MAC	5.0	5.0		11.5 ' - 14 ' Whitish gray, fine SAND, medium dense, wet. Moderate to no odor, stains at places..
15						14 ' - 15 ' Dark gray, fine to medium SAND, clay and silt, medium dense. No odor, no stains..
						15 ' - 18 ' Same as above (sample 14-15), wet. No odor, no stains..
	4	MAC	5.0	5.0		
						18 ' - 19.5 ' Red brown/orange, fine to medium SAND, clay and silt and clay lumps. No odor, no stains..
20						19.5 ' - 20 ' Clay. No odor, no stains..
						Bottom of borehole at 20.0 feet.

VOC SCREENING RESULTS (ppm)
20 40 60 80

Notes:

SOIL BORING/WELL COMPLETION WITH NOTES_2 - TRC_WINDSOR_STD.GDT - 1/14/20
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TRC
1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-106**

PROJECT INFORMATION		BORING INFORMATION	
Project Name:	**Shore Realty Corp (AES)**	Boring Depth:	**20 feet**
Project Location:	**1 Shore Road, Glenwood Landing, NY**	Hole Diameter:	**2 inches**
Project Number:	**327138.0000.0000 Phase 3**	Date Started:	**7/10/19**
Client:	**New York State Department of Environmental Conservation**	Date Completed:	**7/10/19**
Logged By:	**Sanjay Sharma**	Coordinate System:	**State Plane - Long Island Zone**
Checked By:	**Dan Warren**	North:	**239419.2026**
		East:	**1081985.3449**
		Vertical Datum:	**NAVD88**
		Ground Elevation:	**6.93**

DRILLING INFORMATION	
Drilling Contractor:	**Aztech Technologies, Inc.**
Driller(s):	**Jeff Morgan and Jon Grazione**
Drilling Method:	**Direct push**
Equipment/Model:	**GeoProbe - 6620DT**
Sampler:	**Sanjay Sharma**

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	**7/10/2019**		
DEPTH (ft.bgs.)	**2.5**		
REFERENCE	**Ground Surface**		
STABILIZATION	**NA**		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.5 ' Asphalt (2 layers)..
						0.5 ' - 1 ' Brown, medium SAND, fine to medium gravel, dry. No odor, no staining..
						1 ' - 1.5 ' Gray, fine to medium SAND, clay and silt, shells. No odor, no staining..
	1	MAC	5.0	5.0		1.5 ' - 2.5 ' Dark gray, fine to medium SAND, clay and silt, fine to medium gravel, shells, heavy, moist. Mild odor and stains at places..
						2.5 ' - 4 ' Same as above (sample 1.5-2.5), shells, wet..
5						4 ' - 5 ' Dark gray/black, fine SAND, clay and silt and fine gravel, seashells. Strong odor and stains..
	2	MAC	5.0	5.0		5 ' - 6.5 ' Dark gray, medium to coarse SAND, fine gravel, shells, wet. Moderate odor, staining at places..
						6.5 ' - 8.5 ' Dark gray/brown, fine to medium SAND, trace fine gravel, medium dense, wet. Moderate odor..
10						8.5 ' - 10 ' Dark gray/black, fine to medium SAND, dense, wet. Very mild odor..
	3	MAC	5.0	5.0		10 ' - 15 ' Dark brown/gray, fine to medium SAND, clay and silt and gravel, medium dense, wet. Very minor odor at places..
15						15 ' - 18 ' Same as above (sample 10-15), wet. No odor, no staining..
	4	MAC	5.0	5.0		18 ' - 18.33 ' Red brown/orange, fine to medium SAND, clay lumps..
						18.33 ' - 19 ' Red/gray CLAY..
20						19 ' - 20 ' Gray/whitish, fine SAND, wet. No odor, no staining..
						Bottom of borehole at 20.0 feet.

VOC SCREENING RESULTS (ppm)
16 32 48 64

Notes:

TRC
1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-107**

PROJECT INFORMATION		BORING INFORMATION	
Project Name:	**Shore Realty Corp (AES)**	Boring Depth:	**20 feet**
Project Location:	**1 Shore Road, Glenwood Landing, NY**	Hole Diameter:	**2 inches**
Project Number:	**327138.0000.0000 Phase 3**	Date Started:	**7/10/19**
Client:	**New York State Department of Environmental Conservation**	Date Completed:	**7/10/19**
Logged By:	**Sanjay Sharma**	Coordinate System:	**State Plane - Long Island Zone**
Checked By:	**Dan Warren**	North:	**239424.0246**
		East:	**1081988.4602**
		Vertical Datum:	**NAVD88**
		Ground Elevation:	**7**

DRILLING INFORMATION	
Drilling Contractor:	**Aztech Technologies, Inc.**
Driller(s):	**Jeff Morgan and Jon Grazione**
Drilling Method:	**Direct push**
Equipment/Model:	**GeoProbe - 6620DT**
Sampler:	**Sanjay Sharma**

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	**7/10/2019**		
DEPTH (ft.bgs.)	**2.5**		
REFERENCE	**Ground Surface**		
STABILIZATION	**NA**		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.5 ' Asphalt (2 layers)..
						0.5 ' - 1.5 ' Brown, fine to medium SAND, trace gravel (large), shells. No odor, no staining..
	1	MAC	5.0	5.0		1.5 ' - 2 ' Dark gray, fine to medium SAND, clay and silt, crushed shells, moist. No odor, no staining..
						2 ' - 4 ' Light gray, fine SAND, shells, wet at 30". Mild odor..
5						4 ' - 5 ' Dark gray to black, fine SAND, seashells (crushed), wet. Mild odor..
						5 ' - 5.5 ' Same as above (sample 4-5), wet. Mild odor..
						5.5 ' - 7 ' Dark gray, fine to medium SAND, wood, loose, wet. No odor, no staining..
	2	MAC	5.0	3.0		7 ' - 8 ' Light gray, fine SAND, wet..
10						
						10 ' - 11 ' Same as above (sample 7-8), wet. No odor, no staining..
						11 ' - 12.5 ' Dark gray, fine SAND, medium dense, wet. No odor, no staining..
	3	MAC	5.0	4.5		12.5 ' - 13.5 ' Light gray, fine SAND. No odor, no staining..
						13.5 ' - 14.5 ' Dark gray, fine SAND, wet. No odor, no staining..
15						
						15 ' - 17.66 ' Gray, fine SAND, medium dense, wet. No odor, no staining..
	4	MAC	5.0	5.0		17.66 ' - 20 ' Yellowish red/brown, fine to coarse SAND, dense, clay lumps, wet. No odor, no staining..
20						
						Bottom of borehole at 20.0 feet.

VOC SCREENING RESULTS (ppm)
6 12 18 24

Notes:

SOIL BORING/WELL COMPLETION WITH NOTES_2 - TRC_WINDSOR_STD.GDT - 1/14/20
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TRC
1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-108**

PROJECT INFORMATION		BORING INFORMATION	
Project Name:	Shore Realty Corp (AES)	Boring Depth:	20 feet
Project Location:	1 Shore Road, Glenwood Landing, NY	Hole Diameter:	2 inches
Project Number:	327138.0000.0000 Phase 3	Date Started:	7/10/19
Client:	New York State Department of Environmental Conservation	Date Completed:	7/10/19
Logged By:	Sanjay Sharma	Coordinate System:	State Plane - Long Island Zone
Checked By:	Dan Warren	North:	239429.5615
		East:	1081990.981
		Vertical Datum:	NAVD88
		Ground Elevation:	6.98

DRILLING INFORMATION	
Drilling Contractor:	Aztech Technologies, Inc.
Driller(s):	Jeff Morgan and Jon Grazione
Drilling Method:	Direct push
Equipment/Model:	GeoProbe - 6620DT
Sampler:	Sanjay Sharma

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	7/10/2019		
DEPTH (ft.bgs.)	2.5		
REFERENCE	Ground Surface		
STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.5 ' Asphalt (2 layers)..
						0.5 ' - 1 ' Dark brown, fine to medium SAND, large gravel, trace silt, dry. No odor, no staining..
	1	MAC	5.0	5.0		1 ' - 2.5 ' Dark gray, fine to medium SAND, clay and silt, seashells (crushed), wet at 30". No odor, no staining..
						2.5 ' - 4 ' Gray, fine SAND, clay and silt, crushed shell layer, wet. Moderate odor and stains..
						4 ' - 5 ' Dark gray, fine SAND, wet..
5						
						5 ' - 7 ' Dark brown, fine to medium SAND, trace fine gravel, shells, wet. Mild odor..
	2	MAC	5.0	5.0		7 ' - 7.66 ' Dark brown, fine SAND, wet. No to very mild odor, no staining..
						7.66 ' - 10 ' Light gray, fine SAND, medium dense, wet. No to very mild odor, no staining..
10						
						10 ' - 14.5 ' Light gray to dark brown, fine SAND, trace fine to medium gravel, medium dense, wet..
	3	MAC	5.0	5.0		
15						
						14.5 ' - 15 ' Yellow brown, fine SAND, wet, dense. No odor, no staining..
						15 ' - 19 ' Same as above (sample 14.5-15), wet. No odor, no staining..
	4	MAC	5.0	5.0		
						19 ' - 19.33 ' CLAY clumps..
20						19.33 ' - 20 ' Gray, silty CLAY..
						Bottom of borehole at 20.0 feet.

VOC SCREENING RESULTS (ppm)
16 32 48 64

Notes:

1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-109**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	20 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	7/11/19	Date Completed:	7/11/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239432.7509	East:	1081985.8133
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	6.76
Checked By:	Dan Warren				

DRILLING INFORMATION	
Drilling Contractor:	Aztech Technologies, Inc.
Driller(s):	Jeff Morgan and Jon Grazione
Drilling Method:	Direct push
Equipment/Model:	GeoProbe - 6610DT
Sampler:	Sanjay Sharma

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	7/11/2019		
DEPTH (ft.bgs.)	2.5		
REFERENCE	Ground Surface		
STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.5 ' Asphalt (2 layers)..
						0.5 ' - 1.5 ' Dark brown, fine to medium SAND, trace medium gravel. Mild odor, no staining..
	1	MAC	5.0	5.0		1.5 ' - 2.5 ' Gray, silty SAND, clay and medium gravel, moist. Strong petroleum odor, stains..
						2.5 ' - 4 ' Dark gray/black, fine to medium SAND, clay and silt, some medium gravel, wet. Strong petroleum odor, stains..
5						4 ' - 5 ' Same as above (sample 2.5-4), wet, large gravel. Strong petroleum odor, stains..
						5 ' - 6.75 ' Dark gray, fine to medium SAND, trace silt and gravel, wet, loose. Mild odor..
	2	MAC	5.0	1.8		
10						10 ' - 11.5 ' Same as above (sample 5-6.75), wet, loose. Mild odor, no staining..
	3	MAC	5.0	1.5		
15						15 ' - 17.66 ' Same as above (sample 5-6.75), wet. No odor, no staining..
	4	MAC	5.0	5.0		17.66 ' - 20 ' Yellowish brown, fine to medium SAND, clay lumps from 19.5-20 ft bgs, wet. No odor, no staining..
20						Bottom of borehole at 20.0 feet.

VOC SCREENING RESULTS (ppm)
16 32 48 64

Notes:

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BORING NUMBER: **SB-110**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	20 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	7/11/19	Date Completed:	7/11/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239434.5396	East:	1081993.5922
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	6.9
Checked By:	Dan Warren				

DRILLING INFORMATION		GROUND WATER OBSERVATIONS			
Drilling Contractor:	Aztech Technologies, Inc.	MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
Driller(s):	Jeff Morgan and Jon Grazione	DATE	7/11/2019		
Drilling Method:	Direct push	DEPTH (ft.bgs.)	2.5		
Equipment/Model:	GeoProbe - 6620DT	REFERENCE	Ground Surface		
Sampler:	Sanjay Sharma	STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
						0 ' - 0.5 ' Asphalt (2 layers)..	16 32 48 64
						0.5 ' - 1 ' Dark brown, fine to medium SAND, few large gravel/rock, dry. No odor, no staining..	
						1 ' - 2.5 ' Dark gray, fine to medium SAND, clay and silt, shells, dry. No odor, no staining..	
	1	MAC	5.0	5.0		2.5 ' - 4 ' Dark gray, fine SAND, wet, shells. Strong to moderate odor, stains..	
						4 ' - 5 ' Same as above (sample 2.5-4), clay and silt, wet..	
5						5 ' - 6 ' Dark brown to gray, fine to medium SAND, trace silt, medium gravel. Mild odor..	
	2	MAC	5.0	4.0		6 ' - 9 ' Light gray, fine SAND, medium dense, wet. No odor, no staining..	
10						10 ' - 12.5 ' Same as above (sample 6-9), loose, watery. No odor, no staining..	
	3	MAC	5.0	5.0		12.5 ' - 13.66 ' Dark gray, fine SAND, wet..	
						13.66 ' - 15 ' Light gray (whitish), fine SAND wet..	
15						15 ' - 17 ' Same as above (sample 13.66-15), wet. No odor, no staining..	
	4	MAC	5.0	5.0		17 ' - 18.33 ' Whitish gray, fine to medium SAND, wet..	
						18.33 ' - 20 ' Yellowish brown to red brown, fine to medium SAND, wet, dense, clay lumps from 19-20 ft bgs..	
20						Bottom of borehole at 20.0 feet.	

Notes:

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BORING NUMBER: **SB-111**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	20 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	7/9/19	Date Completed:	7/10/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239420.7687	East:	1082010.0294
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	7.41
Checked By:	Dan Warren				

DRILLING INFORMATION		GROUND WATER OBSERVATIONS			
Drilling Contractor:	Aztech Technologies, Inc.	MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
Driller(s):	Jeff Morgan and Jon Grazione	DATE	7/9/2019		
Drilling Method:	Direct push	DEPTH (ft.bgs.)	2.5		
Equipment/Model:	GeoProbe - 6620DT	REFERENCE	Ground Surface		
Sampler:	Sanjay Sharma	STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.83 ' Topsoil and organics with dark brown, fine to medium SAND. No odor, no staining..
						0.83 ' - 1.5 ' Same as above (sample 0-0.83), dry, clay and medium gravel. No odor, no staining..
	1	MAC	5.0	5.0		1.5 ' - 2 ' Same as above (sample 0-0.83), clay and silt, moist..
						2 ' - 4 ' Dark brown/gray, medium to coarse SAND, clay and fine gravel, loose, wet at 30". Strong petroleum odor and stains..
5						4 ' - 5 ' Dark brown/gray, fine to medium SAND, trace silt, medium, dense, wet. Strong odor..
	2	MAC	5.0	5.0		5 ' - 9.5 ' Light to dark gray, fine to medium SAND, trace silt, medium dense, wet. Mild odor and stains at places..
10						9.5 ' - 10 ' Yellow brown, fine to medium SAND, clay and silt, wet, dense. Very mild odor..
						10 ' - 12.5 ' Light gray, fine to medium SAND, dense, wet. Mild odor..
	3	MAC	5.0	5.0		12.5 ' - 15 ' Red brown/tan, fine SAND, dense, wet. Mild odor..
15						15 ' - 20 ' Same as above (sample 12.5-15), wet, clay bands and lumps. No odor, no staining..
	4	MAC	5.0	5.0		
20						Bottom of borehole at 20.0 feet.

VOC SCREENING RESULTS (ppm)
16 32 48 64

Notes:

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BORING NUMBER: **SB-112**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	20 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	7/10/19	Date Completed:	7/10/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239412.3569	East:	1081999.8781
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	6.79
Checked By:	Dan Warren				

DRILLING INFORMATION		GROUND WATER OBSERVATIONS			
Drilling Contractor:	Aztech Technologies, Inc.	MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
Driller(s):	Jeff Morgan and Jon Grazione	DATE	7/10/2019		
Drilling Method:	Direct push	DEPTH (ft.bgs.)	2.5		
Equipment/Model:	GeoProbe - 6620DT	REFERENCE	Ground Surface		
Sampler:	Sanjay Sharma	STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 '- 0.33 ' Asphalt.
						0.33 '- 2 ' Dark brown, fine to medium SAND, trace silt, coarse gravel, bricks, dry. No odor, no staining..
	1	MAC	5.0	5.0		2 '- 5 ' Dark gray to brown, fine to medium SAND, clay and silt, fine to medium gravel, trace coarse gravel, shells, wet. Strong petroleum odor and stains..
5						
						5 '- 6 ' Dark brown, fine to medium SAND, trace silt and large gravel, wet. Mild odor & stains at places..
						6 '- 7 ' Light gray, fine SAND, medium dense, wet..
	2	MAC	5.0	4.2		7 '- 9.17 ' Whitish gray, fine SAND, medium dense, wet at places, bands of clay and brown sand, wet..
10						
	3	MAC	5.0	5.0		10 '- 14.5 ' Same as above (sample 7-9.17) with fine gravel (traces), wet. No odor, no staining..
15						14.5 '- 15 ' Yellowish brown, fine to medium SAND, dense, wet. No odor, no staining..
	4	MAC	5.0	5.0		15 '- 18 ' Same as above (sample 14.5-15), with trace fine gravel, wet. No odor, no staining..
						18 '- 19 ' Gray, fine SAND, traces of clay. No odor, no staining..
20						19 '- 20 ' Yellow/white brown, fine SAND, wet. No odor, no staining..
						Bottom of borehole at 20.0 feet.

VOC SCREENING RESULTS (ppm)
10 20 30 40

Notes:

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BORING NUMBER: **SB-113**
Page 1 of 1

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	20 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	7/9/19	Date Completed:	7/9/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239404.2908	East:	1082000.3757
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	7.4
Checked By:	Dan Warren				

DRILLING INFORMATION		GROUND WATER OBSERVATIONS			
Drilling Contractor:	Aztech Technologies, Inc.	MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
Driller(s):	Jeff Morgan and Jon Grazione	DATE	7/9/2019		
Drilling Method:	Direct push	DEPTH (ft.bgs.)	2.5		
Equipment/Model:	GeoProbe - 6610DT	REFERENCE	Ground Surface		
Sampler:	Sanjay Sharma	STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.5 ' Topsoil with organics. No odor, no staining..
						0.5 ' - 2 ' Brown, fine to medium SAND, gravel, dry. No odor, no staining..
	1	MAC	5.0	5.0		2 ' - 4 ' Gray/brown, fine to medium SAND, trace silt and gravel, wet, few seashells. Strong petroleum odor and stains..
5						4 ' - 5 ' Gray, fine SAND, trace medium clay and silt, seashells, medium gravel, wet, sheen. Strong to mild odor (solvent?), stains at places..
	2	MAC	5.0	1.5		5 ' - 6.5 ' Light to dark gray, fine to medium SAND, clay and silt, wet, some seashells. Mild odor of solvents(?).
10						10 ' - 12.5 ' Light brown, fine SAND, trace silt, wet, medium dense. Mild odor of solvents(?)..
	3	MAC	5.0	5.0		12.5 ' - 15 ' Dark gray/black, fine SAND, medium dense, wet. Mild odor of solvents(?).
15						15 ' - 19 ' Same as above (sample 6.5-10), wet. Very mild odor (solvents?).
	4	MAC	5.0	5.0		19 ' - 20 ' Light brown, fine SAND with clay lumps. No odor, no stains..
20						Bottom of borehole at 20.0 feet.

VOC SCREENING RESULTS (ppm)
12 24 36 48

Notes:

SOIL BORING/WELL COMPLETION WITH NOTES_2 - TRC_WINDSOR_STD.GDT - 1/14/20
I:\PROJECTS\NYSDEC\ASSIGNMENTS\WA #47 - SHORE REALTY CORPORATION (AES)\PHASE 3 - SUPPLEMENTAL INVESTIGATION\IMPLEMENTATION\BORING LOGS\SOIL BORING LOGS.GPJ

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BORING NUMBER: **SB-114**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	20 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	7/9/19	Date Completed:	7/9/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239331.2665	East:	1081930.8524
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	7.35
Checked By:	Dan Warren				

DRILLING INFORMATION		GROUND WATER OBSERVATIONS			
Drilling Contractor:	Aztech Technologies, Inc.	MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
Driller(s):	Jeff Morgan and Jon Grazione	DATE	7/9/2019		
Drilling Method:	Direct push	DEPTH (ft.bgs.)	3		
Equipment/Model:	GeoProbe - 6610DT	REFERENCE	Ground Surface		
Sampler:	Sanjay Sharma	STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.66 ' Asphalt (2 layers).
						0.66 ' - 2 ' Dark brown, fine to medium SAND, clay and silt and large gravel, dry. No odor, no staining.
	1	MAC	5.0	5.0		2 ' - 3 ' Dark gray to brown, fine to medium SAND, trace silt, lots of sea shells, moist. No odor, no staining..
						3 ' - 5 ' Grayish brown, fine SAND, clay and silt, lots of small and large sea shells. No odor, no staining..
5						
						5 ' - 6.66 ' Light grayish brown, fine SAND, medium dense, wet. No odor, no staining..
	2	MAC	5.0	2.0		6.66 ' - 7 ' Dark brown, fine to medium SAND, trace coarse sand, seashells, wet, loose. No odor, no staining..
10						
						10 ' - 12 ' Dark gray, medium SAND, trace silt and trace gravel, medium dense, wet. No odor, no staining..
	3	MAC	5.0	3.0		12 ' - 13 ' Gray, fine to medium SAND, medium dense, trace silt, wet. No odor, no staining..
15						
						15 ' - 17 ' Same as above (sample 12-13)..
	4	MAC	5.0	5.0		17 ' - 20 ' Reddish brown/tan/brown to gray, fine to medium SAND, silt and clay clumps/bands, wet. No odor, no staining..
20						
						Bottom of borehole at 20.0 feet.

VOC SCREENING RESULTS (ppm)
0.2 0.4 0.6 0.8

Notes:

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BORING NUMBER: **SB-115**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	20 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	7/9/19	Date Completed:	7/9/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239320.6642	East:	1081928.5477
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	7.44
Checked By:	Dan Warren				

DRILLING INFORMATION	
Drilling Contractor:	Aztech Technologies, Inc.
Driller(s):	Jeff Morgan and Jon Grazione
Drilling Method:	Direct push
Equipment/Model:	GeoProbe - 6610DT
Sampler:	Sanjay Sharma

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	7/9/2019		
DEPTH (ft.bgs.)	3.5		
REFERENCE	Ground Surface		
STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.33 ' Asphalt.
						0.33 ' - 0.92 ' Gray to light brown, fine to medium SAND, clay and fine to medium gravel, FILL (glass), organics/wood, dry. No odor, no staining..
	1	MAC	5.0	5.0		0.92 ' - 3.5 ' Light gray to dark gray, fine to medium SAND, light to medium pebbles/gravel, some seashells (small to large), wet at 3.5. No staining, no odor..
						3.5 ' - 5 ' Dark gray to black, fine to medium SAND, trace silt and fine gravel, wet. Mild odor and staining..
5						
	2	MAC	5.0	4.3		5 ' - 7.5 ' Dark gray to black, medium to coarse SAND,, medium dense, clay and gravel, wet. Strong petroleum odor and stains..
						7.5 ' - 9.33 ' Gray, medium to coarse SAND, trace silt and fine gravel, wet, medium dense. Strong petroleum odor, no to light stains..
10						
	3	MAC	5.0	5.0		10 ' - 11 ' Same as above (sample 7.5-9.33). Mild odor, no staining..
						11 ' - 14.33 ' Yellow/orange to brown, medium to coarse to very coarse SAND, clay and f gravel, dense, few clay lumps, wet. No odor, no staining..
15						14.33 ' - 15 ' Gray, fine to medium SAND, dense, wet. No odor, no staining..
						15 ' - 20 ' No recovery..
	4	MAC	5.0	0.0		
20						
						Bottom of borehole at 20.0 feet.

VOC SCREENING RESULTS (ppm)
140 280 420 560

Notes:

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BORING NUMBER: **SB-116**

PROJECT INFORMATION		BORING INFORMATION	
Project Name:	**Shore Realty Corp (AES)**	Boring Depth:	**20 feet**
Project Location:	**1 Shore Road, Glenwood Landing, NY**	Hole Diameter:	**2 inches**
Project Number:	**327138.0000.0000 Phase 3**	Date Started:	**7/9/19**
Client:	**New York State Department of Environmental Conservation**	Date Completed:	**7/9/19**
Logged By:	**Sanjay Sharma**	Coordinate System:	**State Plane - Long Island Zone**
Checked By:	**Dan Warren**	North:	**239322.5229**
		East:	**1081923.1505**
		Vertical Datum:	**NAVD88**
		Ground Elevation:	**7.32**

DRILLING INFORMATION	
Drilling Contractor:	**Aztech Technologies, Inc.**
Driller(s):	**Jeff Morgan and Jon Grazione**
Drilling Method:	**Direct push**
Equipment/Model:	**GeoProbe - 6610DT**
Sampler:	**Sanjay Sharma**

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	**7/9/2019**		
DEPTH (ft.bgs.)	**3.5**		
REFERENCE	**Ground Surface**		
STABILIZATION	**NA**		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.33 ' Asphalt.
						0.33 ' - 0.83 ' Light brown to gray, fine to medium SAND, some fine to medium gravel, loose, dry. No odor, no staining..
	1	MAC	5.0	5.0		0.83 ' - 2 ' Light gray, fine to medium SAND, trace silt, seashells, trace medium gravel and wood, moist. No odor, no staining..
						2 ' - 4 ' Light gray, fine to medium SAND, trace silt and f gravel, loose, seashells, few large gravel, wet. No odor, no staining..
5						4 ' - 5 ' Same as above (sample 2-4), wet. No odor, no staining..
						5 ' - 6 ' Light brown, medium to coarse SAND, trace silt, loose, trace medium to large gravel, wet, seashells. No odor, no staining..
						6 ' - 6.83 ' Dark gray to black, medium to coarse SAND, trace silt and fine gravel, sheen, wet, medium dense. Heavy/strong petroleum odor, staining, sheen..
	2	MAC	5.0	4.5		6.83 ' - 9.5 ' Yellowish brown to whitish, medium to coarse SAND, clay and silt and fine gravel, loose, wet. Mild odor, no staining..
10						
						10 ' - 13 ' Gray, medium to coarse SAND, trace silt and clay, fine gravel, medium dense, wet. No odor, no staining..
	3	MAC	5.0	5.0		
						13 ' - 14.58 ' Gray, fine to medium SAND, trace silt and clay, medium dense, wet, trace fine gravel. No staining, some mild odor..
15						
						14.58 ' - 15 ' Yellow brown to orange, fine to medium SAND with clay bands (lumps), wet. No odor, no staining..
						15 ' - 17 ' Same as above (sample 14.58-15)..
	4	MAC	5.0	5.0		17 ' - 20 ' Orange/yellow brown, fine to medium SAND with clay lumps, wet. No odor, no staining..
20						
						Bottom of borehole at 20.0 feet.

VOC SCREENING RESULTS (ppm)
16 32 48 64

Notes:

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BORING NUMBER: **SB-117**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	20 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	7/9/19	Date Completed:	7/9/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239327.5606	East:	1081923.0009
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	7.23
Checked By:	Dan Warren				

DRILLING INFORMATION		GROUND WATER OBSERVATIONS			
Drilling Contractor:	Aztech Technologies, Inc.	MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
Driller(s):	Jeff Morgan and Jon Grazione	DATE	7/9/2019		
Drilling Method:	Direct push	DEPTH (ft.bgs.)	3.5		
Equipment/Model:	GeoProbe - 6610DT	REFERENCE	Ground Surface		
Sampler:	Sanjay Sharma	STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.66 ' Asphalt (2 layers).
						0.66 ' - 2 ' Dark brown, medium to find SAND, trace silt, dry, trace fine gravel. No odor, no staining..
	1	MAC	5.0	5.0		2 ' - 3 ' Light brown to gray, fine to medium SAND, seashells, trace coarse gravel, moist. No odor, no staining..
						3 ' - 5 ' Light gray to brown, fine to medium SAND, wet. Mild odor..
5						
						5 ' - 7 ' Dark gray/black, medium SAND, clay and fine to medium gravel, medium to dense, wet. Strong petroleum odor and staining..
	2	MAC	5.0	4.0		7 ' - 7.66 ' Dark gray, fine to medium SAND, trace silt and fine gravel, wet. Mild odor.
						7.66 ' - 9 ' Dark gray/black, medium SAND, trace fine gravel, wet. Mild odor..
10						
						10 ' - 11.5 ' Same as above (sample 7.66-9), wet. No staining, no odor..
	3	MAC	5.0	5.0		11.5 ' - 12.66 ' Yellow brown, fine to medium SAND, trace fine gravel. No staining, no odor..
						12.66 ' - 15 ' Dark gray/black, medium to coarse SAND, trace fine gravel, wet. No staining, no odor..
15						
						15 ' - 18.5 ' Grayish brown, fine to medium SAND, trace silt and few clay clumps. No staining, no odor..
	4	MAC	5.0	5.0		18.5 ' - 20 ' Reddish gray/brown, CLAY, silt with trace fine to medium gray sand, wet. No staining, no odor..
20						
						Bottom of borehole at 20.0 feet.

VOC SCREENING RESULTS (ppm)
10 20 30 40

Notes:

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BORING NUMBER: **SB-118**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	20 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	7/11/19	Date Completed:	7/11/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239329.6582	East:	1081918.3578
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	6.91
Checked By:	Dan Warren				

DRILLING INFORMATION		GROUND WATER OBSERVATIONS			
Drilling Contractor:	Aztech Technologies, Inc.	MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
Driller(s):	Jeff Morgan and Jon Grazione	DATE	7/11/2019		
Drilling Method:	Direct push	DEPTH (ft.bgs.)	3.5		
Equipment/Model:	GeoProbe - 6610DT	REFERENCE	Ground Surface		
Sampler:	Sanjay Sharma	STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 '- 0.33 ' Asphalt (2 layers)..
						0.33 '- 1 ' Dark brown, fine to medium SAND, clay and fine to medium gravel, rocks. No odor, no staining..
						1 '- 2 ' Same as above (sample 0.33-1), clay and silt, dry. No odor, no staining..
	1	MAC	5.0	5.0		2 '- 3.5 ' Brown, fine to medium SAND, clay and fine to medium gravel, trace silt, moist. No odor, no staining..
						3.5 '- 5 ' Same as above (sample 2-3.5), wet. No odor, no staining..
5						
						5 '- 6.33 ' Sane as above (sample 2-3.5), wet. No odor, no staining..
	2	MAC	5.0	4.0		6.33 '- 7.5 ' Dark brown to black, medium to coarse SAND, trace silt and fine gravel, wet. Strong odor, sheen, stains..
						7.5 '- 9 ' Yellow brown, fine to medium SAND, watery paste. Mild odor..
10						
						10 '- 12.5 ' Same as above (sample 7.5-9), wet. No odor, no staining..
	3	MAC	5.0	5.0		12.5 '- 14.5 ' Dark gray to brown (yellow), fine to coarse SAND, trace fine gravel, medium dense, wet..
15						14.5 '- 15 ' Red brown/orange, fine to medium SAND, dense, wet. No odor, no staining..
						15 '- 17.66 ' Dark gray to black, medium to coarse SAND, fine to medium gravel, wet. Appears to be caved in..
	4	MAC	5.0	5.0		17.66 '- 20 ' Yellowish to reddish brown, fine to medium SAND, clay and silt, dense, wet. No odor, no staining..
20						
						Bottom of borehole at 20.0 feet.

VOC SCREENING RESULTS (ppm)
16 32 48 64

Notes:

SOIL BORING/WELL COMPLETION WITH NOTES_2 - TRC_WINDSOR_STD.GDT - 1/14/20
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1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-119**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	20 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	7/8/19	Date Completed:	7/9/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239326.9427	East:	1081938.8601
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	7.63
Checked By:	Dan Warren				

DRILLING INFORMATION		GROUND WATER OBSERVATIONS			
Drilling Contractor:	Aztech Technologies, Inc.	MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
Driller(s):	Jeff Morgan and Jon Grazione	DATE	7/8/2019		
Drilling Method:	Direct push	DEPTH (ft.bgs.)	4		
Equipment/Model:	GeoProbe - 6610DT	REFERENCE	Ground Surface		
Sampler:	Sanjay Sharma	STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.5 ' Asphalt (2 layers)..
						0.5 ' - 1 ' Dark brown, medium SAND, with seashells. Loose, dry. No odor, no staining..
						1 ' - 2 ' Light to dark brown, fine to medium SAND, trace silt and medium gravel, sea shells, organics. No odor, no staining..
	1	MAC	5.0	5.0		2 ' - 5 ' Brown to gray, fine to medium SAND, trace silt and gravel, lots of small and large seashells (crushed and solid), compact, wet. Mild odor, no staining..
5						
	2	MAC	5.0	3.7		5 ' - 7.5 ' Gray, fine to medium SAND, trace large gravel, dense, wet. Strong petroleum odor, staining..
						7.5 ' - 8 ' Yellowish to brown, medium SAND.
						8 ' - 8.66 ' Gray, fine to medium SAND, trace silt and gravel, dense, wet. Strong petroleum odor, staining..
10						
	3	MAC	5.0	1.3		10 ' - 11.33 ' Dark gray, medium to coarse to very coarse SAND, medium to dense, clay and medium gravel, wet. Mild petroleum odor..
15						
	4	MAC	5.0	5.0		15 ' - 17 ' Same as above (sample 10-11.33), wet. Mild odor..
						17 ' - 17.66 ' Yellow brown, medium to fine SAND, clay and silt, wet. No odor, no staining..
						17.66 ' - 20 ' Reddish gray, silty CLAY with sand. No odor, no staining..
20						
						Bottom of borehole at 20.0 feet.

VOC SCREENING RESULTS (ppm)
100 200 300 400

Notes:

1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-120**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	20 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	7/8/19	Date Completed:	7/8/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239318.5484	East:	1081933.9632
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	7.63
Checked By:	Dan Warren				

DRILLING INFORMATION		GROUND WATER OBSERVATIONS			
Drilling Contractor:	Aztech Technologies, Inc.	MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
Driller(s):	Jeff Morgan and Jon Grazione	DATE	7/8/2019		
Drilling Method:	Direct push	DEPTH (ft.bgs.)	3.5		
Equipment/Model:	GeoProbe - 6610DT	REFERENCE	Ground Surface		
Sampler:	Sanjay Sharma	STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.33 ' Asphalt..
	1	MAC	5.0	5.0		0.33 ' - 0.83 ' Light brown to gray, fine to medium SAND, trace silt, loose, seashells, dry. No odor, no staining..
						0.83 ' - 2 ' Whitish gray, fine SAND and trace clay and silt, trace coarse gravel, moist, lots of seashells (large and small). No odor, no staining..
						2 ' - 2.5 ' Same as above (sample 0.83-2), heavy, moist. No odor, no staining..
						2.5 ' - 3 ' Light brown to gray, fine SAND, clay and silt, sea shells, heavy, moist. No odor, no staining..
						3 ' - 5 ' Light gray, fine SAND, clay and silt, wet. Mild solvent odor, no staining..
5						
	2	MAC	5.0	3.0		5 ' - 5.5 ' Yellow gray, fine to medium SAND..
						5.5 ' - 8 ' Dark gray, coarse to very coarse SAND, clay and silt and fine gravel, medium dense, wet. Strong petroleum odor, stains, sheen..
10						
	3	MAC	5.0	5.0		10 ' - 12.5 ' Same as above (sample 5.5-8), wet. Mild odor, no staining..
						12.5 ' - 15 ' Brown to gray, fine to medium SAND, trace silt and clay clumps, wet, dense. No odor, no staining..
15						
	4	MAC	5.0	5.0		15 ' - 20 ' Orange/brown to gray, fine to medium SAND, dense, clay lumps at places, wet. No odor, no staining..
20						
						Bottom of borehole at 20.0 feet.

VOC SCREENING RESULTS (ppm)
50 100 150 200

Notes:

TRC
1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-201**

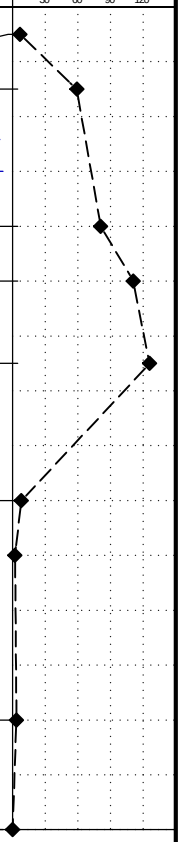
PROJECT INFORMATION		BORING INFORMATION	
Project Name:	**Shore Realty Corp (AES)**	Boring Depth:	**15 feet**
Project Location:	**1 Shore Road, Glenwood Landing, NY**	Hole Diameter:	**2 inches**
Project Number:	**327138.0000.0000 Phase 3**	Date Started:	**12/3/19**
Client:	**New York State Department of Environmental Conservation**	Date Completed:	**12/4/19**
Logged By:	**Sanjay Sharma**	Coordinate System:	**State Plane - Long Island Zone**
Checked By:	**Dan Warren**	North:	**239435.6132**
		East:	**1081999.4886**
		Vertical Datum:	**NAVD88**
		Ground Elevation:	**6.89**

DRILLING INFORMATION	
Drilling Contractor:	**Aztech Technologies, Inc.**
Driller(s):	**Jeff Morgan and Austin Armbrster**
Drilling Method:	**Direct push**
Equipment/Model:	**GeoProbe - 6610DT**
Sampler:	**Sanjay Sharma**

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	**12/3/2019**		
DEPTH (ft.bgs.)	**3**		
REFERENCE	**Ground Surface**		
STABILIZATION	**NA**		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.5 ' ASPHALT.
						0.5 ' - 1.5 ' Dark brown, fine to medium SAND, rocks.
	1	MAC	5.0	5.0		1.5 ' - 4 ' Dark gray to brown, fine to medium SAND, trace of SILT, and fine GRAVEL, sea shells, moist to 3', then wet. Moderate odor, no staining.
						4 ' - 5 ' Same as above, lots of sea shells, wet. Strong odor, no staining.
5						
	2	MAC	5.0	4.0		5 ' - 6.5 ' Brown to gray coarse to medium SAND (sample 5-6), sea shells, trace of fine GRAVEL, wet. Moderate odor, no staining.
						6.5 ' - 9 ' Dark gray fine SAND, wet, trace of SILT. No odor, no staining.
10						
	3	MAC	5.0	5.0		10 ' - 13 ' Same as above. No odor, no staining.
						13 ' - 15 ' Whitesh grey to brown SAND (sample 14-15), wet. No odor, no staining.
15						Bottom of borehole at 15.0 feet.
20						

VOC SCREENING RESULTS (ppm)
30 60 90 120



Notes:

SOIL BORING/WELL COMPLETION WITH NOTES_2 - TRC_WINDSOR_STD.GDT - 1/14/20
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1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-202**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	15 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	12/3/19	Date Completed:	12/4/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239447.4603	East:	1082006.4567
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	6.76
Checked By:	Dan Warren				

DRILLING INFORMATION		GROUND WATER OBSERVATIONS			
Drilling Contractor:	Aztech Technologies, Inc.	MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▽ After Drilling
Driller(s):	Jeff Morgan and Austin Armbrster	DATE	12/3/2019		
Drilling Method:	Direct push	DEPTH (ft.bgs.)	2.5		
Equipment/Model:	GeoProbe - 6610DT	REFERENCE	Ground Surface		
Sampler:	Sanjay Sharma	STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.33 ' ASPHALT.
	1	MAC	5.0	5.0		0.33 ' - 2.5 ' Dark gray to brown fine to medium SAND, little fine to medium GRAVEL, moist. No odor, no staining.
5						2.5 ' - 5 ' Dark gray fine to medium SAND, little SILT, lots of sea shells, trace of fine GRAVEL, wet at 2.5'. Slight odor, no staining.
	2	MAC	5.0	5.0		5 ' - 7 ' Grayish brown fine to medium SAND (sample 6-7), trace of fine GRAVEL, sea shells, wet. Slight odor, no staining.
10						7 ' - 10 ' Light gray fine SAND (sample 9-10), wet. No odor, no staining.
	3	MAC	5.0	5.0		10 ' - 15 ' Reddish brown fine SAND, trace of SILT, wet. No odor, no staining.
15						Bottom of borehole at 15.0 feet.
20						

VOC SCREENING RESULTS (ppm)
10 20 30 40

Notes:

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1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-203**

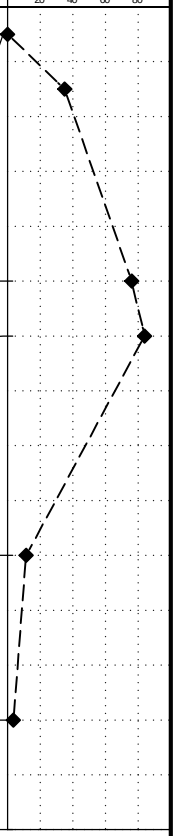
PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	15 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	12/3/19	Date Completed:	12/4/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239427.8809	East:	1082014.3887
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	7.59
Checked By:	Dan Warren				

DRILLING INFORMATION	
Drilling Contractor:	Aztech Technologies, Inc.
Driller(s):	Jeff Morgan and Austin Armbrster
Drilling Method:	Direct push
Equipment/Model:	GeoProbe - 6610DT
Sampler:	Sanjay Sharma

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	12/3/2019		
DEPTH (ft.bgs.)	3		
REFERENCE	Ground Surface		
STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
5	1	MAC	5.0	5.0		0 ' - 0.5 ' TOP SOIL, organic, dark brown fine to medium SAND, little GRAVEL. No odor, no staining. 0.5 ' - 5 ' Brown fine to medium SAND, little fine GRAVEL, organic, wet at 3'. Strong odor, no staining.
10	2	MAC	5.0	5.0		5 ' - 6 ' Same as above (sample 3-6 & 5-6). Strong odor, no staining. Sheen visible at 5.5' bgs. 6 ' - 10 ' Dark gray to whitesh grary fine SAND, wet. Slight odor, no staining.
15	3	MAC	5.0	5.0		10 ' - 13 ' Same as above, wet. Slight odor, no staining. 13 ' - 15 ' Red brown fine SAND, wet (sample 13-14). No odor, no staining.
						Bottom of borehole at 15.0 feet.
20						

VOC SCREENING RESULTS (ppm)



Notes:

1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-204**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	20 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	12/3/19	Date Completed:	12/4/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239405.593	East:	1082008.4101
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	7.48
Checked By:	Dan Warren				

DRILLING INFORMATION		GROUND WATER OBSERVATIONS			
Drilling Contractor:	Aztech Technologies, Inc.	MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
Driller(s):	Jeff Morgan and Austin Armbrster	DATE	12/3/2019		
Drilling Method:	Direct push	DEPTH (ft.bgs.)	2		
Equipment/Model:	GeoProbe - 6610DT	REFERENCE	Ground Surface		
Sampler:	Sanjay Sharma	STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
	1	MAC	5.0	5.0		0 ' - 2 ' Brown medium to coarse SAND, little fine GRAVEL, moist. No odor, no staining.
						2 ' - 4 ' Brownish grey fine to medium SAND, wet. Strong odor, no staining.
5						4 ' - 5 ' Dark gray to black fine SAND. Slight odor, no staining.
	2	MAC	5.0	5.0		5 ' - 7.5 ' Same as above (sample 4-6, 5-6), wet. Strong odor, no staining.
						7.5 ' - 10 ' Whitesh grey fine SAND, wet. Slight odor, no staining.
10						10 ' - 15 ' Same as above (sample 10-11), wet. Slight odor, no staining.
	3	MAC	5.0	5.0		
15						15 ' - 19 ' Same as above, wet. No odor, no staining.
	4	MAC	5.0	5.0		
20						19 ' - 20 ' Red-brown fine to medium SAND (sample 19-20), wet. No odor, no staining.
						Bottom of borehole at 20.0 feet.

VOC SCREENING RESULTS (ppm)
100 200 300 400

Notes:

SOIL BORING/WELL COMPLETION WITH NOTES_2 - TRC_WINDSOR_STD.GDT - 1/14/20
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1430 Broadway
New York, NY 10018
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BORING NUMBER: **SB-205**

PROJECT INFORMATION		BORING INFORMATION	
Project Name:	**Shore Realty Corp (AES)**	Boring Depth:	**15 feet**
Project Location:	**1 Shore Road, Glenwood Landing, NY**	Hole Diameter:	**2 inches**
Project Number:	**327138.0000.0000 Phase 3**	Date Started:	**12/3/19**
Client:	**New York State Department of Environmental Conservation**	Date Completed:	**12/4/19**
Logged By:	**Sanjay Sharma**	Coordinate System:	**State Plane - Long Island Zone**
Checked By:	**Dan Warren**	North:	**239403.9022**
		East:	**1081991.4908**
		Vertical Datum:	**NAVD88**
		Ground Elevation:	**7.12**

DRILLING INFORMATION	
Drilling Contractor:	**Aztech Technologies, Inc.**
Driller(s):	**Jeff Morgan and Austin Armbrster**
Drilling Method:	**Direct push**
Equipment/Model:	**GeoProbe - 6610DT**
Sampler:	**Sanjay Sharma**

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	**12/3/2019**		
DEPTH (ft.bgs.)	**2.5**		
REFERENCE	**Ground Surface**		
STABILIZATION	**NA**		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.5 ' ASPHALT.
						0.5 ' - 1.5 ' Dark brown fine SAND, trace SILT, loose GRAVEL, 2 layers of plastic sheets. No odor, no staining.
	1	MAC	5.0	5.0		1.5 ' - 4 ' GRAVEL. No odor, no staining.
5						4 ' - 5 ' Dark grey, fine SAND, wet. No odor, no staining.
						5 ' - 6 ' Same as above (sample 5-6).
	2	MAC	5.0	5.0		6 ' - 10 ' Greyish to yellow white fine SAND, wet. Slight odor, no staining.
10						
						10 ' - 13 ' Same as above (sample 10-11, MS/MSD). No odor, no staining.
	3	MAC	5.0	5.0		13 ' - 15 ' Dark grey, fine SAND, wet. No odor, no staining.
15						Bottom of borehole at 15.0 feet.
20						

VOC SCREENING RESULTS (ppm)
3 6 9 12

Notes:

SOIL BORING/WELL COMPLETION WITH NOTES_2 - TRC_WINDSOR_STD.GDT - 1/14/20
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TRC
1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-206**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	15 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	12/3/19	Date Completed:	12/4/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239415.6515	East:	1081979.2301
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	6.88
Checked By:	Dan Warren				

DRILLING INFORMATION		GROUND WATER OBSERVATIONS			
Drilling Contractor:	Aztech Technologies, Inc.	MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
Driller(s):	Jeff Morgan and Austin Armbrster	DATE	12/3/2019		
Drilling Method:	Direct push	DEPTH (ft.bgs.)	3		
Equipment/Model:	GeoProbe - 6610DT	REFERENCE	Ground Surface		
Sampler:	Sanjay Sharma	STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.5 ' ASPHALT.
						0.5 ' - 1 ' Brown fine to medium SAND, few loose gravel, dry.
						1 ' - 2.5 ' Grey fine to medium SAND, fine to medium gravel, little silt, trace woods, slag.
	1	MAC	5.0	5.0		2.5 ' - 5 ' Dark grey fine to medium SAND, little silt, sea shells. Moderate odor, no staining.
5						
						5 ' - 6.5 ' Same as above (sample 5-6), wet. Moderate odor, no staining.
	2	MAC	5.0	4.0		6.5 ' - 8 ' Grey fine SAND, trace of fine gravel, wet. No odor, no staining.
						8 ' - 9 ' Whitesh grey fine SAND (sample 8-9), wet. No odor, no staining.
10						
						10 ' - 12.5 ' Same as above, wet. No odor, no staining.
	3	MAC	5.0	5.0		12.5 ' - 14 ' Yellowish brown fine SAND, little silt, wet. No odor, no staining.
						14 ' - 15 ' Greyish white fine SAND, wet. No odor, no staining.
15						
						Bottom of borehole at 15.0 feet.
20						

VOC SCREENING RESULTS (ppm)
20 40 60 80

Notes:

SOIL BORING/WELL COMPLETION WITH NOTES_2 - TRC_WINDSOR_STD.GDT - 1/14/20
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TRC
1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-207**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	15 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	12/3/19	Date Completed:	12/4/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239429.3051	East:	1081983.5933
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	6.79
Checked By:	Dan Warren				

DRILLING INFORMATION	
Drilling Contractor:	Aztech Technologies, Inc.
Driller(s):	Jeff Morgan and Austin Armbrster
Drilling Method:	Direct push
Equipment/Model:	GeoProbe - 6610DT
Sampler:	Sanjay Sharma

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	12/3/2019		
DEPTH (ft.bgs.)	2.5		
REFERENCE	Ground Surface		
STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
0						0 '- 0.5 ' ASPHALT.
	1	MAC	5.0	5.0		0.5 '- 1.5 ' Dark brown fine to medium SAND, little medium to coarse gravel, dry. No odor, no staining.
						1.5 '- 5 ' Dark grey fine SAND, little silt and gravel, moist, sea shells. Slight odor, no staining. Wet at 2.5' bgs.
5						5 '- 6.5 ' Dark grey fine SAND, trace of fine gravel and silt, wet. Slight odor, no staining.
	2	MAC	5.0	3.0		6.5 '- 7 ' Tan GRAVEL. Slight odor, no staining.
						7 '- 8 ' Grey fine SAND (sample 7-8), wet. Slight odor, no staining.
10						10 '- 11 ' Brownish grey, fine to medium SAND, trace of fine gravel, wet. No odor, no staining.
	3	MAC	5.0	5.0		11 '- 15 ' Grey fine SAND (sample 11-12), trace of silt, wet. No odor, no staining.
15						Bottom of borehole at 15.0 feet.
20						

VOC SCREENING RESULTS (ppm)
20 40 60 80

Notes:

SOIL BORING/WELL COMPLETION WITH NOTES_2 - TRC_WINDSOR_STD.GDT - 1/14/20
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TRC
1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-208**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	15 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	12/2/19	Date Completed:	12/3/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239313.7329	East:	1081922.1311
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	7.48
Checked By:	Dan Warren				

DRILLING INFORMATION		GROUND WATER OBSERVATIONS			
Drilling Contractor:	Aztech Technologies, Inc.	MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▽ After Drilling
Driller(s):	Jeff Morgan and Austin Armbrster	DATE	12/2/2019		
Drilling Method:	Direct push	DEPTH (ft.bgs.)	4.5		
Equipment/Model:	GeoProbe - 6610DT	REFERENCE	Ground Surface		
Sampler:	Sanjay Sharma	STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.5 ' ASPHALT.
						0.5 ' - 1.5 ' GRAVEL, rocks, cobbles. No odor, no staining.
						1.5 ' - 2 ' Brown fine SAND, little fine to medium gravel, dry. No odor, no staining.
	1	MAC	5.0	5.0		2 ' - 4 ' Brown grey fine to medium SAND, seashells, little fine to medium gravel, cobbles, dry. No odor.
						4 ' - 5 ' Whitesh grey-brown fine SAND, wet at 4.5'. Slight odor, no staining.
5						
						5 ' - 6 ' Same as above, wet. Mld odor, no staining.
	2	MAC	5.0	5.0		6 ' - 9 ' Grey medium to coarse SAND (sample 5-7), wet. Slight odor, no staining.
						9 ' - 10 ' Dark grey medium to coarse SAND, wet. Slight odor, no staining.
10						
						10 ' - 12.5 ' Same as above, wet. Slight odor, no staining.
	3	MAC	5.0	5.0		12.5 ' - 15 ' Whitesh grey fine to medium SAND (sample 14-15), wet. No odor, no staining.
15						
						Bottom of borehole at 15.0 feet.
20						

VOC SCREENING RESULTS (ppm)
30 60 90 120

Notes:

TRC
1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-209**

PROJECT INFORMATION		BORING INFORMATION	
Project Name:	**Shore Realty Corp (AES)**	Boring Depth:	**15 feet**
Project Location:	**1 Shore Road, Glenwood Landing, NY**	Hole Diameter:	**2 inches**
Project Number:	**327138.0000.0000 Phase 3**	Date Started:	**12/2/19**
Client:	**New York State Department of Environmental Conservation**	Date Completed:	**12/3/19**
Logged By:	**Sanjay Sharma**	Coordinate System:	**State Plane - Long Island Zone**
Checked By:	**Dan Warren**	North:	**239315.0707**
		East:	**1081936.9784**
		Vertical Datum:	**NAVD88**
		Ground Elevation:	**7.78**

DRILLING INFORMATION	
Drilling Contractor:	**Aztech Technologies, Inc.**
Driller(s):	**Jeff Morgan and Austin Armbrster**
Drilling Method:	**Direct push**
Equipment/Model:	**GeoProbe - 6610DT**
Sampler:	**Sanjay Sharma**

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	**12/2/2019**		
DEPTH (ft.bgs.)	**4.5**		
REFERENCE	**Ground Surface**		
STABILIZATION	**NA**		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
						0 ' - 0.33 ' ASPHALT.
						0.33 ' - 1 ' ROCK, gravel.
						1 ' - 1.5 ' Dark brown-grey fine to medium SAND, sea shells, moist. Wood odor.
						1.5 ' - 2.5 ' Light brown, fine SAND, trace of fine to medium gravel, dry. Slight odor, no staining.
	1	MAC	5.0	5.0		2.5 ' - 5 ' Light brown to grey fine SAND, trace of fine gravel and few sea shells, wet at 4.5'. Moderate odor, no staining.
5						
						5 ' - 7 ' Light brown to grey fine to medium SAND (samples 5-7, 5-10), little fine gravel, wet. Strong odor, no staining.
	2	MAC	5.0	2.0		
10						
						10 ' - 12 ' Light grey, coarse SAND, fine gravel, wet. Moderate odor, no staining.
	3	MAC	5.0	5.0		12 ' - 13 ' Grey, fine SAND (sample 12-13), wet. No odor, no staining.
						13 ' - 15 ' Greyish brown fine SAND with small pieces of clay. Slight odor.
15						
						Bottom of borehole at 15.0 feet.
20						

VOC SCREENING RESULTS (ppm)
180 360 540 720

Notes:

SOIL BORING/WELL COMPLETION WITH NOTES_2 - TRC_WINDSOR_STD.GDT - 1/14/20
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1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-210**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	15 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	12/2/19	Date Completed:	12/3/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239318.3253	East:	1081943.7267
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	7.77
Checked By:	Dan Warren				

DRILLING INFORMATION	
Drilling Contractor:	Aztech Technologies, Inc.
Driller(s):	Jeff Morgan and Austin Armbrster
Drilling Method:	Direct push
Equipment/Model:	GeoProbe - 6610DT
Sampler:	Sanjay Sharma

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	12/2/2019		
DEPTH (ft.bgs.)	4		
REFERENCE	Ground Surface		
STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION
	1	MAC	5.0	5.0		0 ' - 0.33 ' ASPHALT. 0.33 ' - 0.67 ' GRAVEL, rocks. Thick plastic sheet encountered at 8" bgs. 0.67 ' - 4 ' Grayesh brown fine SAND, dry, fill, lots of seashells, plastic and glass. No odor, no staining.
5						4 ' - 5 ' Brownish grey fine SAND, trace of fine gravel and few seashells, wet at 4'. Moderate odor, no staining.
	2	MAC	5.0	4.0		5 ' - 9 ' Dark grey fine to medium SAND (sample 7-9), trace of fine gravel and few seashells, wet. Moderate to strong odor, no staining.
10						10 ' - 11.67 ' Same as above, wet. Slight odor, no staining.
	3	MAC	5.0	5.0		11.67 ' - 15 ' Red brown to grey fine SAND (sample 14-15), little clayey patches, wet. No odor, no staining.
15						Bottom of borehole at 15.0 feet.
20						

VOC SCREENING RESULTS (ppm)
240 480 720 960

Notes:

TRC
1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-211**

PROJECT INFORMATION		BORING INFORMATION	
Project Name:	**Shore Realty Corp (AES)**	Boring Depth:	**20 feet**
Project Location:	**1 Shore Road, Glenwood Landing, NY**	Hole Diameter:	**2 inches**
Project Number:	**327138.0000.0000 Phase 3**	Date Started:	**12/2/19**
Client:	**New York State Department of Environmental Conservation**	Date Completed:	**12/3/19**
Logged By:	**Sanjay Sharma**	Coordinate System:	**State Plane - Long Island Zone**
Checked By:	**Dan Warren**	North:	**239325.1845**
		East:	**1081945.1641**
		Vertical Datum:	**NAVD88**
		Ground Elevation:	**7.57**

DRILLING INFORMATION	
Drilling Contractor:	**Aztech Technologies, Inc.**
Driller(s):	**Jeff Morgan and Austin Armbrster**
Drilling Method:	**Direct push**
Equipment/Model:	**GeoProbe - 6610DT**
Sampler:	**Sanjay Sharma**

GROUND WATER OBSERVATIONS			
MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
DATE	**12/2/2019**		
DEPTH (ft.bgs.)	**4**		
REFERENCE	**Ground Surface**		
STABILIZATION	**NA**		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
						0 ' - 0.33 ' ASPHALT.	420 840 1260 1680
	1	MAC	5.0	5.0		0.33 ' - 0.67 ' Dark brown fine to medium SAND, little gravel, dry, plastic layers at 4' and 8'. No odor, no staining.	
						0.67 ' - 5 ' Brown to fine medium SAND, with medium gravel, wet at 4'. No odor, no staining.	
5							
	2	MAC	5.0	2.5		5 ' - 7.5 ' Dark grey fine to medium SAND, wet. Slight to moderate odor, no staining.	
10							
	3	MAC	5.0	5.0		10 ' - 13 ' Same as above (samples 10-11, 10-12), wet. Strong odor, no staining.	
						13 ' - 14.17 ' Yellow-brown to grey fine to medium SAND (sample 13-14), little clayey patches, wet. Slight odor, no staining.	
15						14.17 ' - 15 ' Grey CLAY (sample 14.5-15), medium silt. Very strong odor, no staining.	
	4	MAC	5.0	5.0		15 ' - 18 ' Fallen from top. Very strong odor.	
						18 ' - 19.5 ' Red brown sandy CLAY (sample 19-20, MS/MSD).	
20						19.5 ' - 20 ' Gray fine SAND, wet. No odor, no staining.	
						Bottom of borehole at 20.0 feet.	

Notes:

SOIL BORING/WELL COMPLETION WITH NOTES_2 - TRC_WINDSOR_STD.GDT - 1/14/20
I:\PROJECTS\NYSDEC\ASSIGNMENTS\WA #47 - SHORE REALTY CORPORATION (AES)\PHASE 3 - SUPPLEMENTAL INVESTIGATION\IMPLEMENTATION\BORING LOGS\SOIL BORING LOGS.GPJ

TRC
1430 Broadway
New York, NY 10018
Telephone: 2037889341

BORING NUMBER: **SB-212**

PROJECT INFORMATION		BORING INFORMATION			
Project Name:	Shore Realty Corp (AES)	Boring Depth:	15 feet	Hole Diameter:	2 inches
Project Location:	1 Shore Road, Glenwood Landing, NY	Date Started:	12/2/19	Date Completed:	12/3/19
Project Number:	327138.0000.0000 Phase 3	Coordinate System:	State Plane - Long Island Zone		
Client:	New York State Department of Environmental Conservation	North:	239334.5883	East:	1081934.7501
Logged By:	Sanjay Sharma	Vertical Datum:	NAVD88	Ground Elevation:	7.5
Checked By:	Dan Warren				

DRILLING INFORMATION		GROUND WATER OBSERVATIONS			
Drilling Contractor:	Aztech Technologies, Inc.	MEASUREMENT	▽ At Time of Drilling	▼ At End of Drilling	▼ After Drilling
Driller(s):	Jeff Morgan and Austin Armbrster	DATE	12/2/2019		
Drilling Method:	Direct push	DEPTH (ft.bgs.)	3		
Equipment/Model:	GeoProbe - 6610DT	REFERENCE	Ground Surface		
Sampler:	Sanjay Sharma	STABILIZATION	NA		

DEPTH (FT.)	SAMPLE NUMBER	SAMPLE TYPE	PENETRATION (FT.)	RECOVERY (FT.)	LITHOLOGY	MATERIAL DESCRIPTION	VOC SCREENING RESULTS (ppm)
							0 0 0 0
						0' - 0.33' ASPHALT.	
						0.33' - 2' Brown fine to medium SAND, little fine to medium gravel, some seashells, moist. No odor, no staining.	
	1	MAC	5.0	5.0		2' - 2.5' ROCKS & COBBLES. No odor, no staining.	
						2.5' - 5' Brown fine SAND (sample 1-3), trace of fine gravel, wet at 3' bgs (observed at high tide). No odor, no staining.	
5							
	2	MAC	5.0	0.0		5' - 10' No recovery.	
10							
	3	MAC	5.0	5.0		10' - 15' Greyish brown fine SAND, wet. No odor, no staining.	
15							
						Bottom of borehole at 15.0 feet.	
20							

Notes:

ATTACHMENT C – PHOTOGRAPH LOG

Supplemental Investigation Photograph Log – July 8, 2019

Photo 1: Drill rig setup on SB-116.

Photo 2: Side view of Oil-In-Soil test on sample collected from 7 to 8 feet bgs at SB-115.

Photo 3: Top view of Oil-In-Soil test on sample collected from 7 to 8 feet bgs at SB-115.

Photo 4: Side view of Oil-In-Soil test on sample collected from 14 feet bgs at SB-115.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	TRC
327138	Sanjay Sharma	1 of 3	NYSDEC	Shore Realty Corp – 1 Shore Road, Glenwood Landing, NY	

Supplemental Investigation Photograph Log – July 8, 2019

Photo 5: Top view of Oil-In-Soil test on sample collected from 14 feet bgs at SB-115.

Photo 6: Top view of Oil-In-Soil test on sample collected from 6.5 to 7.5 feet bgs at SB-116.

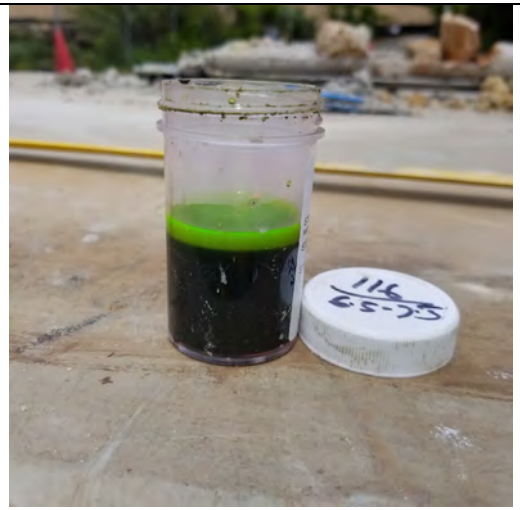


Photo 7: Side view of Oil-In-Soil test on sample collected from 6.5 to 7.5 feet bgs at SB-116.

Photo 8: Top view of Oil-In-Soil test on sample collected from 5 to 6 feet bgs at SB-120.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	TRC
327138	Sanjay Sharma	2 of 3	NYSDEC	Shore Realty Corp – 1 Shore Road, Glenwood Landing, NY	

Supplemental Investigation Photograph Log – July 8, 2019

Photo 7: Side view of Oil-In-Soil test on sample collected from 5 to 6 feet bgs at SB-120.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	TRC
327138	Sanjay Sharma	3 of 3	NYSDEC	Shore Realty Corp – 1 Shore Road, Glenwood Landing, NY	

Supplemental Investigation Photograph Log – July 9, 2019

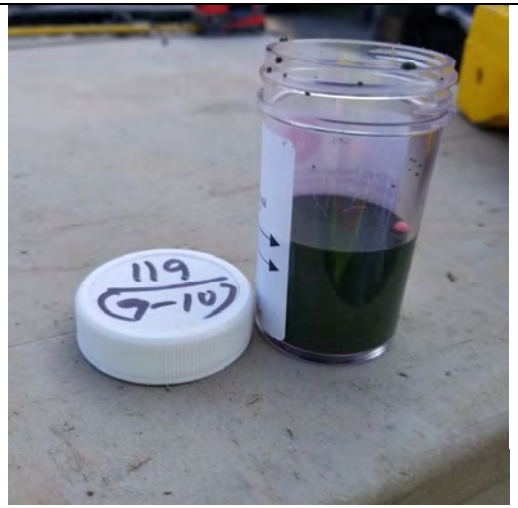


Photo 1: Side view of Oil-In-Soil test on sample collected from 9 to 10 feet bgs at SB-119.

Photo 2: Top view of Oil-In-Soil test on sample collected from 9 to 10 feet bgs at SB-119.

Photo 3: Top view of Oil-In-Soil test on sample collected from 16 to 17 feet bgs at SB-119.

Photo 4: Side view of Oil-In-Soil test on sample collected from 16 to 17 feet bgs at SB-119.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:
327138	Sanjay Sharma	1 of 3	NYSDEC	Shore Realty Corp – 1 Shore Road, Glenwood Landing, NY

Supplemental Investigation Photograph Log – July 9, 2019

Photo 5: Side view of Oil-In-Soil test on sample collected from 11 to 12 feet bgs at SB-114.

Photo 6: Top view of Oil-In-Soil test on sample collected from 11 to 12 feet bgs at SB-114.

Photo 7: Side view of Oil-In-Soil test on sample collected from 6.5 to 7.5 feet bgs at SB-117.

Photo 8: Top view of Oil-In-Soil test on sample collected from 6.5 to 7.5 feet bgs at SB-117.

Supplemental Investigation Photograph Log – July 9, 2019

Photo 9: Side view of Oil-In-Soil test on sample collected from 4 to 5 feet bgs at SB-104.

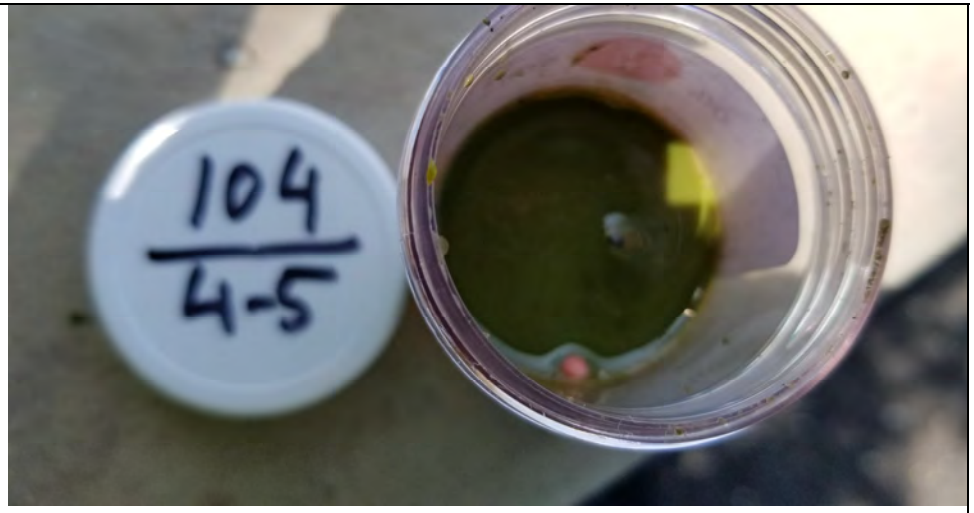


Photo 10: Top view of Oil-In-Soil test on sample collected from 4 to 5 feet bgs at SB-104.

Photo 11: Side view of Oil-In-Soil test on sample collected from 6 to 7 feet bgs at SB-113.

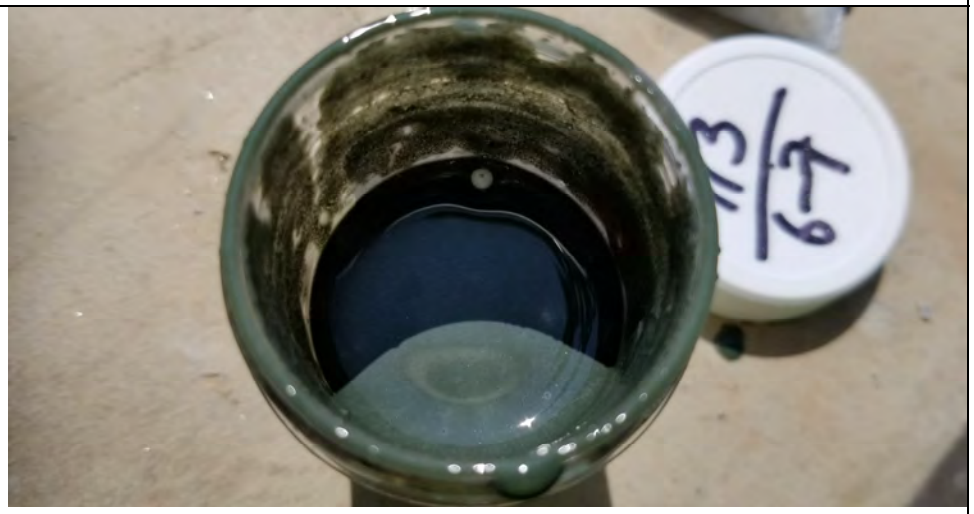


Photo 12: Top view of Oil-In-Soil test on sample collected from 6 to 7 feet bgs at SB-113.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	TRC
327138	Sanjay Sharma	3 of 3	NYSDEC	Shore Realty Corp – 1 Shore Road, Glenwood Landing, NY	

Supplemental Investigation Photograph Log – July 10, 2019

Photo 1: Top view of Oil-In-Soil test on sample collected from 4 to 5 feet bgs at SB-111.

Photo 2: Side view of Oil-In-Soil test on sample collected from 4 to 5 feet bgs at SB-111.

Photo 3: Top view of Oil-In-Soil test on sample collected from 4.5 to 5 feet bgs at SB-112.

Photo 4: Side view of Oil-In-Soil test on sample collected from 4.5 to 5 feet bgs at SB-112.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	TRC
327138	Sanjay Sharma	1 of 4	NYSDEC	Shore Realty Corp – 1 Shore Road, Glenwood Landing, NY	

Supplemental Investigation Photograph Log – July 10, 2019

Photo 5: Top view of Oil-In-Soil test on sample collected from 6 to 6.5 feet bgs at SB-105.

Photo 6: Side view of Oil-In-Soil test on sample collected from 6 to 6.5 feet bgs at SB-105.

Photo 7: Side view of Oil-In-Soil test on sample collected from 14 to 15 feet bgs at SB-105.

Photo 8: Top view of Oil-In-Soil test on sample collected from 14 to 15 feet bgs at SB-105.

Supplemental Investigation Photograph Log – July 10, 2019

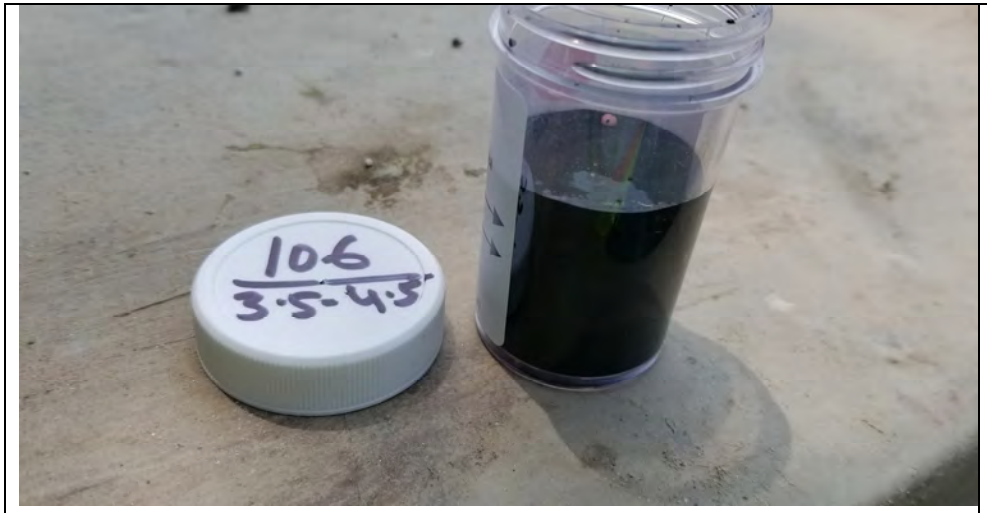


Photo 9: Side view of Oil-In-Soil test on sample collected from 3.5 to 4.5 feet bgs at SB-106.

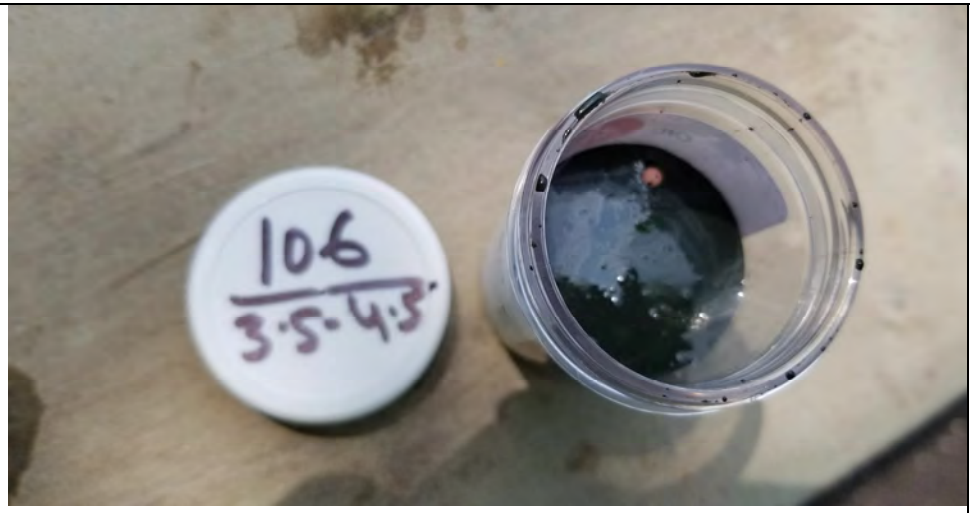


Photo 10: Top view of Oil-In-Soil test on sample collected from 3.5 to 4.5 feet bgs at SB-106.

Photo 11: Side view of Oil-In-Soil test on sample collected from 6 to 6.5 feet bgs at SB-106.

Photo 12: Top view of Oil-In-Soil test on sample collected from 6 to 6.5 feet bgs at SB-106.

Supplemental Investigation Photograph Log – July 10, 2019

Photo 13: Side view of Oil-In-Soil test on sample collected from 4 to 5 feet bgs at SB-107.

Photo 14: Top view of Oil-In-Soil test on sample collected from 4 to 5 feet bgs at SB-107.

Photo 15: Side view of Oil-In-Soil test on sample collected from 3 to 4 feet bgs at SB-108.

Photo 16: Top view of Oil-In-Soil test on sample collected from 3 to 4 feet bgs at SB-108.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	TRC
327138	Sanjay Sharma	4 of 4	NYSDEC	Shore Realty Corp – 1 Shore Road, Glenwood Landing, NY	

Supplemental Investigation Photograph Log – July 11, 2019

Photo 1: Side view of Oil-In-Soil test on sample collected from 4 to 4.5 feet bgs at SB-110.

Photo 2: Top view of Oil-In-Soil test on sample collected from 4 to 4.5 feet bgs at SB-110.

Photo 3: Side view of Oil-In-Soil test on sample collected from 4 to 5 feet bgs at SB-101.

Photo 4: Top view of Oil-In-Soil test on sample collected from 4 to 5 feet bgs at SB-101.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
327138	Sanjay Sharma	1 of 3	NYSDEC	Shore Realty Corp – 1 Shore Road, Glenwood Landing, NY	TRC

Supplemental Investigation Photograph Log – July 11, 2019

Photo 5: Side view of Oil-In-Soil test on sample collected from 4 to 5 feet bgs at SB-102.

Photo 6: Top view of Oil-In-Soil test on sample collected from 4 to 5 feet bgs at SB-102.

Photo 7: Top view of Oil-In-Soil test on sample collected from 3 to 4 feet bgs at SB-109.

Photo 8: Side view of Oil-In-Soil test on sample collected from 3 to 4 feet bgs at SB-109.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:
327138	Sanjay Sharma	2 of 3	NYSDEC	Shore Realty Corp – 1 Shore Road, Glenwood Landing, NY

Supplemental Investigation Photograph Log – July 11, 2019

Photo 9: Top view of Oil-In-Soil test on sample collected from 4 to 5 feet bgs at SB-103.

Photo 10: Side view of Oil-In-Soil test on sample collected from 4 to 5 feet bgs at SB-103.

Photo 11: Top view of Oil-In-Soil test on sample collected from 7 to 8 feet bgs at SB-118.

Photo 12: Side view of Oil-In-Soil test on sample collected from 7 to 8 feet bgs at SB-118.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	TRC
327138	Sanjay Sharma	3 of 3	NYSDEC	Shore Realty Corp – 1 Shore Road, Glenwood Landing, NY	

Supplemental Investigation Photograph Log – July 12, 2019

Photo 1: Soil boring surfaces restored in Area 1.

Photo 2: Soil boring surfaces restored in Area 2.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	
327138	Sanjay Sharma	1 of 1	NYSDEC	Shore Realty Corp – 1 Shore Road, Glenwood Landing, NY	TRC

Supplemental Investigation Photograph Log – December 3, 2019

Photo 1: Side view of Oil-In-Soil test on sample collected from 5 to 7 feet bgs at SB-208.

Photo 2: Top view of Oil-In-Soil test on sample collected from 5 to 7 feet bgs at SB-208.

Photo 3: Side view of Oil-In-Soil test on sample collected from 5 to 7 feet bgs at SB-209.

Photo 4: Top view of Oil-In-Soil test on sample collected from 5 to 7 feet bgs at SB-209.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	TRC
327138	Sanjay Sharma	1 of 3	NYSDEC	Shore Realty Corp – 1 Shore Road, Glenwood Landing, NY	

Supplemental Investigation Photograph Log – December 3, 2019

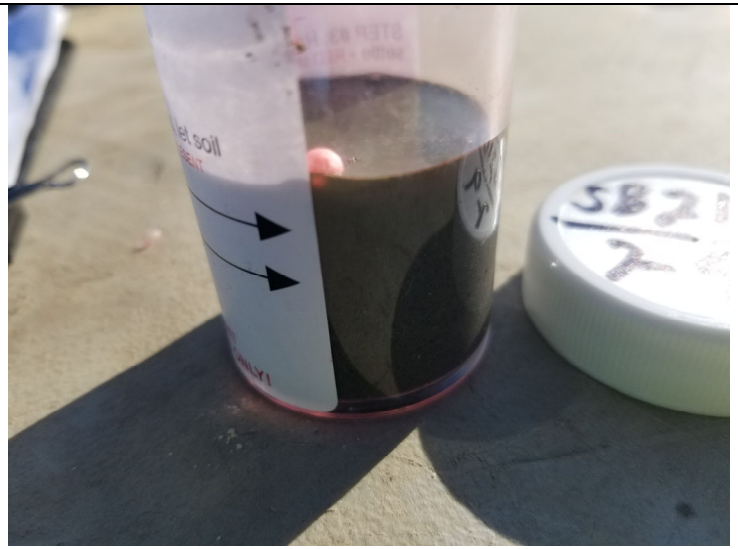


Photo 5: Side view of Oil-In-Soil test on sample collected from 7 to 9 feet bgs at SB-210.

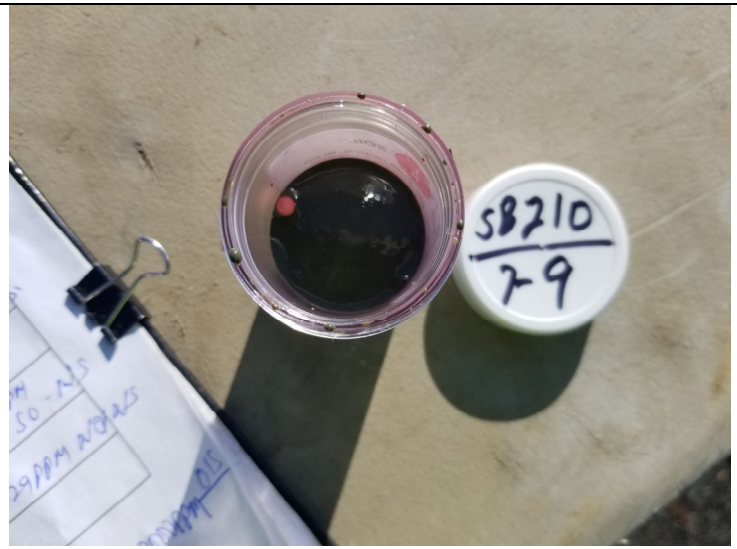


Photo 6: Top view of Oil-In-Soil test on sample collected from 7 to 9 feet bgs at SB-210.

Photo 7: Side view of Oil-In-Soil test on sample collected from 14 to 15 feet bgs at SB-210.

Photo 8: Top view of Oil-In-Soil test on sample collected from 14 to 15 feet bgs at SB-210.

Supplemental Investigation Photograph Log – December 3, 2019

Photo 9: Side view of Oil-In-Soil test on sample collected from 10 to 11 feet bgs, 13 to 14 feet bgs, and 14.5 to 15 feet bgs at SB-211.

Photo 10: Top view of Oil-In-Soil test on sample collected from 10 to 11 feet bgs, 13 to 14 feet bgs, and 14.5 to 15 feet bgs at SB-211.

Photo 11: Side view of Oil-In-Soil test on sample collected from 10 bgs at SB-212.

Photo 12: Top view of Oil-In-Soil test on sample collected from 10 feet bgs at SB-212.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:	TRC
327138	Sanjay Sharma	3 of 3	NYSDEC	Shore Realty Corp – 1 Shore Road, Glenwood Landing, NY	

Supplemental Investigation Photograph Log – December 4, 2019

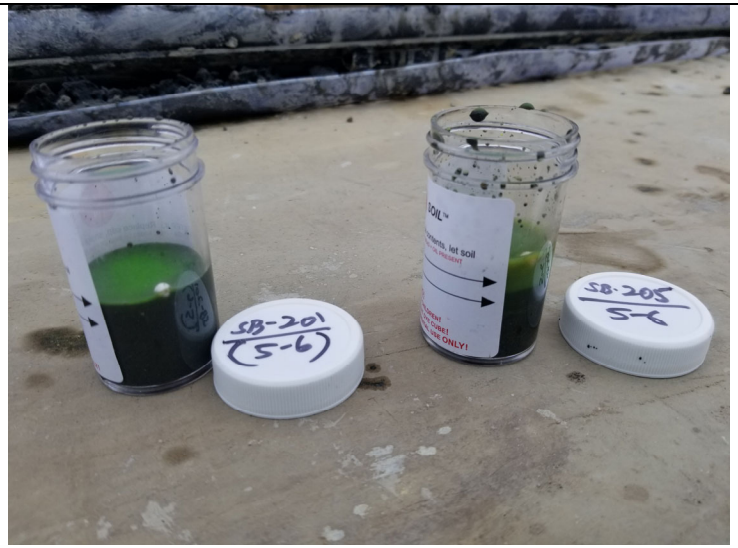


Photo 1: Side view of Oil-In-Soil test on sample collected from 5 to 6 feet bgs at SB-201 and from 5 to 6 feet bgs at SB-205.

Photo 2: Top view of Oil-In-Soil test on sample collected from 5 to 6 feet bgs at SB-201 and from 5 to 6 feet bgs at SB-205.

Photo 3: Side view of Oil-In-Soil test on sample collected from 6 to 7 feet bgs at SB-202.

Photo 4: Top view of Oil-In-Soil test on sample collected from 6 to 7 feet bgs at SB-202.

TRC Job No.	Photographs Taken By:	Page No.	Client:	Site Name & Address:
327138	Sanjay Sharma	1 of 3	NYSDEC	Shore Realty Corp – 1 Shore Road, Glenwood Landing, NY

Supplemental Investigation Photograph Log – December 4, 2019

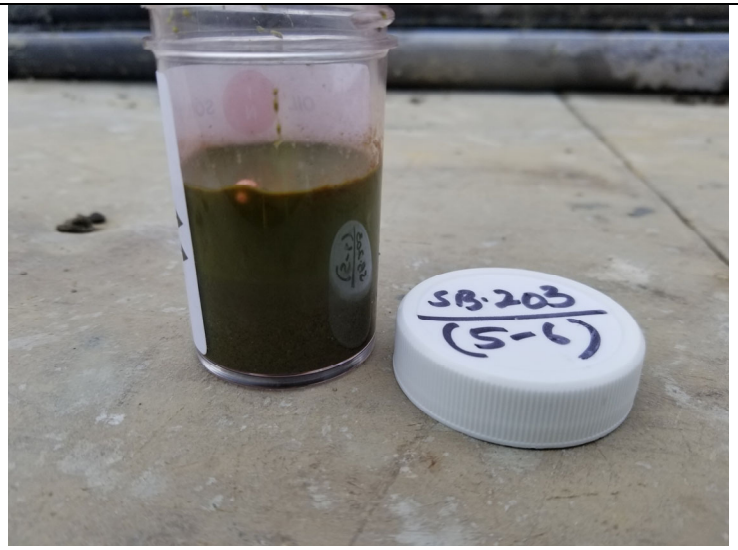


Photo 5: Side view of Oil-In-Soil test on sample collected from 5 to 6 feet bgs at SB-203.

Photo 6: Top view of Oil-In-Soil test on sample collected from 5 to 6 feet bgs at SB-203.

Photo 7: Top view of Oil-In-Soil test on sample collected from 5 to 6 feet bgs at SB-204.

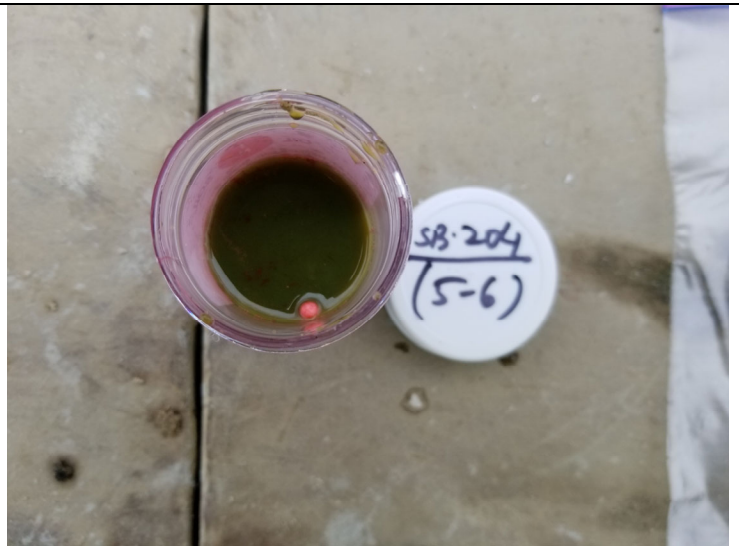


Photo 8: Side view of Oil-In-Soil test on sample collected from 5 to 6 feet bgs at SB-204.

Supplemental Investigation Photograph Log – December 4, 2019

Photo 9: Top view of Oil-In-Soil test on sample collected from 5 to 6 feet bgs at SB-206 and from 7 to 8 feet bgs at SB-207.

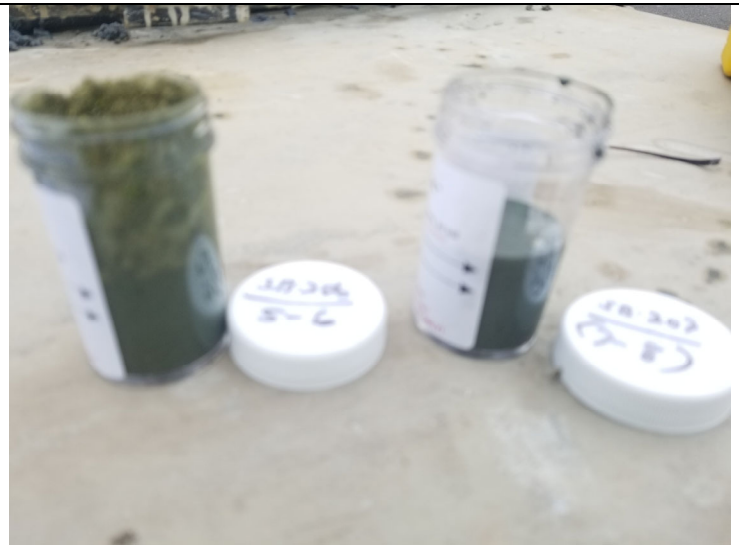


Photo 10: Side view of Oil-In-Soil test on sample collected from 5 to 6 feet bgs at SB-206 and from 7 to 8 feet bgs at SB-207.

APPENDIX B

Revised Interim Remedial Measures Conceptual Plan – June 2020

DRAFT

TRC Engineers, Inc.
1430 Broadway, 10th Floor
New York, New York 10018

Main (212) 221-7822
Fax (212) 221-7840

Memorandum

To: Caroline Jalanti, Project Manager
New York State Department of Environmental Conservation
Division of Environmental Remediation

From: Daniel Warren, Project Manager
TRC Engineers, Inc.

Subject: Standby Engineering Contract
Work Assignment No. D009812-01
Shore Realty Corporation (AES) – Site No. 130006
Revised Interim Remedial Measure Conceptual Plan

Date: June 10, 2020

CC: D. Glass (TRC)
J. Magda (TRC)

TRC Project No.: 386138.0000.0000

This revised memorandum provides a concept-level description of the elements of an Interim Remedial Measure (IRM), consisting of excavation and off-site disposal of petroleum-related volatile organic compound (VOC)-impacted soil and related work, at the Shore Realty Corporation (AES) Site located in Glenwood Landing, New York (the "Site"). TRC submitted the original Conceptual Plan on April 3, 2020. The revised conceptual plan has been prepared based on the results of a Supplemental Investigation completed in December 2019, summarized in a memorandum, prepared by TRC, dated January 31, 2020 and comments received from New York State Department of Environmental Conservation (NYSDEC) via email on April 15, 2020. The objective of the IRM is to remove residual sources of petroleum-related VOCs in soil, primarily ethylbenzene, toluene, and xylenes (ETX), detected in groundwater samples collected from extraction wells GX-2 and GX-7 and monitoring well WP-5A. Soil will be removed in four zones, as summarized in the table below and described further in this memorandum. Conceptual limits of the Excavation Zones are shown on **Figures 1** and **2.**

Summary of Excavation Zones				
Investigation Area	**Excavation Zone**	**Area of Excavation (square feet)**	**Average Depth of Excavation (feet)**	**Excavation Volume (Rounded) (cubic yards)**
1	1A	790	8.0	240
1	1B	500	15.0	280
2	2A	420	13.5	210
2	2B	170	18.0	110
Total (Rounded)				**840**

Note: All quantities are approximate.

Presented below are descriptions of the primary elements of the IRM, estimated costs, and an estimated schedule to complete the work. At the request of NYSDEC, TRC has included an evaluation of four excavation support options utilizing three different excavation support system types: 1) trench box, 2) slide rail, and 3) interlocking sheeting. The evaluation of two different size slide rail systems is included in this Conceptual Plan. It should be noted that due to the non-uniform distribution of contamination identified at the Site and gaps in horizontal and vertical delineation of VOC concentrations above Soil Cleanup Objectives, uncertainty exists as to whether the planned soil removal alone would result in adequate reduction of VOC concentrations in groundwater at extraction wells GX-2 and GX-7 and monitoring well WP-5A. Therefore, as described below, the IRM also includes the application of amendments to enhance post-excavation anaerobic bioremediation of petroleum-related VOCs.

Interim Remedial Measure Work Plan and Technical Scope of Work

TRC will prepare an IRM Work Plan describing the scope, estimated cost, and schedule in greater detail than in this memorandum for NYSDEC review and approval. TRC would also prepare a Technical Scope of Work, including drawings, for use by the Department for procurement of a Standby call-out contractor. The IRM Work Plan and Technical Scope of Work would be prepared in accordance with applicable provisions of NYSDEC DER-10, Technical Guidance for Site Investigation and Remediation and in consultation with the Department.

Implementation of Interim Remedial Measure Work Plan/Technical Scope of Work

Conceptual descriptions of significant IRM work elements are described below. However, the selected contractor will determine means and methods to complete the work. TRC will review contractor submittals and provide full-time on-Site supervision of the contractor's activities.

Mobilization and Site Preparation

Prior to mobilization, an existing conditions survey would be performed, and excavation limits would be staked out in the field. Erosion and sediment controls would be installed and locations of subsurface utilities and bulkhead tie backs (if present) would be identified. Since overhead power lines are located near proposed excavation areas, electrical service to the Site would be temporarily deactivated. The existing groundwater treatment system would be connected to a temporary power source. Subsurface utilities running through the excavation areas (e.g., potable water and natural gas lines) would be re-routed outside the limits of planned excavations. Additionally, clearing, grubbing, and grading would be performed in Excavation Zone 1B to prepare the area for installation of an excavation support system. Equipment, materials, and temporary facilities would be mobilized and staged at the Site.

Excavation Support Options

Potential excavation support systems are described below. Excavation support systems for Options 1, 2, and 3 would be installed and advanced concurrent with excavation activities. Sheeting under Option 4 would be installed prior to commencing excavation activities. As such, the time to implement each excavation support option varies. It is expected that the selected contractor would be required to submit a schedule for each phase of the work and description of means and methods proposed for excavation support, and that the contractor would be required to obtain TRC approval of the schedule and excavation support system prior to start of the work.

Option 1 – Large Slide Rail System

Slide rail excavation support utilizes a component system of steel panels and posts installed simultaneously by sliding the panels into rails on the posts and then pushing the panels and posts down as the excavation is advanced. Option 1 includes the installation of a 60-foot by 45-foot slide rail system encompassing the entirety of Excavation Zones 1A and 1B to facilitate excavation and backfilling of both zones in one effort. The conceptual slide rail system includes extensive bracing because of the large size of the system.

After Excavation Zone 1 is completed, the slide rail system posts and much of the slide rail equipment would be utilized to construct an excavation support system encompassing the entirety of Excavation Zones 2A and 2B. Excavation Zone 1 panels and bracing equipment not required for Excavation Zone 2 would be removed from the Site and delivery of different size slide rail system panels suitable for the smaller Excavation Zone 2 would be required for completion of Zone 2 work. The Excavation Zone 2 slide rail system would be approximately 29 feet long by 24 feet wide.

Option 2 – Small Slide Rail System

Option 2 includes the installation of individual slide rail systems, similar to those which would be utilized for Option 1, encompassing Excavation Zones 1A and B. Due to the smaller size of the slide rail systems, Option 2 would include less bracing than Option 1. A 56-foot by 28-foot slide rail system would be installed

around Excavation Zone 1A. Following completion of the excavation, backfilling, and slide rail system removal in Excavation Zone 1A, the same support technique would be used to excavate Excavation Zone 1B using a portion of the slide rail system posts, panels, and equipment used for Excavation Zone 1A. The Excavation Zone 1B slide rail system would be approximately 37 feet long by 18 feet wide.

Once Excavation Zone 1 is completed, the support of the entirety of Excavation Zone 2 could be completed with slide rail components already onsite from the Excavation Zone 1A and 1B slide rail systems, so a second equipment delivery would not be required. Additionally, unused slide rail equipment could be returned. Using the equipment already onsite from the Excavation Zone 1 system, the Excavation Zone 2 slide rail system would be approximately 37 feet long by 28 feet wide.

Option 3 – Trench Box

Option 3 includes advancement, removal, and relocation of a 24-foot by 8-foot by 16-foot trench box in Excavation Zones 1A and 1B for excavation of approximately one eleventh of the total area of both Excavation Zones per move. Following completion of the first setup excavation, backfilling, and trench box removal in Excavation Zone 1A or 1B, the same support technique would be repeated ten additional times to complete the work in Excavation Zones 1A and 1B.

After Excavation Zone 1 is completed, the same trench box would be used to excavate Excavation Zones 2A and 2B. It is estimated that four trench box excavation setups would be required to excavate the entirety of Excavation Zones 2A and 2B. In and around Zone 2B, at the start of the work, soil would be excavated to a depth of approximately 2 feet, in order to advance the trench box to 18 feet below ground surface.

Option 4 – Sheeting

Temporary sheeting would be installed around the perimeter of each excavation area and, if necessary, between the boundary of Excavation Zones 1A and 1B. A vibration monitoring plan would be developed and implemented to monitor for potential damage to the bulkhead during sheeting installation. Additionally, periodic inspection of the bulkhead would be performed. If predetermined vibration or settling limits were exceeded the contractor would be required to stop work and submit a corrective action plan. For cost estimating purposes, sheeting quantities are based on installing sheeting between Excavation Zones 1A and 1B and driving sheeting to three times the depth of each Excavation Zone.

Dewatering

Since excavations will be advanced several feet below the water table, dewatering will be required. Dewatering liquids would be conveyed to temporary tanks, treated utilizing the existing Site groundwater treatment system, and discharged to the reinjection gallery.

Soil Removal, Staging, Transportation, Disposal, and Backfilling

Soil would be excavated to the target elevation in each Excavation Zone and staged on-Site for disposal. Monitoring wells and existing remediation system infrastructure within the limits of excavations would be removed. Disturbed remediation system infrastructure and monitoring wells outside the limits of excavation would be abandoned in place. Components of the bulkhead would be identified, clearly marked and protected from disturbance by soil staging and loading operations.

Removed soil would be characterized and transported off-Site for disposal. Two confirmatory soil samples would be collected from the bottom of each Excavation Zone, for a total of eight confirmatory samples. The coordinates of the horizontal limits and elevation of the bottom of each Excavation Zone would be surveyed by a New York State-licensed surveyor. Excavations would be backfilled with imported clean fill, placed in lifts and compacted. Imported clean fill placed in the saturated and smear zones of excavations in lifts would be mixed with amendment (e.g., gypsum), to enhance anaerobic bioremediation of residual dissolved-phase petroleum-related VOCs.

Soil removal, staging, transportation, disposal, and backfilling would proceed at different rates for each excavation support option described above. Since slide rail systems and trench boxes are installed as an excavation is advanced, slower productivity is anticipated than with sheeting. During advancement of slide rail systems, excavated soil outside of the Excavation Zone limits would be stockpiled on-Site and screened for suitability for reuse and, if acceptable, returned to the same excavation, as practicable, during backfilling. The concept-level cost estimates which are part of this memorandum are based on reuse of excavated soil beyond the limits of the Excavation Zones targeted for remediation. However, final quantities of soil reused and disposed off-Site would vary based on conditions encountered and the contractor's selected means and methods. TRC estimates soil removal, staging, transportation, disposal, and backfilling would be completed within six weeks utilizing Option 1 (Large Slide Rail System), eight weeks utilizing Option 2 (Small Slide Rail System), 11 weeks utilizing Option 3 (Trench Box), and two weeks utilizing Option 4 (Sheeting).

Utility Reconnection, Surface Restoration, and Demobilization

At the completion of backfilling, excavation supports would be removed, electrical service would be reconnected and all equipment, excess materials, waste, and temporary tanks would be removed from the Site. Disturbed areas would be restored with asphalt and topsoil and seed, to match current conditions. Infrastructure associated with existing remediation systems which is disturbed or removed would not be restored or replaced. All disturbed groundwater monitoring wells would be replaced. Additionally, groundwater monitoring wells would be installed in the former locations of extraction wells GX-2 and GX-7.

Construction Completion Report

Upon completion of the work, TRC would prepare a Construction Completion Report in accordance with DER-10, including:

- A description of the work performed;
- Waste profiles;
- Copies of waste manifests and bills of lading;
- Truck weight tickets;
- Documentation of source of imported material;
- Daily inspection reports;
- Laboratory analytical results;
- Photograph log; and,
- Record drawings.

Cost Estimate

Based on the conceptual plan presented above, the estimated concept-level costs (including 20% contingency) to complete the IRM utilizing each excavation support option are presented below:

- Option 1: $1.3 million
- Option 2: $1.4 million
- Option 3: $1.5 million
- Option 4: $2.0 million

Cost estimate summaries utilizing each excavation support option are presented in **Attachment A**. The basis of the cost estimates is presented below.

Basis of Cost

- The Department would procure a Standby call-out contractor to implement the IRM. Therefore, costs for remedial design services for public bidding and bid phase services are not included in the cost estimate.
- Concept-level dewatering calculations and associated estimated costs are based on hydrogeologic data presented in the historic Environmental Resource Management (ERM) report: Supplemental Data Acquisition Summary & Analysis, dated March 3, 2012.
- Excavated material would be characterized as non-hazardous (petroleum impacted).
- Excavated material not specified for disposal would be returned to the excavation during backfilling.
- Excavation support systems would be removed after completion of backfilling activities.

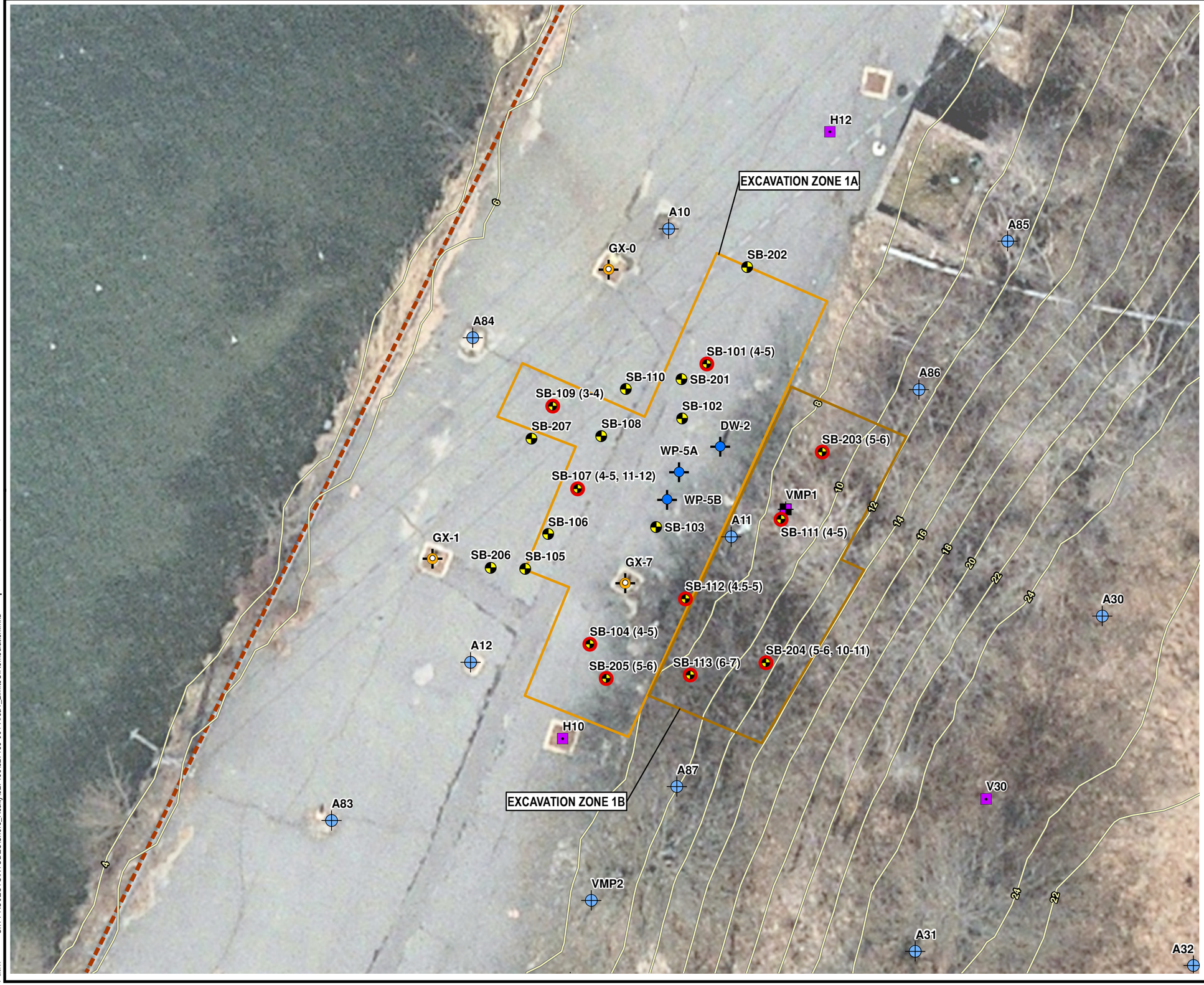
- Based on preliminary calculations, the existing groundwater treatment system will be adequate to treat dewatering liquids; however, confirmation will be required as part of development of the Technical Scope of Work.
- Cost estimate is based on performing the work during non-winter months.
- Costs to decommission and remove existing monitoring wells and remediation systems beyond the limits of the work are not included in the cost estimates.
- Costs to prepare a Site Management Plan or perform long-term groundwater monitoring are not included in the cost estimates.

Project Schedule

An estimated project schedule is presented below.

Task Description	*Estimated Time of Completion*
Preparation of IRM Work Plan and Technical SOW	8 weeks from authorization to proceed
Implementation of IRM	To be determined based on excavation support option selected
Construction Completion Report	4 weeks from receipt of contractor submittals

FIGURES

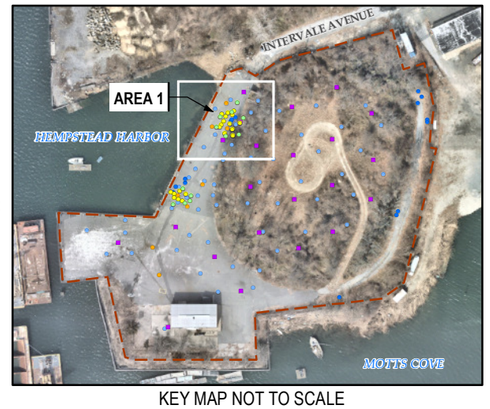


LEGEND

- SOIL BORING LOCATION
- AIR SPARGE WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- VAPOR MONITORING POINT
- APPROXIMATE LIMITS OF SOIL REMOVAL TO -1 FT NAVD88
- APPROXIMATE LIMITS OF SOIL REMOVAL TO -5 FT NAVD88
- FENCE

NOTES

1. BASE MAP IMAGERY FROM NEARMAP DATED MARCH 18, 2019.
2. GROUND SURFACE ELEVATION CONTOURS (NAVD88) ARE APPROXIMATE AND WERE CREATED USING THE USGS LONG ISLAND 2014 LIDAR COLLECTION.
3. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES ARE APPROXIMATE, UNLESS STATED OTHERWISE.
4. SOIL BORING LOCATIONS WERE SURVEYED ON JANUARY 10, 2020, THE LOCATION OF SB-103 IS APPROXIMATE.
5. RED RING AROUND BORING SYMBOL INDICATES ETHYLBENZENE, TOLUENE, AND/OR TOTAL XYLENES WERE DETECTED AT A CONCENTRATION GREATER THAN THE UNRESTRICTED USE SOIL CLEANUP OBJECTIVE. INTERVAL IN PARANTHESES INDICATES DEPTH (FEET BELOW GROUND SURFACE) OF EXCEEDANCES. FIELD OBSERVATIONS (E.G., PID READINGS) WERE ADDITIONALLY USED TO ESTABLISH LIMITS OF EXCAVATION.
6. SOIL BORING LOCATION SB-204 WAS GRADED TO APPROXIMATELY ELEVATION 7.5 FT (NAVD88) PRIOR TO ADVANCEMENT.



KEY MAP NOT TO SCALE

0 5 10 Feet

1 " = 10 '

1:120

N

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SHORE REALTY CORPORATION (AES) - SITE NO. 130006
1 SHORE ROAD
GLENWOOD LANDING, NEW YORK 11547

TITLE:
INVESTIGATION AREA 1 CONCEPTUAL LIMITS OF EXCAVATION ZONES

DRAWN BY:	E. CORDERO	PROJ. NO.:	327138
CHECKED BY:	D. WARREN		
APPROVED BY:	D. GLASS		**FIGURE 1**
DATE:	MARCH 2020		

TRC
1430 Broadway, 10th Floor
New York , NY 10018
Phone: 212.221.7822
www.trccompanies.com

FILE NO.: 327138-004-Area1_LimitsOfRemediation.mxd

Plot Date: 3/31/2020, 15:35:52 PM by ECORDERO – LAYOUT: ANSI B(11"x17")
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Map Rotation: 0

TRC - GIS

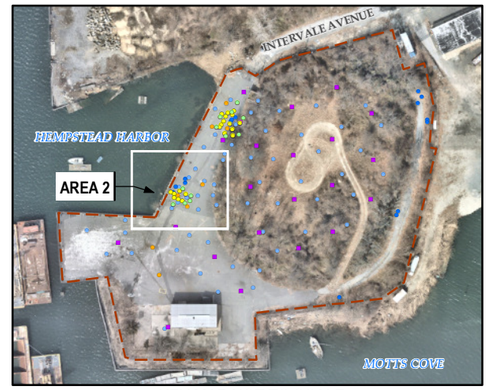
Plot Date: 3/31/2020, 15:18:01 PM by ECORDERO
Path: S:\1-PROJECTS\NYSDEC\Shore_Realty\327138\327138-004-Area2_LimitsOfRemediation.mxd
Coordinate System: NAD 1983 StatePlane New York Long Island FIPS 3104 Feet (Foot US)
Map Rotation: 0

LEGEND

- SOIL BORING LOCATION
- AIR SPARGE WELL
- GROUNDWATER EXTRACTION WELL
- GROUNDWATER MONITORING WELL
- SOIL VAPOR EXTRACTION WELL
- APPROXIMATE LIMITS OF SOIL REMOVAL TO -6 FT NAVD88
- APPROXIMATE LIMITS OF SOIL REMOVAL TO -10 FT NAVD88
- FENCE

NOTES

1. BASE MAP IMAGERY FROM NEARMAP DATED MARCH 18, 2019.
2. GROUND SURFACE ELEVATION CONTOURS (NAVD88) ARE APPROXIMATE AND WERE CREATED USING THE USGS LONG ISLAND 2014 LIDAR COLLECTION.
3. LOCATIONS AND DIMENSIONS OF PHYSICAL FEATURES ARE APPROXIMATE, UNLESS STATED OTHERWISE.
4. SOIL BORING LOCATIONS WERE SURVEYED ON JANUARY 10, 2020.
5. RED RING AROUND BORING SYMBOL INDICATES ETHYLBENZENE, TOLUENE, AND/OR TOTAL XYLENES WERE DETECTED AT A CONCENTRATION GREATER THAN THE UNRESTRICTED USE SOIL CLEANUP OBJECTIVE OR EVIDENCE OF PRODUCT WAS OBSERVED. INTERVAL IN PARANTHESES INDICATES DEPTH (FEET BELOW GROUND SURFACE) OF EXCEEDANCES OR PRODUCT. FIELD OBSERVATIONS (E.G., PID READINGS) WERE ADDITIONALLY USED TO ESTABLISH LIMITS OF EXCAVATION.



KEY MAP NOT TO SCALE

0 5 10 Feet

1 " = 10 '
1:120

N

PROJECT:
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SHORE REALTY CORPORATION (AES) - SITE NO. 130006
1 SHORE ROAD
GLENWOOD LANDING, NEW YORK 11547

TITLE:
INVESTIGATION AREA 2 CONCEPTUAL LIMITS OF EXCAVATION ZONES

DRAWN BY:	E. CORDERO	PROJ. NO.:	327138
CHECKED BY:	D. WARREN		
APPROVED BY:	D. GLASS		
DATE:	MARCH 2020		

FIGURE 2

TRC
1430 Broadway, 10th Floor
New York , NY 10018
Phone: 212.221.7822
www.trccompanies.com

FILE NO.: 327138-004-Area2_LimitsOfRemediation.mxd

ATTACHMENT A – COST ESTIMATES

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SHORE REALTY CORPORATION (AES) - SITE NO. 130006
CONTRACT/WA NO. D009812-01
CONCEPT-LEVEL COST ESTIMATE FOR SOIL EXCAVATION AND OFF-SITE DISPOSAL
EXCAVATION SUPPORT OPTION 1 - LARGE SLIDE RAIL SYSTEM
JUNE 2020

	ITEM DESCRIPTION	UNIT	ESTIMATED UNIT COST	ESTIMATED QUANTITY	ESTIMATED EXTENDED COST
1	PREPARATION OF INTERIM REMEDIAL MEASURE WORK PLAN	LS	$40,000	1	$40,000
2	PREPARATION OF TECHNICAL SCOPE OF WORK	LS	$45,000	1	$45,000
3	MOBILIZATION (SUBMITTALS, SITE PREPARATION, CLEARING AND GRUBBING, TEMPORARY FACILITIES, EROSION AND SEDIMENTATION CONTROLS, UTILITY AND TIE-BACK LOCATING, WELL ABANDONMENT, ETC.)	LS	$95,000	1	$95,000
4	UTILITY RELOCATING AND ELECTRICAL SERVICE DISCONNECTION AND REACTIVATION	LS	$25,000	1	$25,000
5	DEWATERING (SYSTEM SETUP, OPERATION AND REMOVAL)	LS	$150,000	1	$150,000
6	EXCAVATION ZONES 1A AND 1B SLIDE RAIL SYSTEM RENTAL	MONTH	$68,000	1	$68,000
7	EXCAVATION ZONES 2A AND 2B SLIDE RAIL SYSTEM MOBILIZATION [1]	LS	$5,400	1	$5,400
8	EXCAVATION ZONES 2A AND 2B SLIDE RAIL SYSTEM RENTAL	WEEK	$6,300	2	$12,600
9	ONSITE SUPPORT FOR SLIDE RAIL INSTALLATION	WEEK	$3,000	3	$9,000
10	SUPPORT SYSTEM INSTALLATION AND ADVANCEMENT, EXCAVATION, STOCKPILING, AND LOADING (INCLUDING WASTE CHARACTERIZATION SAMPLING AND ANALYSIS)[2]	CY	$80	1,825	$146,000
11	TRANSPORTATION AND DISPOSAL OF EXCAVATED MATERIAL (NON-HAZARDOUS)	TON	$125	1,430	$178,750
12	PLACEMENT OF CLEAN FILL (TESTING, IMPORT, MIXING WITH AMENDMENT, PLACEMENT, AND COMPACTION)	CY (IN PLACE)	$50	840	$42,000
13	BACKFILL OF STOCKPILED MATERIAL	CY (IN PLACE)	$20	985	$19,700
14	ENHANCED BIOREMEDIATION AMENDMENT (GYPSUM)	LB	$0.25	12,000	$3,000
15	ENHANCED BIOREMEDIATION AMENDMENT (UREA)	50 LBS	$100	3	$300
16	POST-EXCAVATION SAMPLING, ANALYSIS AND REPORTING	EACH	$250	8	$2,000
17	PAVEMENT RESTORATION	SF	$15	2,800	$42,000
18	PLACEMENT OF TOPSOIL AND SEEDING	SF	$3	600	$1,800
19	PRE-EXCAVATION, PROGRESS, AND POST-EXCAVATION SURVEYS	LS	$25,000	1	$25,000
20	WELL REPLACEMENT	EACH	$4,500	7	$31,500
21	DEMOBILIZATION	LS	$25,000	1	$25,000
22	CONSTRUCTION PHASE ENGINEERING SERVICES	LS	$100,000	1	$100,000
23	PREPARATION OF CONSTRUCTION COMPLETION REPORT	LS	$50,000	1	$50,000
		SUBTOTAL			$1,117,050
		CONTINGENCY (20%)			$223,410
		TOTAL (ROUNDED):			**$1,341,000**

NOTES

[1] - A SECOND MOBILIZATION IS REQUIRED TO DELIVER ADDITIONAL SLIDE RAIL SYSTEM EQUIPMENT REQUIRED FOR EXCAVATION ZONES 2A AND 2B.

[2] - BASED ON REUSE OF EXCAVATED MATERIAL NOT SPECIFIED FOR DISPOSAL.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SHORE REALTY CORPORATION (AES) - SITE NO. 130006
CONTRACT/WA NO. D009812-01
CONCEPT-LEVEL COST ESTIMATE FOR SOIL EXCAVATION AND OFF-SITE DISPOSAL
EXCAVATION SUPPORT OPTION 2 - SMALL SLIDE RAIL SYSTEM
JUNE 2020

	ITEM DESCRIPTION	UNIT	ESTIMATED UNIT COST	ESTIMATED QUANTITY	ESTIMATED EXTENDED COST
1	PREPARATION OF INTERIM REMEDIAL MEASURE WORK PLAN	LS	$40,000	1	$40,000
2	PREPARATION OF TECHNICAL SCOPE OF WORK	LS	$45,000	1	$45,000
3	MOBILIZATION (SUBMITTALS, SITE PREPARATION, CLEARING AND GRUBBING, TEMPORARY FACILITIES, EROSION AND SEDIMENTATION CONTROLS, UTILITY AND TIE-BACK LOCATING, WELL ABANDONMENT, ETC.)	LS	$85,000	1	$85,000
4	UTILITY RELOCATING AND ELECTRICAL SERVICE DISCONNECTION AND REACTIVATION	LS	$25,000	1	$25,000
5	DEWATERING (SYSTEM SETUP, OPERATION AND REMOVAL)	LS	$188,000	1	$188,000
6	EXCAVATION SLIDE RAIL SYSTEM RENTAL	MONTH	$41,200	2	$82,400
7	ONSITE SUPPORT FOR SLIDE RAIL INSTALLATION	WEEK	$3,000	4	$12,000
8	SUPPORT SYSTEM INSTALLATION AND ADVANCEMENT, EXCAVATION, STOCKPILING, AND LOADING (INCLUDING WASTE CHARACTERIZATION SAMPLING AND ANALYSIS)[1]	CY	$130	1,500	$195,000
9	TRANSPORTATION AND DISPOSAL OF EXCAVATED MATERIAL (NON-HAZARDOUS)	TON	$125	1,430	$178,750
10	PLACEMENT OF CLEAN FILL (TESTING, IMPORT, MIXING WITH AMENDMENT, PLACEMENT, AND COMPACTION)	CY (IN PLACE)	$50	840	$42,000
11	BACKFILL OF STOCKPILED MATERIAL	CY (IN PLACE)	$20	660	$13,200
12	ENHANCED BIOREMEDIATION AMENDMENT (GYPSUM)	LB	$0.25	12,000	$3,000
13	ENHANCED BIOREMEDIATION AMENDMENT (UREA)	50 LBS	$100	3	$300
14	POST-EXCAVATION SAMPLING, ANALYSIS AND REPORTING	EACH	$250	8	$2,000
15	PAVEMENT RESTORATION	SF	$15	2,700	$40,500
16	PLACEMENT OF TOPSOIL AND SEEDING	SF	$3	600	$1,800
17	PRE-EXCAVATION, PROGRESS, AND POST-EXCAVATION SURVEYS	LS	$25,000	1	$25,000
18	WELL REPLACEMENT	EACH	$4,500	7	$31,500
19	DEMOBILIZATION	LS	$25,000	1	$25,000
20	CONSTRUCTION PHASE ENGINEERING SERVICES	LS	$120,000	1	$120,000
21	PREPARATION OF CONSTRUCTION COMPLETION REPORT	LS	$50,000	1	$50,000
			SUBTOTAL		$1,205,450
			CONTINGENCY (20%)		$241,090
			TOTAL (ROUNDED):		**$1,447,000**

Assumptions

[1] - BASED ON REUSE OF EXCAVATED MATERIAL NOT SPECIFIED FOR DISPOSAL.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SHORE REALTY CORPORATION (AES) - SITE NO. 130006
CONTRACT/WA NO. D009812-01
CONCEPT-LEVEL COST ESTIMATE FOR SOIL EXCAVATION AND OFF-SITE DISPOSAL
EXCAVATION SUPPORT OPTION 3 - TRENCH BOX
JUNE 2020

	ITEM DESCRIPTION	UNIT	ESTIMATED UNIT COST	ESTIMATED QUANTITY	ESTIMATED EXTENDED COST
1	PREPARATION OF INTERIM REMEDIAL MEASURE WORK PLAN	LS	$40,000	1	$40,000
2	PREPARATION OF TECHNICAL SCOPE OF WORK	LS	$45,000	1	$45,000
3	MOBILIZATION (SUBMITTALS, SITE PREPARATION, CLEARING AND GRUBBING, TEMPORARY FACILITIES, EROSION AND SEDIMENTATION CONTROLS, UTILITY AND TIE-BACK LOCATING, WELL ABANDONMENT, ETC.)	LS	$80,000	1	$80,000
4	UTILITY RELOCATING AND ELECTRICAL SERVICE DISCONNECTION AND REACTIVATION	LS	$25,000	1	$25,000
5	DEWATERING (SYSTEM SETUP, OPERATION AND REMOVAL)	LS	$244,000	1	$244,000
6	TRENCH BOX RENTAL	MONTH	$2,700	3	$8,100
7	SUPPORT SYSTEM INSTALLATION AND ADVANCEMENT, EXCAVATION, STOCKPILING, AND LOADING (INCLUDING WASTE CHARACTERIZATION SAMPLING AND ANALYSIS)[1]	CY	$210	1,320	$277,200
8	TRANSPORTATION AND DISPOSAL OF EXCAVATED MATERIAL (NON-HAZARDOUS)	TON	$125	1,430	$178,750
9	PLACEMENT OF CLEAN FILL (TESTING, IMPORT, MIXING WITH AMENDMENT, PLACEMENT, AND COMPACTION)	CY (IN PLACE)	$50	840	$42,000
10	BACKFILL OF STOCKPILED MATERIAL	CY (IN PLACE)	$20	480	$9,600
11	ENHANCED BIOREMEDIATION AMENDMENT (GYPSUM)	LB	$0.25	12,000	$3,000
12	ENHANCED BIOREMEDIATION AMENDMENT (UREA)	50 LBS	$100	3	$300
13	POST-EXCAVATION SAMPLING, ANALYSIS AND REPORTING	EACH	$250	8	$2,000
14	PAVEMENT RESTORATION	SF	$15	2,300	$34,500
15	PLACEMENT OF TOPSOIL AND SEEDING	SF	$3	600	$1,800
16	PRE-EXCAVATION, PROGRESS, AND POST-EXCAVATION SURVEYS	LS	$25,000	1	$25,000
17	WELL REPLACEMENT	EACH	$4,500	7	$31,500
18	DEMOBILIZATION	LS	$25,000	1	$25,000
19	CONSTRUCTION PHASE ENGINEERING SERVICES	LS	$150,000	1	$150,000
20	PREPARATION OF CONSTRUCTION COMPLETION REPORT	LS	$50,000	1	$50,000
		SUBTOTAL			$1,272,750
		CONTINGENCY (20%)			$254,550
		TOTAL (ROUNDED):			**$1,528,000**

Assumptions

[1] - BASED ON REUSE OF EXCAVATED MATERIAL NOT SPECIFIED FOR DISPOSAL.

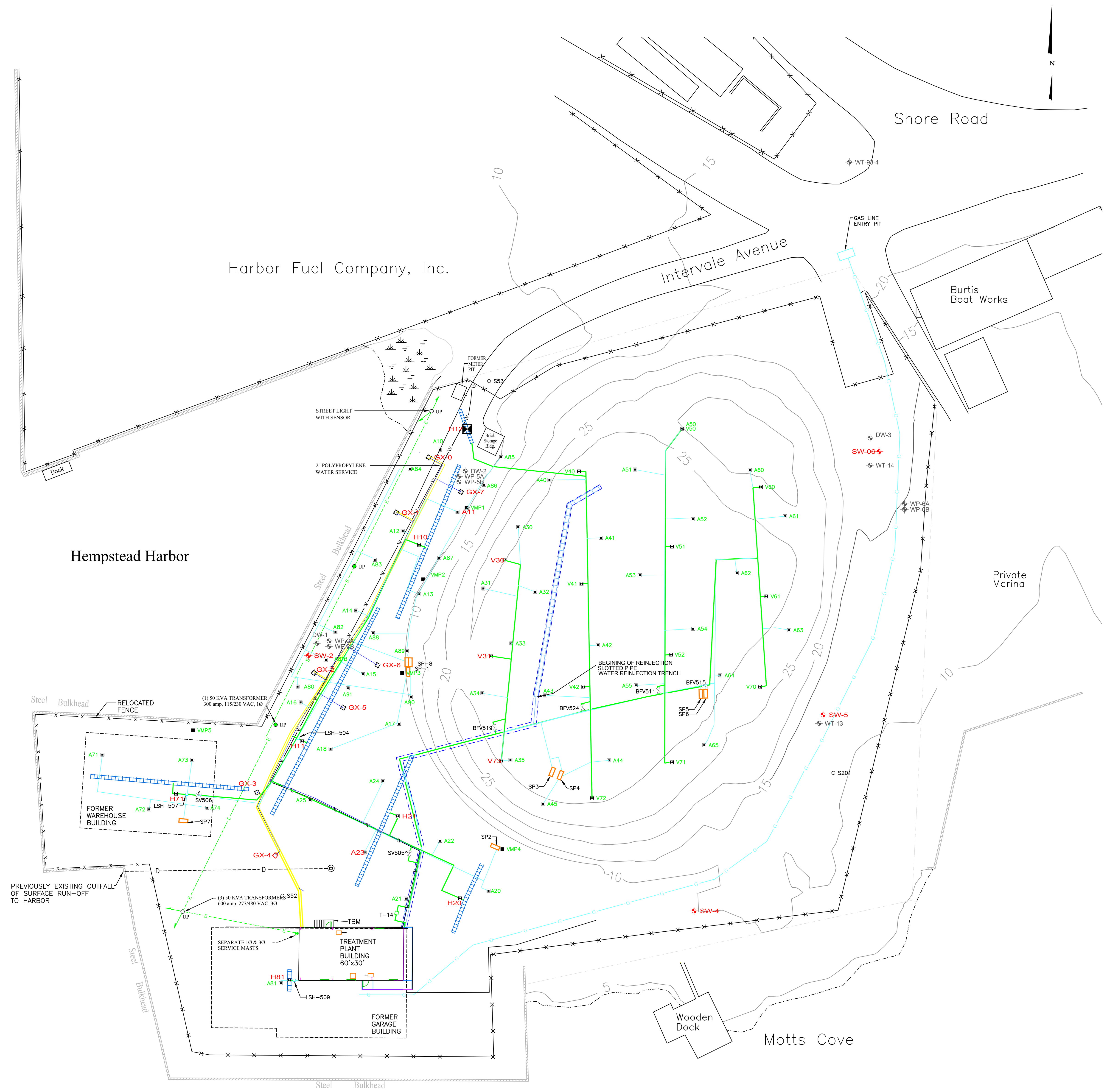
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
SHORE REALTY CORPORATION (AES) - SITE NO. 130006
CONTRACT/WA NO. D009812-01
CONCEPT-LEVEL COST ESTIMATE FOR SOIL EXCAVATION AND OFF-SITE DISPOSAL
EXCAVATION SUPPORT OPTION 4 - SHEETING
JUNE 2020

	ITEM DESCRIPTION	UNIT	ESTIMATED UNIT COST	ESTIMATED QUANTITY	ESTIMATED EXTENDED COST
1	PREPARATION OF INTERIM REMEDIAL MEASURE WORK PLAN	LS	$40,000	1	$40,000
2	PREPARATION OF TECHNICAL SCOPE OF WORK	LS	$45,000	1	$45,000
3	MOBILIZATION (SUBMITTALS, SITE PREPARATION, CLEARING AND GRUBBING, TEMPORARY FACILITIES, EROSION AND SEDIMENTATION CONTROLS, UTILITY AND TIE-BACK LOCATING, WELL ABANDONMENT, ETC.)	LS	$75,000	1	$75,000
4	UTILITY RELOCATING AND ELECTRICAL SERVICE DISCONNECTION AND REACTIVATION	LS	$25,000	1	$25,000
5	DEWATERING (SYSTEM SETUP, OPERATION AND REMOVAL)	LS	$75,000	1	$75,000
6	EXCAVATION, STOCKPILING, AND LOADING (INCLUDING WASTE CHARACTERIZATION SAMPLING AND ANALYSIS)	CY	$60	840	$50,400
7	SHEETING (INSTALLATION, REMOVAL AND SALVAGE)	SF	$75	12,000	$900,000
8	TRANSPORTATION AND DISPOSAL OF EXCAVATED MATERIAL (NON-HAZARDOUS)	TON	$125	1,430	$178,750
9	PLACEMENT OF CLEAN FILL (TESTING, IMPORT, MIXING WITH AMENDMENT, PLACEMENT, AND COMPACTION)	CY (IN PLACE)	$50	840	$42,000
10	ENHANCED BIOREMEDIATION AMENDMENT (GYPSUM)	LB	$0.25	12,000	$3,000
11	ENHANCED BIOREMEDIATION AMENDMENT (UREA)	50 LBS	$100	3	$300
12	POST-EXCAVATION SAMPLING, ANALYSIS AND REPORTING	EACH	$250	8	$2,000
13	PAVEMENT RESTORATION	SF	$15	1,400	$21,000
14	PLACEMENT OF TOPSOIL AND SEEDING	SF	$3	600	$1,800
15	PRE-EXCAVATION, PROGRESS, AND POST-EXCAVATION SURVEYS	LS	$25,000	1	$25,000
16	WELL REPLACEMENT	EACH	$4,500	6	$27,000
17	DEMOBILIZATION	LS	$25,000	1	$25,000
18	CONSTRUCTION PHASE ENGINEERING SERVICES	LS	$80,000	1	$80,000
19	PREPARATION OF CONSTRUCTION COMPLETION REPORT	LS	$50,000	1	$50,000
		SUBTOTAL			$1,666,250
		CONTINGENCY (20%)			$333,250
		TOTAL (ROUNDED):			**$2,000,000**

APPENDIX C

Remedial Systems Layout

0 40' 80'
GRAPHIC SCALE IN FEET



QUARTERLY SITE MONITORING POINTS ARE IN RED

LEGEND

- GROUNDWATER MONITORING WELL
- VAPOR EXTRACTION POINT
- VAPOR MONITORING POINT
- AIR SPARGE WELL
- GROUNDWATER EXTRACTION WELL
- WATER UTILITY LINE
- GAS UTILITY LINE
- ELECTRIC UTILITY LINE
- ELECTRIC UTILITY POLE
- ELECTRIC UTILITY POLE WITH GUIDE WIRES
- VAPOR EXTRACTION PIPE
- AIR SPARGING LINE
- UTILITY SITE DRAINAGE
- GW EXTRACTION PIPES
- GW EXTRACTION INST POWER
- GROUNDWATER REINJECTION TRENCH
- FENCE

0 30' 60'
GRAPHIC SCALE IN FEET

SOURCE: HANDEX OF NEW JERSEY, INC. 500 CAMPUS DRIVE P.O. BOX 451, MORGANVILLE, NEW JERSEY, 07751
SITE PLAN DWG NAME: 12499-SP, DATE 2/16/2002 FIGURE 1
BASEPLAN DONE BY: LAND TECH REMEDIAL, INC.

TITLE

SITE LAYOUT MAP
AES/SHORE REALTY
SUPERFUND SITE

PREPARED FOR

THE PERFORMING PARTIES GROUP

Environmental Resources Management

DRAWN BY	SCALE	DATE	JOB NO.	FIGURE
CWW/EMF	AS SHOWN	04/03/2014	0235063.08	2

APPENDIX D

Schedule 1 – Work Assignment No. D009812-01

SCHEDULE 1

SCOPE OF WORK

SHORE REALTY CORPORATION (AES)

WA NO. D009812-01

SITE MANAGEMENT

SCHEDULE 1 – SCOPE OF WORK
SHORE REALTY CORPORATION (AES)
WA NO. D009812-01
SITE MANAGEMENT
APRIL 2020

Task 1 – Preliminary Activities

Work Assignment Package

TRC Engineers, Inc. (TRC) will prepare a Work Assignment (WA) Package, including a cover letter, Schedule 1 - Scope of Work, Schedule 2 - Schedule 2.11s, and Schedule 3 - Supporting Documentation (e.g., WA Package Checklist, subcontractor documentation, etc.) consistent with Department requirements. The complete WA Package will be sent to the Department's Contract Manager and Project Manager for review and approval. TRC will review any comments provided by the Department and revise the WA Package (as necessary), as part of this task.

Task 2 – Operation, Maintenance and Monitoring

TRC will operate, maintain and monitor the existing groundwater extraction, air sparge (AS), soil vapor extraction (SVE), and water and vapor treatment systems, collectively referred to as "remediation systems" for 12 months, beginning in March 2020, consistent with the most-recent practice including the pulsing cycle. Groundwater extraction, AS, and SVE systems will be cycled on for two months and off for one month. The AS system will be pulsed to run for 24 hours on and one hour off during operating months. Groundwater extraction, SVE, and water and vapor treatment systems will be operated continuously during operating months. For the purpose of this Scope of Work, the term "biweekly" shall be defined as twice per week. For budgeting purposes, the Scope of Work is based on continued operation of the remediation systems for the full duration of the WA and that the remediation systems will not be shut down and/or temporarily decommissioned during the WA[1]. Laboratory analytical services under this task will be performed by a NYSDEC call-out laboratory. Therefore, costs for laboratory services are not included in the Schedule 2.11s.

Operation, Maintenance, and Monitoring (OM+M) activities will consist of:

- General
    - Annual inspection of backflow preventer and inspection and servicing of fire extinguishers in accordance with local regulations and codes. This Scope of

[1] Since the schedule for implementation of the Interim Remedial Measure (IRM) under Task 6 is unknown, the work activities under Task 2 are presented with the understanding that no modifications to current OM+M procedures would be made as a result of IRM implementation.

Work includes costs for one inspection/service event for both the backflow preventer and fire extinguishers.
    - Snow removal services to maintain site accessibility.
    - Landscaping to maintain access to monitoring wells and the elevated/vegetated portion of the Site.
    - Removal and off-Site disposal of municipal solid waste every two weeks.
    - Biweekly housekeeping and equipment/supply inventorying.
    - Biweekly visual inspection of the harbor, from the Site, for sheen on surface water.
    - Weekly documentation of natural gas and electrical (single and three-phase) meter readings.
    - Weekly inspection of plant heating system and water supply piping.

- Groundwater Extraction System
    - Weekly cleaning and testing of the three level-sensing (conductivity) probes in each of the eight groundwater extraction wells (GX-0 through GX-7).
    - Weekly documentation of the total flow, in gallons, from each groundwater extraction well.

- Air Sparge System
    - Weekly inspection of air compressor and documentation of total hours of operation; drain air receiver tank (T-05) and compressor.
    - Preventative maintenance of air compressor in accordance with manufacturer's recommendations. Scheduled service shall be performed approximately every 2,000 hours of operation.
    - Weekly inspection and documentation of air flow (cubic feet per hour) to each of the 24 AS wells.

- Soil Vapor Extraction and Treatment System
    - Weekly inspection of SVE blower, and documentation of total hours of operation, temperature, influent pressure (inches of water, measured at moisture separator), and influent photoionization detector (PID) measurement in parts per million (ppm).
    - Weekly documentation of blower and post-vapor phase granular activated carbon (VGAC) effluent pressure (inches of water), VGAC effluent flow rate in cubic feet per minute, and VGAC effluent PID measurement in ppm.
    - Monthly greasing of SVE blower motor and tightening of SVE blower belts.
    - Monthly collection of vapor sample from VGAC effluent via SUMMA® canister and laboratory analysis for total petroleum hydrocarbons (TPH) and benzene, toluene, ethylbenzene, and total xylenes (BTEX) via United States Environmental Protection Agency (USEPA) Method TO-3.
    - Quarterly, during the final week of each 2-month operating period, collection of vacuum and PID measurements from each of the 10 currently utilized soil vapor extraction wells (H-10, H-11, H-12, H-20, H-21, H-71, H-81, V-30, V-31, and V-73).
    - No removal and replacement of VGAC is included in this Scope of Work since it is not expected to be required during the planned 12-month operating period.

- Water Treatment System
    - Biweekly inspection of extracted groundwater, SVE condensate, sludge tank (T-03), supernatant tank (T-09), and building sump effluent equalization tank (T-01); clarifier (T-02); clarifier supernatant tank (T-06); and T-03. Routine decanting of T-03 will be performed based on visual inspections.
    - Biweekly monitoring of plant influent and effluent pH and iron concentrations via field instrumentation.
    - Biweekly removal and replacement of two 10-micron and two 5-micron bag filters from November to March; note that bag filter replacement frequency will increase and be performed three times per week between April and October 2020.
    - Biweekly documentation of total water discharge to reinjection gallery from both local and remote flow totalizers and the instantaneous flow rate during a discharge cycle.
    - Monthly greasing of sludge auger (A-01) drive chain per manufacturer's instructions.
    - Monthly collection of water samples from the influent to the primary bag filters and combined LGAC effluent via the discharge pipe, and analysis for BTEX and methylene chloride via USEPA Method 624.
    - Monthly backwash of the two liquid phase granular activated carbon (LGAC) vessels to remove accumulated sediment.
    - Monthly nutrient amendment (i.e., injection) of solution consisting of 100 pounds of ammonium chloride, 5 pounds of monopotassium phosphate, and 5 pounds of dipotassium phosphate; amendment will be mixed and injected in a single batch. Amendment solution will be mixed in T-04 and pumped to discharge injection galley.
    - Removal and replacement of 165 pounds of LGAC every two operating months from each of the two LGAC vessels during the 12-month period (i.e., total of four replacement events for each LGAC vessel).
    - Removal and off-site disposal of accumulated sludge in T-03 via vacuum truck extraction. TRC anticipates that the waste will be characterized for disposal utilizing existing Site data. A total of two waste disposal events have been included in the Scope of Work to account for the sludge currently accumulated at the Site.
    - Removal and off-Site disposal of drummed spent carbon and used bag filters. TRC anticipates that waste will be characterized for disposal utilizing existing Site data. A total of two waste disposal events have been included in the Scope of Work for each waste stream to account for drums currently accumulated at the Site.

OM+M activities during each 1-month non-operating period will consist of:

- General
    - Inspection of backflow preventer(s) and inspection and servicing of fire extinguishers in accordance with local regulations and codes.
    - Snow removal services to maintain site accessibility.

- Landscaping to maintain access to monitoring wells and the elevated/vegetated portion of the Site.
- Weekly housekeeping and equipment/supply inventorying.
- Weekly documentation of natural gas and electrical (single and three-phase) meter readings.
- Weekly inspection of plant heating system and water supply piping.
- Preventative maintenance items identified during the operating period.

- Groundwater Extraction System
  - Removal and maintenance (e.g., cleaning with muriatic acid) of groundwater extraction pumps, as necessary.

- Water Treatment System
  - Removal/cleaning of accumulated sludge in T-01, T-02, T-06, associated level switches and bag filter housings via pressure washing. Removed sludge will be transferred to T-03.

Upon collection, wastewater samples will be placed in laboratory-supplied containers, labeled, placed in coolers with ice and shipped, with the vapor sample, under chain-of-custody protocols to TestAmerica Laboratories, Inc., under contract to NYSDEC as a call-out laboratory. Therefore, costs for laboratory services will not be included in the Schedule 2.11s. Quality control samples will not be collected. Field work, including sample collection and analysis, will be completed in accordance with the Generic and Site-Specific Health and Safety Plan, Generic Field Activities Plan (FAP), and Generic Quality Assurance Project Plan (QAPP).

Remediation systems OM+M activities will be reported in Semi-Annual Site Monitoring Reports as described in Task 5. Laboratory analytical data generated under Task 2 will not be validated. TRC anticipates the activities described under Task 2 will be completed with biweekly Site OM+M visits by the Plant Operator and weekly Site OM+M visits by a Plant Technician during each 2-month operating period and weekly Site OM+M visits by the Plant Operator and Plant Technician during each 1-month non-operating period. In consultation with the Department, TRC may recommend reduced frequency of Site OM+M and O+M visits, as appropriate.

Additionally, unanticipated OM+M activities will likely arise during the duration of the Work Assignment. Therefore, TRC has included budget for additional OM+M visits, non-routine maintenance tasks (plant sump cleaning, manhole repairs, etc.), and unforeseeable equipment repairs or replacement and other operating costs in the WA Package. Additionally, since Lexington Technologies has previously provided licensed electrician and controls support to the Site, including the installation, troubleshooting, and repair of existing Progammable Logic Controller (PLC) infrastructure, TRC has included budget for their services in this WA Package.

Task 3 – Supplemental Investigation

Investigation Derived Waste

Soil cuttings generated during a Supplemental Investigation performed in July and December 2019 are containerized in 55-gallon drums staged at the Site. Analysis for waste characterization purposes of one soil sample and transportation and off-Site disposal of the drums has been included in the Work Assignment Package.

Task 4 – Groundwater Monitoring

Groundwater samples will be collected via low-flow sampling techniques quarterly (i.e., a total of four sampling events), approximately two weeks after the completion of each 2-month operating period, from the eight groundwater extraction wells (GX-0 through GX-7), four groundwater monitoring wells (SW-4 through SW-6 and WP-5A), and one air sparge well (A-23). Headspace readings and depth to water and total well depth measurements will be collected from each well prior to sampling. Upon collection, groundwater samples will be placed in laboratory-supplied containers, labeled, placed in coolers with ice and shipped under chain-of-custody protocols to TestAmerica Laboratories, Inc., under contract to NYSDEC as a call-out laboratory. Therefore, costs for laboratory services will not be included in the Schedule 2.11s. Groundwater samples will be submitted for laboratory analysis for Target Compound List VOCs via USEPA Method 8260. Quality control samples will be in accordance with the Generic QAPP. Field work, including sample collection and analysis, will be completed in accordance with the Generic and Site-Specific Health and Safety Plan, Generic FAP, and Generic QAPP.

The laboratory will provide Category B data deliverable packages and TRC will validate analytical results in accordance with NYSDEC DER-10. Electronic Data Deliverables in EQuIS™ format will be submitted to the NYSDEC. Results of analysis of groundwater samples will be included in Semi-Annual Site Monitoring Reports described in Task 5.

Task 5 – Semi-Annual Site Monitoring Reporting

TRC will prepare and submit to the NYSDEC three Semi-Annual Site Monitoring Reports in May and November 2020, and March 2021. Each report will document the following:

- Summary of OM+M activities completed under Task 2.

- Summary of remediation systems performance data including items such as:
    - Number of days the systems operated during the reporting period or the percentage of run time for the reporting period.
    - Volumes processed during the reporting period and the cumulative total processed for each system during the reporting period.
    - Average, high and low flows.
    - Estimated mass of contaminants removed by each system.

- Description and explanation of significant downtime and/or performance issues encountered (if any) during the reporting period and the associated resolution(s).

- Field data collected (e.g., vacuum and pressure readings, PID readings, etc.).

- Summary of groundwater monitoring activities completed under Task 4. Since groundwater elevations and flow direction at the Site have been well documented, groundwater elevation contour maps will not be prepared.

- Summary of performance and effectiveness of the remediation systems, including identification of needed repairs or modifications.

- Summary of OM+M costs, including recommendations (if any) for cost savings.

- Summary of new conclusions or observations regarding Site contamination based on the inspections, sampling or data generated by operating the systems.

- Recommendations regarding any necessary changes to the Site remedy, OM+M or Standard Operating Procedures.

Task 6 – Interim Remedial Measure

This WA Package has been prepared with the understanding that an Interim Remedial Measure (IRM) will be implemented at the Site. The final details of the IRM have not been determined at this time. Therefore, the estimated cost presented in this WA Package (developed using 2020 labor and expense rates) for Task 6 have been prepared in accordance with recent communications with the Department and are based on an IRM consisting of excavation and off-Site disposal of petroleum-related VOC-impacted soil, including the following:

- TRC will develop a conceptual plan for an IRM consisting of removal and off-Site disposal of petroleum-related VOC-impacted soil, which is the likely source of residual groundwater contamination at the Site, and backfilling with clean fill mixed with amendment to enhance bioremediation.
- TRC will prepare an IRM Work Plan (IRMWP), which will include a detailed description of the selected IRM and anticipated schedule for implementation.
- TRC will prepare a Technical Scope of Work for implementation of the IRM for use by the NYSDEC for procurement of a NYSDEC Standby call-out contractor.
- TRC will review contractor submittals and provide full-time on-Site supervision of contractor activities during implementation of the IRM. Since the details of the IRM (e.g., number of submittals, contractor's schedule, etc.) have not yet been determined, estimated costs in the Schedule 2.11s are intended to serve as a placeholder. Final budget and scope of engineering services for implementation of the IRM will be determined after the call-out contractor has been selected. As indicated above, it is TRC's understanding

that the IRM will be implemented by a NYSDEC Standby call-out contractor. Therefore, contractor costs to implement the IRM are not included in the 2.11s.

- TRC will prepare a Construction Completion Report (CCR).

Project Schedule

An estimated project schedule is presented below.

Task No.	Task Description	Estimated Time of Completion
1	Preliminary Activities WA Package	Completed in April 2020
2	Operation, Maintenance, and Monitoring	Started March 1, 2020 Completed February 2021
3	Supplemental Investigation	To Be Determined (To Be Coordinated With Another Disposal Event)
4	Groundwater Monitoring	Completed January 2021
5	Semi-Annual Site Monitoring Reporting	Completed March 2021
6	Interim Remedial Measure	To Be Determined